THESIS ABSTRACT

POLITICAL EMOTIONS: THE DISTINCT INFLUENCES OF ANGER AND CONTEMPT ON VOTER PERCEPTION AND PREFERENCE

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Recent research has demonstrated the undeniable influence of emotion on political decision making and voter choice. Research on negative campaigning has grown in the past decade, but a recent meta-analysis reached no conclusion about its effectiveness (Lau & Rovner, 2009). There is still debate in the literature as to whether the dimensional emotion perspective or the discrete emotion perspective is superior, and consequently few studies have examined whether discrete emotions (in this case anger and contempt) have differential impacts on voters’ perceptions of candidates. Although anger and contempt are both negatively valenced emotions related to interpersonal conflict, they differ in both social function and prototypical behaviors (Fischer & Roseman, 2007). This study tested the differential impacts of anger and contempt on voters’ reactions to presidential candidates by having three groups of participants watch the second presidential debate between Barack Obama and Mitt Romney and indicate each time they either (1) perceive Obama or Romney to express anger or contempt or (2) feel anger or contempt toward Obama or Romney or (3) have favorable or unfavorable impressions of Obama or Romney. Pre- and post-debate questionnaires measured participants’ perceptions of the candidates and participants’ favorability towards the
candidates. Multiple regression models tested the effects of anger and contempt on perceptions of presidential candidates and feelings of favorability toward those candidates. Feelings of anger and contempt inconsistently predicted a decrease in favorability, although feelings of anger better predicted negative perceptions than feelings of contempt. Expressions of anger by the candidates were overall related to a decrease in positive perceptions toward the expressing candidate and, in some cases, a decrease in negative perceptions of the opposing candidate. However, expressions of both anger and contempt by the candidates were also related to an increase in negative perceptions of the opposing candidate, although expressions of contempt had a stronger relationship with increased negative perceptions. Overall, anger and contempt were shown to have differential impacts on perceptions and favorability toward presidential candidates.

Keywords: Contempt, Anger, Politics
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Background

Research conducted on voter behavior and cognition in the past 20 years has begun to paint a new picture of the mind of the voter (Marcus et al., 2000). This research has revealed the inaccuracies of the idea that voters make decisions based on factual information and careful reasoning. Specifically, research has demonstrated the importance of affect in our understanding of how people decide who they vote for and why (Granberg & Brown, 1989; Forgas & Moylan, 1987). Research suggests that emotions are not very influential on our political thought processes without cognitions to support them (Granberg & Brown, 1989). However, it is still clear that emotions color our perceptions, cognitions, and even memories to a degree that makes understanding their causes and effects imperative if we are to understand the processes involved in political decision making (Civenttini & Redlawsk, 2009; Forgas & Moylan, 1987; Hullete, Louden, Mitra, 2003; Parker & Isbell, 2009).

Negative Campaigning

The research literature is still inconclusive on whether negative campaigning (attacking an opposing candidate or their positions) is more effective than positive campaigning (candidates focusing on what they aim to accomplish in office) (Lau & Rovner, 2009). The issue is a complex one, and studying it is difficult considering the many moving parts in any given campaign. The contradictory results may in part be due to differences in how negative campaigns are waged and what particular campaigns choose to be negative about (e.g., attacking the issue vs. attacking the candidate; Kahn & Kenney, 1999). However, much of the current research has failed to differentiate between particular discrete emotions, instead choosing to focus on general valence
based affect. Given the evidence for discrete emotions (see Roseman, 2011), it is possible that eliciting certain emotions is more effective than eliciting others. Some studies have already begun examining this possibility, and recent research found differences between anger and anxiety on voter turnout (Best & Krueger, 2011). Specifically, anger increased turnout, while anxiety decreased it. Other research has also found evidence that anger is a more “mobilizing” emotion than anxiety or enthusiasm (Valentino, Brader, Groenendyk, Gregorowicz, & Hutchings, 2011). These studies would suggest that perhaps eliciting anger is a more effective strategy for political campaigns than eliciting, say, fear or anxiety. If this is the case, then lumping all negative emotions under a single umbrella is likely to provide conflicting and contradictory results.

Several prominent theories on the involvement of emotion in political cognition are valence based, meaning they treat emotion as a continuum ranging from negative to positive. An example of this is the Theory of Affective Intelligence (TAI), which posits that there are two distinct emotional systems (Marcus et al., 2000). The dispositional system is split into enthusiasm and aversion, while the surveillance system incorporates emotions such as anxiety and fear. Although this theory uses discrete emotion words to describe affective states, it lumps positive emotions under enthusiasm and negative emotions under anxiety and fear. Research on this theory has focused mostly on enthusiasm and anxiety, and has found that enthusiasm increases heuristic processing while anxiety decreases it. Heuristic processing leads voters to rely more on what they already believe and know, such as their party loyalty (Parker & Isbell, 2010).

The basic premise that enthusiasm increases heuristic processing does seem to
be true (Parker & Isbell, 2010). However, research on TAI has tended to lump anger in with anxiety because they are both considered to be negative emotions, which, when considering the behavioral and cognitive components of each, is an unsupported assumption. Although anger and anxiety, as proposed by the Theory of Affective Intelligence, both increase motivation to act, there is little evidence that anger leads to a search for further information. Instead, as will be discussed, anger, like enthusiasm, has been shown to increase heuristic processing. This means that both anger and enthusiasm would both lead voters to pay less attention to the actual arguments in a debate and instead decide who they thought was the best candidate based on prior beliefs or loyalties, such as party affiliation.

Although past studies have examined how positive and negative emotions affect voters’ decisions, few have examined how anger is involved or to what degree (Kiss & Hobolt, 2011), and even fewer have examined contempt in a political context. The current study, using data gathered from participants watching the second presidential debate between Barack Obama and Mitt Romney, aims to test the comparative impacts of anger and contempt on voting behavior. Specifically, it aims to determine how voters’ feelings of anger and contempt and how perceived expressions of anger and contempt from the presidential candidates are related to voting decisions. In addition to the lack of research related to the involvement of anger, research in the realm of political psychology has practically ignored contempt, even though there is research supporting its unique qualities as a discrete emotion (Fischer & Roseman, 2007; Ekman & Friesen, 1975; Haidt & Keltner, 1999; Matsumoto, 1992; Rozin, 1999; Matsumoto & Ekman, 2004; Ufkes & Otten, 2011; Tausch et al., 2011; Rozin & Lowery, 1999; Haidt, 2003).
Given that contempt is associated with distinctive patterns of cognition, motivation, and behaviors, it likely that it plays some role in political cognition and decision making.

The evidence for discrete emotions differentially predicting voter cognition and behavior combined with a general lack of research exploring specific aspects of negative campaigning provides a clear motive for the current study. A primary goal of this study is to build on the evidence that anger and contempt are discrete emotions with distinctive characteristics and influences (Fischer & Roseman, 2007; Ufkes & Otten, 2011; Tausch et al., 2011). By testing how anger and contempt differentially impact perceptions of and favorability toward presidential candidates, we can hopefully begin to tease apart the nuances of negative campaigning.

Anger

Major disagreement still exists within the literature as to whether or not distinct emotions exist, much less precisely which emotions or how many (Roseman, 2011). However, sufficient research has been conducted on anger to demonstrate its importance in understanding affect. For example, anger is one of the most commonly reported emotions by Americans, indicating in a very simple way how ingrained it is in the public consciousness (Averill, 1982). As well as being a common emotion, it is also very easily recognized, both for people experiencing it and people witnessing others experiencing it (Solomon, 1990; Tavris, 1989). People seem to have an implicit ability to recognize anger. This is evidenced by the ability of 10 month old infants to distinguish between angry faces and faces displaying other emotions, including happiness (Haviland & Lelwica, 1987). Research has also found that, compared to other emotions, people are particularly attuned to looking at angry faces. This phenomenon has been
dubbed “The Anger Superiority Effect” and highlights the likelihood that anger is a fundamental, adaptive human emotion (Hansen & Hansen, 1988).

Appraisal theories posit that our evaluations of events influence our emotional responses. Many researchers argue that certain combinations of appraisals give rise to particular discrete emotions. Several appraisal theorists have found evidence for what kinds of appraisal are responsible for eliciting anger. Lazarus (1991) found evidence that anger is elicited by perceptions that the self or someone the self cares about has been wronged in some way. Roseman (1996) argued that anger is caused by a particular combination of several appraisal “components”: control potential (whether the self has control over the situation), agency (whether the self, another person, or circumstances beyond anyone’s control is the cause of an event), and motive consistency (whether the event is something the self wants). Specifically, an appraisal of relatively high control potential (ability to do something about a negative event), outside agency (someone or something outside the self caused it), and motive inconsistency (something the self does not want) is thought to cause anger.

Some researchers have also found evidence that anger can be elicited by certain moral transgressions. Rozin and Singh (1999) hypothesize that anger, contempt, and disgust make up the Contempt Anger Disgust Triad, which they consider to be the three “other-critical” moral emotions. Each emotion corresponds with a specific ethical domain thought to be culturally universal (Schwader, Much, Mahapatra, & Park, 1997). For example, research has found that when people read a story describing “violations of autonomy”, like someone being robbed, they responded with feelings of anger (Rozin & Singh, 1999). The CAD Triad will be discussed further in the contempt section.
Anger is associated with distinctive patterns of behavior. According to several appraisal theorists, each emotion has a particular action tendency, which refers to implicit goals that are tied to each emotion (Frijda, 1986; Roseman, 1996). Anger is thought to be a particularly motivating emotion in that its action tendency typically involves “moving against” a person or an obstacle (Frijda, Kuipers, & ter Schure, 1989). This can manifest in a number of different ways, ranging from punching a stranger for stealing your iPod to giving your roommate the cold shoulder because he did not do the dishes as agreed. Anger’s behavioral action tendencies can often be witnessed in politics, either during a heated debate when one candidate attacks another candidate’s stance on an issue or when a viewer watching a speech from home yells at their TV because the speech giver suggested raising taxes.

Whereas appraisal theory offers hypotheses specifying when anger is elicited and its immediate effects, recent work on the Appraisal-Tendency Framework (ATF) establishes distinctive patterns of cognition that are present after an angry episode (Lerner & Keltner, 2000, 2001). This theory posits that the appraisals that give rise to emotional experience continue to influence behavior, affect, and cognitions, even after the actual emotional episode (Keltner, Ellsworth, & Edwards 1993; Tiedens & Linton, 2001; Lerner & Keltner, 2000, 2001). With regard to anger, research has found that it brings on shallower, more heuristic processing (Bodenhausen, Kramer, & Susser, 1994), and depletes a persons’ overall ability to weigh evidence and reach objective conclusions (Lerner & Tiedens, 2006). Tiedens and Linton (2001) found that participants who were made to feel angry, as opposed to worried, relied more on heuristic cues when asked to rate an opinion article supposedly written by either a community college student
or a professor. The essays were identical, but angry participants still agreed more with the professor’s article than the student’s article. In other words, they relied more on the general information (credibility of a student vs. a professor) than on argument information (what the essay actually said). Regarding politics, Parker and Isbell (2010) conducted a study in which they experimentally induced emotion before having participants research and vote for one of two made-up senatorial candidates. They found that participants in the anger condition (as opposed to fear) did not seek out as much information about the candidates and relied more on general criteria, such as party loyalty, to make a decision. These studies exemplify the impact that anger and heuristic processing can have on political decision making.

An interesting line of research on anger has focused on the differences between people who are high in social power and those who are low. Social power “refer(s) to different facets of the individual’s relative rank, or position, vis-à-vis others, and relative capacity to alter the states of other individuals” (Fiske, 1993; Keltner, Gruenfeld, & Anderson, 2003; Keltner & Lerner, 2010, page 334). It is reasonable to assume that congressmen, and certainly presidents, fall under this category. Several studies have found that social power is actually a predictor of emotion. People who are high in social power tend to feel more positive emotions, while people low in social power tend to feel more negative emotions (Collins, 1990; Langner & Keltner, 2008). People who are high in social power also tend to express more anger, which is considered to be a more “dominant” emotion (Keltner et al., 1998). This seems to be especially true when people high in social power deal with negative situations (Tiedens et al., 1998). Roseman’s (1996) appraisal theory suggests that in order for anger to arise a person has to feel like
they have some control over a situation.

It is distinctly possible that part of the reason people high in social power tend to react angrily to negative situations is because they more often than not appraise that they have the potential to control a situation. In fact, there actually seems to be a general assumption among people that powerful people are more likely to become angry when faced with difficulties (Tiedens et al., 2000), which raises the question of whether we expect our leaders to show anger in certain situations. Several studies have also found that when people view an angry person, they implicitly judge them to have several leader-oriented traits, such as competence, power, and dominance (Clark, Pataki, & Carver, 1996; Knutson, 1996; Tiedens, 2001; Lerner & Tiedens, 2006). One of these studies found that it was more effective for President Clinton to express anger (as opposed to sadness) over the Monica Lewinsky scandal (Tiedens, 2001).

However, this does not mean that a politician can simply yell and scream. Intense displays of emotion by politicians are rare, and emotional displays tend to stay within normative boundaries (Glaser & Salovey, 1998). As well, the impact of any emotional display seems to depend on who is watching. Specifically, research has suggested that political partisanship can moderate the effects of watching a politician show emotion (Shields & Macdowell, 1987). Specifically, Democrats made positive statements about the Democratic candidate's expressions of emotion, while Republicans made positive statements about the Republican candidate's expressions of emotion, although the exact emotions were not specified. As well, the current mood of the voter can moderate how effective a display of emotion is by a politician. Research has found that angry people respond better to angry political messages (Roseman, Ableson, & Ewing, 1986).
Contempt

While the literature on anger is extensive, the literature on contempt is smaller and more controversial. Some of the earliest research supporting the existence of contempt as a discrete emotion was conducted by Ekman and Friesan (1975), who found evidence that facial expressions of contempt were both widely recognized across cultures and distinguishable from expressions of anger and disgust. Further research has supported these initial findings and demonstrated strong empirical evidence for the universality of facial expressions of contempt across cultures (Matsumoto, 1992; Ekman & Heider, 1998; Russel, 1991; Haidt & Keltner, 1999; Wagner, 2000; Matsumoto & Ekman, 2004).

However, the issue has been debated. Empirical evidence for the existence of contempt is strong, but two problems with the expression literature are worth mentioning. First, the methodology used to test whether people connect the proto-typical contempt expression (unilateral lip raise and tighten) (Ekman & Friesen, 1986) with the word contempt has at times been questionable. Many studies have utilized a forced-choice method, where participants are shown a face and asked to match pre-selected emotions with it. This method introduces demand characteristics by assuming that each of the emotions actually have an associated expression, and assumes that each of the pre-selected emotions is actually an emotion. Fixed-choice methods, which are identical to forced choice with the addition of a “None of the above”/”Neutral” option, have been used as well (Rosenberg & Ekman, 1995). They hold an advantage over forced-choice given they provide participants with the option of not labeling a face if they don’t believe it fits any of the other choices. The disadvantage to fixed-choice is that it still has the
potential to introduce similar demand characteristics as forced-choice methods. Free choice methods, where participants are shown a face and simply asked to come up with whatever they think the expression shows, are arguably the most ecologically valid. Studies using this method have also found evidence for contempt (Haidt & Keltner, 1999; Russell, 1991a; Wagner, 2000). For example, Haidt and Keltner (1999) showed Indian participants pictures of people making expressions of contempt. When asked to list emotions that represented the expressions, participants wrote contempt at a much higher rate than chance.

The second problem with the literature on contempt is that native English speakers seem to be very bad at labeling expressions of contempt or connecting vignettes with the word contempt (Haidt & Keltner, 1999; Russell, 1991; Wagner, 2000). However, Indians, Japanese, and Europeans all labeled expressions and vignettes of contempt correctly at a much higher rate than chance. This suggests that perhaps either the English language or English language cultures simply don’t tend to use the word (Haidt & Keltner, 1999; Russell, 1991; Wagner, 2000; Matsumoto & Ekman, 2004).

Matsumoto and Ekman (2004) argue that this is the case, citing two lines of evidence. First, native English speakers, when asked to write down as many emotions words as possible in a given time frame, mention contempt only about 1% to 9% of the time (Fehr & Russel, 1984; Wagner, 2000). Second, English speakers connect photographs of contempt expressions with vignettes about violations of ethics of community, which is conceptually related to contempt through the CAD triad hypothesis (Rosenberg & Ekman, 1995; Rozin & Singh, 1999; Rozin & Lowery, 1999). These studies support the idea that the lack of results in the expression labeling research for
English speakers are likely due to lexical differences between languages instead of a lack of contempt in native English speakers.

Research on discrete emotions and appraisal theory have found evidence that contempt is associated with several distinct negative appraisals. Specifically, appraisals of another person or group as inferior, incompetent, or low in status or power often leads to feelings of contempt (Brewer & Alexander, 2002; Hutcherson & Gross, 2011; Izard, 1997; Ufkes & Otten, 2011). In addition, contempt is more likely to be elicited if these negative attributions are thought to be internal and unchangeable (Fischer & Roseman, 2007). This suggests that once a person experiences contempt towards someone else, it’s unlikely that he/she will feel favorably towards them again, since the target of contempt is viewed as a bad person. All of these types of permanent, negative attributions can also be attributed to entire groups of people, therefore demonstrating the possible role of contempt in racism and prejudice (Izard, 1997; Roseman, Copeland, & Fischer, 2003; Ufkes & Otten, 2011). Izard (2011) even goes as far as to say that contempt is significantly related to human “intraspecific aggression, including ethnic conflicts, internecine wars, and genocide” (Izard, 2011, page 374).

Anger and Contempt: Similar Yet Different Negative Emotions

A number of studies have examined anger and contempt together, which is likely due to several similarities between the two emotions. First, both are considered negative emotions found in interpersonal relationships (Ekman, 1994; Izzard, 1977; Izzard, 1997; Fischer & Roseman, 2007). Second, they are both related to negative appraisals of another person or groups’ character behavior, or effects (Frijda, Kuipers, & ter Schure, 1989; Rozin & Lowery, 1999; Tausch et al., 2011; Izard, 1977; Ufkes & Otten, 2011;
Fischer & Roseman, 2007). Third, English speakers have been known to confuse them or treat them as the same, which highlights their possible similarities in everyday life (Alvarado & Jameson, 1996). Fourth, although experiencing anger does not always lead to experiencing contempt (e.g., I can be angry without feeling contemptuous), it is often a precursor or even a necessary component for contempt to occur (my anger toward you builds to the point of experiencing contempt; Fischer & Roseman, 2007).

One of the aims of this study is to further our understanding of how anger and contempt are unique from each other. Research has found several important differences in appraisals, behaviors, and motivations between anger and contempt. First, when a person judges that they maintain some sort of control over a situation or a person, they are more likely to react with anger than contempt (Ufkes & Otten, 2011; Tausch et al., 2011; Fischer & Roseman, 2007; Kuppens, Van Mechelen, & Meulders, 2004). The opposite is true as well, meaning that once a person judges they have little to no control they are more likely to respond with contempt (Ufkes & Otten, 2011; Fischer & Roseman, 2007). These appraisals can also lead to different behaviors. For example, Tausch et al. (2011) found that when people were upset with the government, anger and high feelings of efficacy predicted normative actions, such as peaceful protest, while contempt and low feelings of efficacy predicted non-normative actions, such as terrorism and violence.

Tausch et al.’s (2011) study is also evidence for a second difference. Contempt is associated with permanent negative beliefs about a person or thing, while anger is associated with a belief that a person or thing can change (Fischer & Roseman, 2007). People who dislike their government, but still believe that their government isn’t
completely corrupt or defunct, are more likely to try and change it through the normal political channels such as protest or voting. On the other hand, a person who believes the government will never improve is more likely to try and physically remove it through more extreme measures, such as terrorism.

A third difference between anger and contempt is how an unfriendly person is appraised. If an unfriendly person is thought to be purposefully unfriendly, then anger is more likely, while if an unfriendly person is thought to be acting that way without realizing, contempt is more likely. Ufkes & Otten (2011) described a group of imaginary aliens as either “less warm” or as “incompetent” to participants before asking them how they would react to being wronged by these aliens. The participants in the “less warm” condition reacted with anger, while participants in the “incompetent” condition reacted with contempt. In addition, the “less warm” group was more likely to say they would confront the alien transgressors, while the “incompetent” group was more likely to say they would avoid them.

**Candidate Preference**

Several hypotheses make predictions based on participants who have a candidate preference. Focusing on candidates with a preference has several benefits. First, it allows for predictions with a greater applicability to the general population, since the majority of Americans belong to a political party, and will therefore have a preferred candidate. Second, political psychology, on a broad level, seeks to understand both individual and group dynamics which affect political thoughts, feelings, and behaviors. By testing the effects of anger and contempt on participants who are already “on a team”, so to speak, I am also testing the potential social functions of two prominent
negative emotions involved in political group dynamics.

**Hypotheses**

The hypotheses in this study were designed to try to answer four primary research questions. First, how do people's feelings of anger and contempt toward candidates influence perceptions of and favorability toward those candidates? Second, how do expressions of anger and contempt by a person's preferred candidate influence perceptions of and favorability toward (a) the preferred candidate and (b) the opposing candidate? Third, how do people's feelings of anger toward an opposing candidate influence perceptions and favorability toward a preferred candidate? And fourth, do anger and contempt seem to have distinct influences on perceptions and favorability? Each hypothesis seeks to answer one or more of these questions, although all attempt to answer the fourth question.

Hypotheses 1 and 2 test the first primary question. Specifically, hypothesis 1 examines whether participant's feelings of anger and contempt toward a candidate are related to a decrease in favorability toward that candidate. Hypothesis 2 examines whether participant's feelings of anger and contempt negatively impact perceptions of the candidates.

Hypothesis 1: Participant's feelings of contempt towards a candidate while watching the debate will be more related to a decrease in favorability towards that candidate than feelings of anger (regardless of candidate preference).

This hypothesis directly tests the differential impacts of anger and contempt on political affect. I base this hypothesis on several findings. Contempt and anger are both
hypothesized to be negatively correlated with change in favorability ratings because each emotion is associated with negative appraisals of another person or groups’ character or intent (Fischer & Roseman, 2007; Frijda, Kuipers, & ter Schure, 1989; Izard, 1977; Rozin, Lowery, Haidt, Imada, 1999; Tausch et al., 2011; Ufkes & Otten, 2011).

However, contempt is hypothesized to have a stronger impact on change in favorability for three reasons. First, contempt is associated with appraisals of bad character (Fischer & Roseman, 2007). This means that once a person experiences contempt towards someone else it’s unlikely that he/she will feel favorably towards them again, since the target of contempt is viewed as a bad person. Second, contempt is associated with a lack of intimacy (Fischer & Roseman, 2007), which suggests that a person who feels contempt towards another does not feel connected with them. Third, contempt is related to perceptions of incompetence (Ufkes & Otten, 2011), and competence is an important trait people consider when choosing between presidential candidates (Markus, 1982). In contrast, anger is not associated with appraisals of bad character or a lack of intimacy (Fischer & Roseman, 2007). Additionally, anger is not associated with perceptions of incompetence (Ufkes & Otten, 2011). If the data support this hypothesis, it will demonstrate the relative “strength” of contempt as opposed to anger. This relative “strength” of contempt as opposed to anger will also be tested in hypotheses 3, 4, and 5.

Hypothesis 2a: Participant’s feelings of anger towards a candidate will be positively correlated with agreement that the candidate would cause undesirable outcomes if elected (regardless of candidate preference).

Hypothesis 2b: The more frequently that a participant recalls anger towards a
candidate the more strongly he/she will agree that candidate would cause undesirable outcomes (regardless of candidate preference).

Hypothesis 2c: Participant’s feelings of contempt towards a candidate will be positively correlated with agreement that the candidate has undesirable qualities (regardless of candidate preference).

Hypothesis 2d: The more frequently that a participant recalls contempt towards a candidate the more likely he/she will agree that the candidate has undesirable qualities (regardless of candidate preference).

With regard to hypothesis 2a and 2b, Roseman (2011) describes how feelings of anger are associated with the motivation to “move against another person” (p. 438), which can take the form of criticizing. Agreeing that a candidate would cause undesirable outcomes if they were elected president is a criticism of that candidate’s capabilities as president and would therefore be prototypical behavior for an angry person. It can be argued that if a participant agrees that a candidate has undesirable qualities, then this is also a criticism. However, these criticisms differ conceptually. Agreeing that a candidate has undesirable qualities is more an attack on their personal qualities than a critique of their capabilities as president. Since criticizing a person’s qualities is in line with contempt and not in line with anger, the undesirable qualities measure does not seem an appropriate measure to be predicted by anger.

Hypotheses 2c and 2d are in line with Fischer & Roseman’s (2007) finding. Specifically, they found that contempt is closely related with perceptions that another person is inferior or unworthy, which, in the current study, is measured by agreement that the candidate has undesirable qualities. Additionally, if a participant experiences
contempt towards one of the candidates, then he should also more likely view them as incompetent (Ufkes & Otten, 2011), which is certainly an undesirable quality and demonstrates a belief that the candidate is lacking as a person. This hypothesis will also extend Fischer and Roseman’s (2007) finding that contempt is associated with appraisals of bad character to presidential candidate debates.

Hypotheses 3, and 4 make predictions based on expressions of anger and contempt by the participant’s preferred candidate, although they test separate questions. Specifically, hypothesis 3 examines how expressions of anger and contempt by a participant's preferred candidate impact feelings toward the opposing candidate (e.g., I prefer Obama, and he shows lots of anger during the debate. How does this influence my feelings toward Romney?).

Hypothesis 3a: For participants who prefer a candidate, perceived expressions of anger by their preferred candidate will have a positive relationship with agreement that the opposing candidate would cause undesirable outcomes if elected and will be related to a decrease in favorability toward the opposing candidate (e.g., if I prefer Obama, then Romney is the opposing candidate).

Hypothesis 3b: For participants who prefer a candidate, perceived expressions of contempt by their preferred candidate will have a positive relationship with agreement that the opposing candidate has undesirable qualities and will be related to a decrease in favorability toward the opposing candidate.

Hypothesis 3c: For participants who prefer a candidate, perceived expressions of
contempt by their preferred candidate will have a stronger negative effect than perceived expressions of anger on change in favorability ratings toward the opposing candidate.

With regard to hypothesis 3a, I’m predicting that expressions of anger will have a negative effect on perceptions of the opposing candidate because I expect participants to be angry about the same things their favored candidate is. Therefore, participants who already like and view a candidate as a leader should be even more likely to follow suit with them and feel anger toward the opposing candidate. With regard to the perceptions of undesirable outcomes, I’m predicting this based on the same research as for hypotheses 2a and 2b. Specifically, perceiving undesirable outcomes is a type of criticism, but not criticism that infers a permanent negative evaluation of the candidate as a person.

With regard to hypothesis 3b, I am expecting that expressions of contempt by a participant’s preferred candidate will unite participants with that candidate and against the opposing candidate. Two lines of research support this. First, contempt is theoretically and empirical related to the ethics of community (Rozin, Lowery, Imada, Haidt, 1999). Therefore, expressions of contempt may signal moral outrage, which could unify participants who feel similar moral outrage against the opposing candidate. Second, contempt is connected with social exclusion (Fischer & Roseman, 2007). Exclusion automatically creates an us vs. them dichotomy, since there are the excluders and the excluded. In this case, there is already an us vs. them dichotomy for participants who favor a candidate (Democrats vs. Republicans, Obama vs. Romney). It is easy to imagine that expressions of contempt would strengthen this dichotomy, and therefore cause greater dislike for the opposing candidate. However, this hypothesis is in doubt.
because contempt might be such a strong emotion that it alienates those who do not feel contempt. Just as it may unify people who feel similar outrage or a desire for exclusion, participants who do not feel that expressions of contempt are warranted might react negatively towards their preferred candidate.

With regard to hypothesis 3c, I'm predicting that contempt will have a stronger effect on change in favorability than anger. I base this on the same lines of research cited in hypothesis 1 and hypothesis 3b. Specifically, contempt is related to permanent negative beliefs about a person (Fischer & Roseman, 2007), moral outrage (Rosin et al., 1999), and perceptions of incompetence (Ufkes & Otten, 2011), whereas anger is not associated with permanent negative beliefs or incompetence (Fischer & Roseman, 2011; Ufkes & Otten, 2011). If this hypothesis is supported, then this study could have strong implications for the effectiveness of negative campaigning. Specifically, a meta-analysis by Lau and Rovner (2009) on the negative campaigning literature found “little scientific evidence that attacking one’s opponent is a particularly effective campaign technique (pg. 285).” As far as I am aware, however, no research has examined whether or not the particular emotions elicited in a negative campaign are predictors of its success. Therefore, if I find that there is a significant difference in change in favorability between expressed anger and expressed contempt by the candidates, then it would suggest the particular emotion elicited is an important determinant of campaign success. However, if I find that neither expressed anger nor expressed contempt are related to change in favorability, then it would suggest these particular emotions are not responsible for the problems with negative campaigns. Either way, this study could shed light on what emotions are effective to show or not show for presidential candidates.
Hypothesis 4 examines how expressions of anger and contempt by a participant's preferred candidate impact toward the preferred candidate (e.g., I prefer Obama, and he shows lots of anger during the debate. How does this influence my feelings toward Obama?).

Hypothesis 4a: For participants who prefer a candidate, perceived expressions of anger by their preferred candidate will have a positive relationship with agreement that the participant's preferred candidate would cause desirable outcomes if elected and will be related to an increase in favorability toward the participant's preferred candidate.

Hypothesis 4b: For participants who prefer a candidate, perceived expressions of contempt by their preferred candidate will have a positive relationship with agreement that the preferred candidate has desirable qualities and will be related to an increase in favorability toward the participant’s preferred candidate.

Hypothesis 4c: For participants who favor a candidate, perceived expressions of contempt by their preferred candidate will have a stronger positive effect on change in favorability than perceived expressions of anger by their preferred candidate.

First, with regard to hypotheses 4a and 4b, the reasoning is similar to hypothesis 3a. Specifically, anger and contempt have both been connected with social power (Collins, 1990; Langner & Keltner, 2008; Keltner et al., 1998). Research has found that people viewing an angry person implicitly judged them to have several leader-oriented traits, such as competence, power, and dominance (Clark, Pataki, & Carver, 1996; Knutson, 1996; Lerner & Tiedens, 2006; Tiedens, 2001). This suggests that anger or
contempt expressed by a participant’s preferred candidate during the debate will be viewed as leadership, and will therefore increase favorability. I am predicting that anger, and not contempt, will have a relationship with perceptions of desirable qualities because contempt is related to personal attacks. Personal attacks are more likely to be perceived as unnecessary or undeserved and could end up backfiring (Lau & Rovner, 2007). However, for the same reasons as cited in hypothesis 3 (moral outrage, exclusion), contempt is predicted to unite participants with their candidate, and therefore predicted to increase favorability.

With regard to hypothesis 4c, I’m predicting that contempt will have a stronger effect on change in favorability than anger for the same reasons as hypothesis 3c. Specifically, uniting behind potential moral outrage or uniting with a desire to exclude should increase group salience more than feelings of anger.

Hypothesis 5 attempts to answer the third question. Specifically, it examines how participant’s feelings of anger or contempt toward the opposing candidate impact feelings toward the participant’s preferred candidate (e.g., I prefer Obama, so how do my feelings of anger toward Romney influence my feelings toward Obama?)

Hypothesis 5a: For participant’s who prefer a candidate, participants’ feelings of anger toward the opposing candidate will have a positive relationship with agreement that the participant’s preferred candidate would cause desirable outcomes if elected and will be related to an increase in favorability toward that preferred candidate.

Hypothesis 5b: For participant’s who prefer a candidate, participants’ feelings of
contempt toward the opposing candidate will have a positive relationship with perceived desirables qualities of the preferred candidate and will be related to an increase in favorability toward that preferred candidate.

Hypothesis 5c: For participant’s who prefer a candidate, participants’ feelings of contempt towards the opposing candidate will be a better predictor of change in favorability towards the participants’ preferred candidate than participants’ feelings of anger toward the opposing candidate.

With regard to hypothesis 5a, research has linked feelings of anger to an increase in heuristic processing. Heuristic processing has been demonstrated to increase the use of general information (such as party loyalty) when making a decision and decrease objective evaluation of evidence (Parker & Isbell, 2010; Lerner & Tiedens, 2006; Bodenhausen, Kramer, & Susser, 1994). In the current study, the most salient heuristic cue is partisanship. If a participant feels angry, they should become more likely to use their partisan attitudes as a guide while paying less attention to the actual arguments. This should translate to liking the opposing candidate less and their own candidate more. If these hypotheses are supported it would suggest that arousing anger in the party base is an effective method for mobilizing votes. This would also build upon past research which found that turnout was higher amongst voters who felt anger over a particular issue as opposed to fear (Valentino, Brader, Groenendyk, Gregorowicz, & Hutchings, 2011).

Regarding the increase in potential desirable outcomes, research on the appraisal tendency framework has found that feelings of anger are associated with decreased perceptions of risk when compared to feelings of fear (Lerner et al., 2003). Specifically,
Americans who were experimentally induced to feel angry after the terrorist attacks of September 11th scored lower on two risk questionnaires: the first gauged perceived likelihood of another terrorist attack on the US and the second gauged perceived likelihood of being personally injured or killed in a terrorist attack. This suggests a participant who feels anger is less likely to perceive potential upcoming risks, and therefore more likely to believe that desirable outcomes will occur if their preferred candidate is elected. If there is evidence for this hypothesis, it would meant that arousing feelings of anger in the party base against an opposing candidate could increase supporter’s favorability toward the party candidate.

In regard to hypotheses 5b, I am predicting, again, that contempt will be a uniting emotion because of its theoretical and empirical relation to the ethics of community (Rozin, Lowery, Imada, Haidt, 1999) and its social exclusion component (Fischer & Roseman, 2007). However, for this hypothesis, I am making a prediction on the potential positive feelings arising from participant’s own feelings of contempt. Therefore, I’m hypothesizing that feeling contempt towards an opposing candidate will make a participant feel more positively towards their preferred candidate. Although previous research has found that emotions felt towards a candidate influence favorability toward that candidate, this study adds to the literature by examining whether emotion felt towards one candidate can influence favorability towards the opposing candidate.

In regard to hypothesis 5c, I am predicting that a participant’s feelings of contempt towards an opposing candidate will have a stronger relationship with change in favorability towards the participants’ preferred candidate because contempt is hypothesized to be more damaging. If contempt is associated with perceptions of
incompetence and permanent negative beliefs, it seems possible that these perceptions of the opposing candidate will make the preferred candidate look even stronger.

Method

Design

The current study utilizes an independent groups pre-test/post-test design. Participants were recruited from Rutgers-Camden introductory psychology courses, and received partial course credit as compensation for their time. Each experimental session lasted an hour. Participants were randomly assigned to one of three experimental conditions: audience emotion condition (in which participants indicated each time they felt anger or contempt toward each candidate), candidate evaluation condition (in which participants indicated when they felt favorably or unfavorably toward each candidate), or the speaker expression condition (in which participants indicate each time they perceived each candidates to express anger or contempt).

Participants

One hundred and thirty-eight undergraduate students from Rutgers University’s Camden campus were run between mid-October of 2012 (three weeks before the election) and December of 2013. Although an attempt was made to run as many participants as possible before the election, due to availability the majority of the participants (n = 112 out of N = 138) in the study were run after the election for president, on November 6, 2012, was over. A majority of the participants were non-Hispanic White (43%), although Blacks (18.5%), Asians (12.3%), and Hispanics (12%) were represented. The sample was young, with the majority (82%) born between 1990
and 1995. Ages ranged from 18 to 55, with a median age of 20 years old. Exactly half of the participants were female (50%), and the majority of the participants (69%) were native English speakers. Given that most of the participants were college students who still depend on their families for income and support, the majority (55%) personally made less than $3,000 per year. The median income for their household was $60,000–$69,999 per year, which is slightly below the $71,637 median income for New Jersey households, but above the $53,046 median income for US households (US Census 2008-2012). A large majority of the participants preferred Obama ($n = 88$) over Romney ($n = 22$), and a sizable portion of the participants claimed to have no preference ($n = 24$).

**Overview of Procedures**

Each participant was given a folder with a pre-test questionnaire, a post-test questionnaire, and a set of instructions that differed depending on condition assignment. These folders were placed in front of each computer before the participants arrived for each session. Choice of computers for each particular session was semi-random, meaning efforts were made so that participants sat at least one computer away from each other. This was to minimize potential confounds resulting from participants from influencing one another. Each participant was assigned to a computer based upon the order he or she arrived in to ensure an even distribution throughout the room. This order was determined before each session (e.g., the first participant to arrive sat at computer 1, the second at computer 4, the third at computer 7, etc.). The computers were not randomly chosen, because we wanted participants to sit at least a few seats away from each other, and away from potential sources of noise, if possible. On top of each folder was a consent form. Once participants were seated, they were instructed to read over
the consent form and sign it if they agreed to participate in the study. After participants had signed the consent form, they began filling out the pre-debate questionnaire which contained questions about political ideology, political affiliation, and the first set of thermometer ratings (see below). Next, participants read their condition-specific set of instructions for what to do while watching the debate.

There were three conditions and two variations of each (see explanation in “Conditions,” below) for a total of six different sets of instructions. Since the folders were made ahead of time, each folder already had a set of instructions in it. In order to ensure an equal distribution of the conditions, each cycle of six was randomly ordered, so every six folders contained one of each condition. After participants read and understood their instructions, they watched a segment of a presidential debate on their computer with headphones. The segment in question was the first 35 minutes of the second presidential debate between Barack Obama and Mitt Romney in 2012. We used this section because it corresponds with viewer’s experiences of actually watching a debate from the beginning, and only this section because we didn’t want fatigue to set in and affect responses. After the debate, participants completed a post-debate questionnaire, which included a second set of thermometer ratings, questions about emotions felt towards the candidates while watching the debate, questions about the emotions they recall being expressed by the candidates during the debate, and questions about certain perceptions of the candidates. Whenever there was time left in the session, participants were asked about how it was to participate in the experiment and whether they want to comment on any of the questions or procedures. Before the participants left, they each were given a copy of the consent form and a debriefing form, which gave a brief
overview of the purpose of the study.

**Conditions**

The experimental manipulation occurred just before and during the debate segment. Each participant was given a set of instructions explaining the task they were to do while watching the debate. All three conditions asked the participants to make judgments during the debate, and to indicate those judgments by pressing particular keys on the keyboard of their computer. Each condition had four possible responses, and each condition utilized the same four keys (4, C, 7, and N). These keys were chosen because they are close to the center of the keyboard, line up together, and are as close to equidistant from each other as possible. Participants were instructed to press the keys as often or as rarely as they like in order to reduce possible demand characteristics from expectations of productivity (number of button presses).

In the audience emotion (AE) conditions, participants were “While you are watching, please press the key labeled "**Anger toward Obama (Romney)**" whenever you feel ANGER (CONTEMPT) toward Barack Obama (Mitt Romney).” In order to give equal relative prominence to anger vs. contempt, each of these conditions was also counterbalanced so that anger was above contempt on the keyboard in one condition and below in the other.

Therefore, instructions for AE1 were asked participants to press keys labeled as follows:
4 = Anger toward Obama  
7 = Anger toward Romney

C = Contempt toward Obama  
N = Contempt toward Romney

Instructions for AE2 were:

4 = Contempt toward Obama  
7 = Contempt toward Romney

C = Anger toward Obama  
N = Anger toward Romney

In the speaker expression (SE) conditions, “While you are watching, please press the key labeled “Obama (Romney) expresses Anger (Contempt)” whenever Barack Obama (Mitt Romney) expresses ANGER (CONTEMPT) toward someone”. In order to give equal relative prominence to anger vs. contempt, each of these conditions was also counterbalanced so that anger was above contempt on the keyboard in one condition and below in the other. We considered also counterbalancing which side of the keyboard that the candidates are on (i.e., in AE1/SE1 Obama responses would be on the left, and in AE2/SE2 Obama responses would be on the right), but decided that this would unnecessarily complicate our set up.

The final condition was the candidate evaluation condition (CE), and was designed to measure participants’ real time impressions of candidates. Participants were given instructions stating, “While you are watching, please press the key labeled “+ Obama” whenever you have a FAVORABLE(UNFAVORABLE) impression of Barack Obama(Mitt Romney). This condition was also counterbalanced, but in this condition we switched
which side of the keyboard the buttons corresponding to each candidate were on. Whereas in the AE and SE condition, anger could not be interpreted as “higher” than contempt or contempt “higher” than anger, in the CE condition, favorable could very well be interpreted as “higher”. We believe it would have confused participants to counterbalance by putting unfavorable on the “bottom” of the keyboard, so instead we switched which side of the keyboard the candidates were on. Therefore, instructions for CE1 were:

<table>
<thead>
<tr>
<th>4 = Favorable toward Obama</th>
<th>7 = Favorable toward Romney</th>
</tr>
</thead>
<tbody>
<tr>
<td>C = Unfavorable toward Obama</td>
<td>N = Unfavorable toward Romney</td>
</tr>
</tbody>
</table>

Instructions for CE2 were:

<table>
<thead>
<tr>
<th>4 = Favorable toward Romney</th>
<th>7 = Favorable toward Obama</th>
</tr>
</thead>
<tbody>
<tr>
<td>C = Unfavorable toward Romney</td>
<td>N = Unfavorable toward Obama</td>
</tr>
</tbody>
</table>

**Independent Variables**

There were four main predictor variables analyzed in this thesis: participants’ feelings of anger toward a candidate, participants’ feelings of contempt toward a candidate, participants’ perceived expressions of anger by a candidate, and participants’ perceived expressions of contempt by a candidate. However, each of these variables was divided into two separate measures, which are most easily conceptualized as “real-
time” and “recalled”. Specifically, real-time feelings and perceptions of anger and contempt were measured using the button presses during the debate segment, while recalled feelings and perceptions of anger and contempt were measured with items on the post-debate questionnaire. Since the real-time measures were condition specific, these measures have only one third the number of responses as the questionnaire measures. Favorable and unfavorable impressions of each candidate during the debate will be analyzed in future publications.

The four real-time predictor variables analyzed here are: felt anger toward each candidates during the debate (Audience Emotion [AE] condition), felt contempt toward candidates during the debate (AE condition), perceived expressions of anger by candidates during the debate (Speaker Expression [SE] condition), and perceived expressions of contempt by candidates during the debate (SE condition). These variables were measured by the number of times a participant pressed one of the buttons (e.g., anger toward Obama). Please see the section titled “Questions to be Answered While Viewing Political Communications” in Appendix A for complete instructions for each condition.

The four recalled independent variables are: anger ever felt toward the candidates, contempt ever felt toward the candidates, recalled expressions of anger in the debate by candidates, and recalled expressions of contempt in the debate by the candidates. These were measured using items from the post-debate questionnaire that every participant filled out. Anger ever felt towards each candidate and contempt ever felt towards each candidate was measured using a two part item. Specifically, the first question asked, “Think about BARACK OBAMA (MITT ROMNEY). Has Barack Obama
(MITT ROMNEY), because of the kind of person he is or because of something he has done, ever made you feel angry (contemptuous)?” Answer choices were “Yes”, “No”, or “Don’t know”. If the participant answered no, he or she was instructed to skip the next question. If participants answered yes, they were instructed to answer the next question. Specifically, the next question asked, “If you answered yes to (ABOVE QUESTION NUMBER), how often would you say you have felt angry (contemptuous)?” Answers were on a four point Likert scale (“Very often”, “Fairly often”, “Occasionally”, “Rarely”). Higher scores on this item represent higher levels of recalled felt contempt or anger.

These questions were taken from the American National Election Study (ANES) 2012 Time Series, although no articles validating these measures could be found. Recalled expressions of anger and contempt by the candidates was measured with a single question, asking “During the debate, how much ANGER (CONTEMPT) did Barack Obama (Mitt Romney) express toward his opponent?” This item was on a Likert scale from 1 (“Hardly any”) to 9 (“A great deal”). Higher scores on this item represent higher levels of recalled contempt or anger expressed.

**Dependent Variables**

*Change in favorability toward a candidate.* The main dependent variable in this study is the change in favorability from between the pre and post-debate thermometers. This was a composite variable measured by a standard feeling thermometer question in the pre-debate questionnaire, and administered a second time in the post-debate questionnaire. This measure has been validated and demonstrated to correlate strongly with voting behavior (Brody & Page, 1971). The feeling thermometer ranges from 0 degrees (“Very cold or unfavorable feeling”) to 100 (“Very warm or favorable feeling”).
The instructions state, “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.” The change in favorability was calculated by subtracting the pre-debate feeling thermometer ratings for each candidate from the post-debate feeling thermometer ratings for that candidate. Thus, positive scores indicate an increase in favorability, while negative scores indicate a decrease in favorability. A change in favorability of 0 indicates no change, and the farther a score from 0 the larger the change in favorability.

Perceptions of the candidates. The second and third dependent variables were participants’ perceptions of desirable and undesirable qualities in the candidates. These are two separate questions which use identical wording (except for replacing undesirable with desirable and vice versa). Specifically, the first question asked, “Think about what you thought and felt while watching the debate today. While you were watching the debate, to what extent did you agree or disagree that Barack Obama (Mitt Romney) has important DESIRABLE QUALITIES?” The next question asked “Think about what you thought and felt while watching the debate today. While you were watching the debate, to what extent did you agree or disagree that Barack Obama (Mitt Romney) has important UNDESIRABLE QUALITIES?” Both items were on a 5 point Likert scale

The fourth and fifth dependent variables were participants’ beliefs that the candidates would cause desirable or undesirable outcomes if elected. The first question asked “Think about what you thought and felt while watching the debate today. While you were watching the debate, to what extent did you agree or disagree that Barack Obama (Mitt Romney) would cause important DESIRABLE OUTCOMES if elected president?” The second question asked “Think about what you thought and felt while watching the debate today. While you were watching the debate, to what extent did you agree or disagree that Barack Obama (Mitt Romney) would cause important UNDESIRABLE OUTCOMES if elected president?” These items were also on a 5 point Likert scale (“Strongly Disagree”, “Disagree”, “Neither Agree nor Disagree”, “Agree”, “Strongly Agree”). This measure was used previously and found to be significantly related to emotions and favorability toward presidential candidates in the 2008 election (Roseman et al., 2013).

**Demographic Characteristics**

Demographics items were asked in the last section of the post-debate questionnaire. For race, participants were asked which “racial or ethnic group” best describes them, and they chose from: Black, Asian, Native American, Hispanic or Latino, White, Other, or Don’t Know. For sex, participants were asked to choose between male and female. For income, participants indicated personal incomes of up to $150,000 or more a year in increments from $2,000 to $415,000.

The item measuring political affiliation was in the pre-debate questionnaire, and
asked participants, “Generally speaking, do you usually think of yourself as a
REPUBLICAN, a DEMOCRAT, an INDEPENDENT, or what?” Participants selected
either Republican, Democrat, Independent, other party, no preference, or “don’t know.”
Strength of affiliation is measured in separate items. If participants indicate affiliation with
either Republicans or Democrats, they were then asked whether they call themselves “a
STRONG Republican (Democrat), or a NOT VERY STRONG Republican (Democrat)”.

Results

Data Transformations

Four variables measured perceptions of the candidates, and these were originally
coded so that 1 corresponded with "Strongly Agree" and 5 with "Strongly Disagree".
Therefore, desirable qualities, undesirable qualities, desirable outcomes, and
undesirable outcomes were all reverse coded so that higher scores indicated more
desirable qualities, undesirable qualities, desirable outcomes, and undesirable
outcomes.

Anger or contempt ever felt toward the candidates was a composite variable
constructed from two questionnaire items. First, participants were asked whether or not
they had ever felt anger or contempt toward a candidate. If they did, they answered a
second question asking how often, ranging from rarely to very often. From these two
questions, the composite variable was created. If participants answered "No" to the first
question (e.g., “Has Mitt Romney, because of the kind of person he is or because of
something he has done, ever made you feel angry?”), then they were assigned a value
of 1 for the new variable (frequency of anger toward Romney). If they had answered yes
to the first question, then we assigned them a score of 2 for feeling the emotion “Rarely”, a score of 3 for “Occasionally”, a score of 4 for “Fairly often”, and a score of 5 for “Very often”. As well, if a participant answered “Don’t know” for either of these questions, they were assigned a missing value for the composite variable.

Table 1

<table>
<thead>
<tr>
<th></th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Obama Expresses Anger&quot;</td>
<td>3.13</td>
<td>-0.14</td>
</tr>
<tr>
<td>&quot;Obama Expresses Contempt&quot;</td>
<td>1.72</td>
<td>-0.80</td>
</tr>
<tr>
<td>&quot;Romney Expresses Anger&quot;</td>
<td>2.16</td>
<td>-0.21</td>
</tr>
<tr>
<td>&quot;Romney Expresses Contempt&quot;</td>
<td>2.22</td>
<td>-0.30</td>
</tr>
<tr>
<td>&quot;Anger toward Obama&quot;</td>
<td>3.76</td>
<td>1.15</td>
</tr>
<tr>
<td>&quot;Contempt toward Obama&quot;</td>
<td>2.06</td>
<td>0.80</td>
</tr>
<tr>
<td>&quot;Anger toward Romney&quot;</td>
<td>3.74</td>
<td>0.26</td>
</tr>
<tr>
<td>&quot;Contempt toward Romney&quot;</td>
<td>3.43</td>
<td>0.24</td>
</tr>
</tbody>
</table>

Note. The relative distance from 0 indicates how skewed the data are for each variable. Therefore, the closer a number is to 0, the less skewed the data.

The button press data had a tendency to be positively skewed, meaning the majority of the data points were typically bunched close to 0, with a long tail stretching to the right.
away from 0. In an attempt to resolve this issue, the button press data were log transformed. Table 1 shows the calculated skewness for each button press variable before and after transformation. According to Bulmer (1979), a good rule of thumb for skewness is that a score below -1 or above +1 represents a highly skewed distribution, but anything between is either moderately skewed (-1 to -1/2, +1/2 to +1) or evenly distributed (-1/2 to 0, 0 to +1/2). As can be seen from Table 1, the log transform did a very good job of reducing skew. However, the button press measures for "Obama Expresses Contempt", "Anger toward Obama", and "Contempt toward Obama" are still at least moderately skewed. This potentially reduces the reliability of parametric statistical tests, such as correlations and regression, so results using these measures will need to be interpreted with caution.

There were also a number of instances where a participant had pressed a button 0 times. The log of 0 is negative infinity, so values of "-Inf" had to be removed before the analyses were run. Since negative infinity is as close to 0 as number can be without actually being 0, all values of "-Inf" were replaced with 0 in order to run the analyses.

**Overview of Analyses**

In order to fully test each of the hypotheses, a combination of correlations and regression models were created using the statistical program SAS (version 9.2). For each hypothesis, correlations were calculated to first test the predicted relationships of anger and contempt by themselves, followed by multiple regression models to test the differential impacts of anger and contempt on the dependent variables. For all the hypotheses predicting change in favorability, regressions used change in favorability as the dependent variable and anger and contempt as the predictors. For hypotheses
predicting how anger and contempt are related to perceptions of candidates, multiple regression models used either (a) perceived desirable outcomes, (b) perceived undesirable outcomes, (c) perceived desirable qualities, or (d) perceived undesirable qualities as the dependent variable. H$_2$ and H$_3$ make predictions for undesirable outcomes (qualities), while H$_4$ and H$_5$ make predictions for desirable outcomes (qualities).

The measure used for change in favorability, on a 0 to 100 scale, turned out to have a very small amount of variance. The standard deviation for change in favorability to Obama was 14.86, and for Romney was 18.42. Participants tended to have very similar responses for both the pre- and post-debate thermometer ratings, meaning changes in favorability were relatively small. A quick look at the descriptive statistics found that the median and the mode for change in favorability for both candidates was 0. This suggests that participants' feelings of favorability didn't seem to be very affected by the debate itself.

**Results from Hypothesis Testing**

Hypothesis 1 (H$_1$) tested whether felt anger or felt contempt toward a candidate predicted a decrease in favorability toward that candidate, and if so, whether contempt was a stronger predictor. Before testing hypothesis 1 (which just uses measures of emotions during the debate) or hypothesis 2 (which uses measures of emotions felt during the debate and emotions ever felt toward a candidate), a correlation matrix was created for all measures of emotions felt during the debate (button presses) and ever felt emotions (questionnaire items). First, the variables for felt anger and anger ever felt were compared, as well as the variables for felt contempt and contempt ever felt, to
determine whether there was agreement among the felt and ever felt measures for anger and contempt. Next, the variables for anger and contempt were compared to determine whether they were collinear. These correlations are presented in Table 2.

As shown in Table 2, there was high agreement among the felt and ever felt measures. Specifically, the measures for felt anger and ever felt anger were strongly and significantly correlated for both candidates (Obama, \( r = .81, p < .001 \); Romney, \( r = .72, p < .001 \)). The same was found for the felt contempt and ever felt contempt measures for Obama (\( r = .74, p < .001 \)), but the correlation wasn’t as strong for Romney, \( r = .35, p < .05 \). The fact that all of these relationships were significant supports the reliability and validity of the relatively novel button press measures.

Also shown in Table 2, felt anger toward a candidate during the debate had a significant relationship with felt contempt toward that candidate (Obama, \( r = .66, p < .001 \)); Romney, \( r = .51, p < .01 \)). The same relationship was found the anger ever felt and contempt ever felt measures (Obama, \( r = .45, p < .001 \)); Romney, \( r = .62, p < .001 \)). Thus, in order to test the unique impact of anger vs. contempt, it is crucial to enter both emotions as predictors in simultaneous multiple regression models. As the size of the correlations is in all cases below the conventional threshold value of .7, multicollinearity is unlikely to present a problem for the regression analyses (Dorffman et al., 2013). Although the felt and ever felt measures, for the most part, were correlated above .70, they were never used in the same model together, so this issue was avoided.

A set of correlations, shown in Table 3 were calculated to test the predicted negative relationship between felt emotions toward a candidate during the debate and change in favorability toward that candidate (\( H_1 \)). For comparison, Table 3 also shows
Table 2

**Correlations Between Button Presses (AE Condition) Measures and Corresponding Questionnaire (QA) Items**

<table>
<thead>
<tr>
<th></th>
<th>Felt Anger to Obama (AE)</th>
<th>Felt Contempt to Obama (AE)</th>
<th>Anger Ever Felt to Obama (QA)</th>
<th>Contempt Ever Felt to Obama (QA)</th>
<th>Felt Anger to Romney (AE)</th>
<th>Felt Contempt to Romney (AE)</th>
<th>Anger Ever Felt to Romney (QA)</th>
<th>Contempt Ever Felt to Romney (QA)</th>
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<td>Felt Anger to Obama (AE)</td>
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<tr>
<td>Felt Contempt to Obama (AE)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>0.66***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anger Ever Felt to Obama (QA)</td>
<td>0.81***</td>
<td>0.51**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conempt Ever Felt to Obama (QA)</td>
<td>0.54**</td>
<td>0.74***</td>
<td>0.45***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Felt Anger to Romney (AE)</td>
<td>0.13</td>
<td>0.19</td>
<td>0.07</td>
<td>0.12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.03</td>
<td>0.29†</td>
<td>0.05</td>
<td>0.18</td>
<td>0.59***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anger Ever Felt to Romney (QA)</td>
<td>-0.16</td>
<td>-0.04</td>
<td>-0.29**</td>
<td>-0.21*</td>
<td>0.72***</td>
<td>0.54***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conempt Ever Felt to Romney (QA)</td>
<td>-0.19</td>
<td>-0.04</td>
<td>-0.19†</td>
<td>-0.10</td>
<td>0.39*</td>
<td>0.35*</td>
<td>0.62***</td>
<td></td>
</tr>
</tbody>
</table>

**Note.** AE = on-line log button press data in Audience Emotion condition, QA = questionnaire ratings (ever felt anger, ever felt contempt), ***p < .001, **p < .01, *p < .05, †p < .10

The table presents bivariate correlations of emotions ever felt toward each candidate with change in favorability. Since this prediction specifically tests feelings during the debate, only the
Audience Emotion measures were used.

Table 3

\textit{H}_1: \textit{Correlations of Emotions Felt During the Debate, and Ever Felt, with Change in Favorability (Felt and Ever Felt)}

<table>
<thead>
<tr>
<th>Candidate and Felt Emotion</th>
<th>Change in Favorability to Obama</th>
<th>Change in Favorability to Romney</th>
</tr>
</thead>
<tbody>
<tr>
<td>Felt Anger to Obama (AE)</td>
<td>-0.10</td>
<td>0.44**</td>
</tr>
<tr>
<td></td>
<td>\textit{n} = 35</td>
<td>\textit{n} = 34</td>
</tr>
<tr>
<td>Felt Contempt to Obama (AE)</td>
<td>0.17</td>
<td>0.32†</td>
</tr>
<tr>
<td></td>
<td>\textit{n} = 35</td>
<td>\textit{n} = 34</td>
</tr>
<tr>
<td>Felt Anger to Romney (AE)</td>
<td>0.36*</td>
<td>-0.18</td>
</tr>
<tr>
<td></td>
<td>\textit{n} = 35</td>
<td>\textit{n} = 34</td>
</tr>
<tr>
<td>Felt Contempt to Romney (AE)</td>
<td>0.34*</td>
<td>-0.36*</td>
</tr>
<tr>
<td></td>
<td>\textit{n} = 35</td>
<td>\textit{n} = 34</td>
</tr>
<tr>
<td>Anger Ever Felt to Obama (QA)</td>
<td>-0.16†</td>
<td>0.20*</td>
</tr>
<tr>
<td></td>
<td>\textit{n} = 104</td>
<td>\textit{n} = 103</td>
</tr>
<tr>
<td>Contempt Ever Felt to Obama (QA)</td>
<td>-0.13</td>
<td>0.11</td>
</tr>
<tr>
<td></td>
<td>\textit{n} = 104</td>
<td>\textit{n} = 103</td>
</tr>
<tr>
<td>Anger Ever Felt to Romney (QA)</td>
<td>0.13</td>
<td>-0.28**</td>
</tr>
<tr>
<td></td>
<td>\textit{n} = 107</td>
<td>\textit{n} = 107</td>
</tr>
<tr>
<td>Contempt Ever Felt to Romney (QA)</td>
<td>-0.04</td>
<td>-0.11</td>
</tr>
<tr>
<td></td>
<td>\textit{n} = 107</td>
<td>\textit{n} = 107</td>
</tr>
</tbody>
</table>

Note. AE = on-line log button press data in Audience Emotion condition, QA = questionnaire ratings (ever felt anger, ever felt contempt) **\(p < .01\), *\(p < .05\), †\(p < .10\).
To test the unique impacts of felt anger and felt contempt during the debate on change in favorability, a multiple regression model using both felt anger and felt contempt as predictors was created for each candidate. As shown in Table 4, felt anger was a marginally significant predictor of a decrease in favorability toward Obama ($\beta = -0.37, p < .10$), but not toward Romney. Felt contempt was marginally significant for both candidates (Obama, $\beta = 0.41, p < .10$; Romney, $\beta = -0.39, p < .10$), although the beta weight for Obama was positive, suggesting that an increase in feelings of contempt toward Obama were related to an increase in favorability toward Obama. This positive relationship is perplexing, since it seems unlikely that feelings of contempt toward a candidate would somehow be related to an increase in favorability. Several supplemental analyses were run to test whether anger and contempt ever felt toward a candidate (questionnaire items) had the same relationships with change in favorability that the felt anger and contempt during the debate. As shown in Table 4, the beta weight for contempt ever felt toward Obama was both negative and non-significant ($\beta = -0.05, p > .10$), suggesting that feelings of contempt toward a candidate are not associated with an increase in favorability. Anger ever felt toward Romney was a significant predictor of a decrease in favorability toward Romney, and contempt ever felt toward Romney was non-significant.

This indicates that anger may sometimes be a more important determinant of favorability, at least with regard to recalled emotions. One final model was created using felt contempt toward Romney and felt contempt toward Obama to predict change in favorability to Obama. This model was created to test whether felt contempt toward Romney was actually behind the increase in favorability toward Obama. As expected,
Table 4

*H₁: Multiple Regression Models Testing the Impacts of Anger and Contempt on Change in Favorability*

<table>
<thead>
<tr>
<th>Candidate and Emotion Felt</th>
<th>Change in Favorability to Obama</th>
<th>Change in Favorability to Romney</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( n ) 35</td>
<td>( n ) 34</td>
</tr>
<tr>
<td>Felt Anger to Obama (AE)</td>
<td>(-0.37^\dagger)</td>
<td>(0.40^\dagger)</td>
</tr>
<tr>
<td>Felt Contempt to Obama (AE)</td>
<td>(0.41^\dagger)</td>
<td>(0.06)</td>
</tr>
<tr>
<td>Adj. ( R^2 )</td>
<td>(0.05)</td>
<td>(0.15)</td>
</tr>
<tr>
<td>( n ) 35</td>
<td>( n ) 34</td>
<td></td>
</tr>
<tr>
<td>Felt Anger to Romney (AE)</td>
<td>(0.24)</td>
<td>(0.05)</td>
</tr>
<tr>
<td>Felt Contempt to Romney (AE)</td>
<td>(0.19)</td>
<td>(-0.39^\dagger)</td>
</tr>
<tr>
<td>Adj. ( R^2 )</td>
<td>(0.10)</td>
<td>(0.07)</td>
</tr>
<tr>
<td>( n ) 104</td>
<td>( n ) 103</td>
<td></td>
</tr>
<tr>
<td>Anger Ever Felt Toward Obama (AE)</td>
<td>(-0.14)</td>
<td>(0.11)</td>
</tr>
<tr>
<td>Contempt Ever Felt Toward Obama (AE)</td>
<td>(-0.05)</td>
<td>(0.07)</td>
</tr>
<tr>
<td>Adj. ( R^2 )</td>
<td>(0.01)</td>
<td>(0.00)</td>
</tr>
<tr>
<td>( N ) 107</td>
<td>( N ) 107</td>
<td></td>
</tr>
<tr>
<td>Anger Ever Felt Toward Romney (AE)</td>
<td>(0.24^*)</td>
<td>(-0.25^*)</td>
</tr>
</tbody>
</table>
felt contempt toward Obama dropped off to non-significance (β = .09, p < .59), while contempt toward Romney was a marginally significant predictor of increased favorability to Obama (β = .31, p < .08). Overall though, the results from hypothesis 1 are mixed, and do not support the hypothesis.

Hypothesis 2 (H2) tested whether feelings of anger or contempt toward a candidate were related to negative perceptions of that candidate, and if so, whether contempt was a stronger predictor than anger. Specifically, felt anger toward a candidate during the debate and anger ever felt toward a candidate were predicted to correlate with perceived undesirable outcomes arising from that candidate being elected president, but were not predicted to correlate with perceived undesirable qualities in that candidate. The opposite was predicted for felt contempt toward a candidate and contempt ever felt toward a candidate, meaning contempt was expected to correlate with perceived undesirable qualities, but not perceived undesirable outcomes.

A series of correlations was run to test these predicted relationships. All of the correlations, as shown in Table 5, were in the predicted direction, so more feelings of anger or contempt (felt and ever felt) toward a candidate were related to an increase in negative perceptions of that candidate. In order to test the relationships between each emotion (controlling for the other) and perceptions of the candidates, a series of multiple regression models was created using either (a) felt anger and felt contempt (button
presses) toward a candidate or (b) anger ever felt and contempt ever felt (questionnaire items) toward a candidate to predict (1) perceived undesirable outcomes from that candidate being elected president or (2) perceived undesirable qualities in that candidate. The beta weights for each predictor and the adjusted $R^2$ for each model are displayed in Table 6.

Table 5

$H_2$: Correlations Testing Predicted Relationships Between Feelings towards Candidates and Perceptions of those Candidates

<table>
<thead>
<tr>
<th>Emotion Felt Toward Candidate</th>
<th>Perceived Undesirable Outcomes by Obama</th>
<th>Perceived Undesirable Qualities in Obama</th>
<th>Emotion Felt Toward Candidate</th>
<th>Perceived Undesirable Outcomes by Romney</th>
<th>Perceived Undesirable Qualities in Romney</th>
</tr>
</thead>
<tbody>
<tr>
<td>Felt Anger to Obama (SE)</td>
<td>0.21</td>
<td>0.26</td>
<td>Felt Anger to Romney (SE)</td>
<td>0.36*</td>
<td>0.23</td>
</tr>
<tr>
<td></td>
<td>$n = 36$</td>
<td>$n = 36$</td>
<td></td>
<td>$n = 34$</td>
<td>$n = 34$</td>
</tr>
<tr>
<td>Felt Contempt to Obama (SE)</td>
<td>0.22</td>
<td>0.17</td>
<td>Felt Contempt to Romney (SE)</td>
<td>0.16</td>
<td>0.04</td>
</tr>
<tr>
<td></td>
<td>$n = 36$</td>
<td>$n = 36$</td>
<td></td>
<td>$n = 34$</td>
<td>$n = 34$</td>
</tr>
<tr>
<td>Anger Ever Felt to Obama (QA)</td>
<td>0.17†</td>
<td>0.16†</td>
<td>Anger Ever Felt to Romney (QA)</td>
<td>0.20*</td>
<td>0.17†</td>
</tr>
<tr>
<td></td>
<td>$n = 107$</td>
<td>$n = 107$</td>
<td></td>
<td>$n = 108$</td>
<td>$n = 108$</td>
</tr>
<tr>
<td>Contempt Ever Felt to Obama (QA)</td>
<td>0.08</td>
<td>0.07</td>
<td>Contempt Ever Felt to Romney (QA)</td>
<td>0.19*</td>
<td>0.18†</td>
</tr>
<tr>
<td></td>
<td>$n = 107$</td>
<td>$n = 107$</td>
<td></td>
<td>$n = 108$</td>
<td>$n = 108$</td>
</tr>
</tbody>
</table>

*Note. SE = on-line log button press data in Speaker Expression condition, QA = questionnaire ratings (ever felt anger, ever felt contempt) ***$p < .001$, **$p < .01$, *$p < .05$, †$p < .10$*

Perceived undesirable outcomes by Obama were marginally predicted by anger ever felt toward Obama ($\beta = .18, p < .10$), but not by felt anger or felt contempt during
the debate. Perceived undesirable outcomes by Romney were marginally predicted by felt anger toward Romney during the debate (β = .42, p < .10) and significantly predicted by anger ever felt toward Romney (β = .28, p < .05).

Table 6

<table>
<thead>
<tr>
<th>Emotion Felt Toward Candidate</th>
<th>Perceived Undesirable Outcomes by Obama</th>
<th>Perceived Undesirable Qualities in Obama</th>
<th>Emotion Felt Toward Candidate</th>
<th>Perceived Undesirable Outcomes by Romney</th>
<th>Perceived Undesirable Qualities in Romney</th>
</tr>
</thead>
<tbody>
<tr>
<td>n</td>
<td>36</td>
<td>36</td>
<td>n</td>
<td>34</td>
<td>34</td>
</tr>
<tr>
<td>Felt Anger to Obama (SE)</td>
<td>0.11</td>
<td>0.26</td>
<td>Felt Anger to Romney (SE)</td>
<td>0.42†</td>
<td>0.34</td>
</tr>
<tr>
<td>Felt Contempt to Obama (SE)</td>
<td>0.15</td>
<td>0.00</td>
<td>Felt Contempt to Romney (SE)</td>
<td>-0.10</td>
<td>-0.16</td>
</tr>
<tr>
<td>Adj. R²</td>
<td>0.00</td>
<td>0.01</td>
<td>Adj. R²</td>
<td>0.08</td>
<td>0.01</td>
</tr>
</tbody>
</table>

| n                            | 107                                     | 107                                    | n                            | 108                                      | 108                                      |
| Anger Ever Felt to Obama (QA)| 0.18†                                   | 0.19†                                  | Anger Ever Felt to Romney (QA)| 0.28*                                    | 0.17                                     |
| Contempt Ever Felt to Obama (QA) | -0.01                                | -0.02                                  | Contempt Ever Felt to Romney (QA)| 0.00                                     | 0.06                                     |
| Adj. R²                      | 0.01                                    | 0.01                                   | Adj. R²                      | 0.06                                     | 0.03                                     |

Note. Beta weights in bold represent analyses the directly test the hypothesis. SE = on-line log button press data in Speaker Expression condition, QA = questionnaire ratings (emotions ever felt toward both candidates). ***p < .001, **p < .01, *p < .05, †p < .10

Perceived undesirable qualities in Obama were marginally predicted only by anger ever
felt toward Obama ($\beta = .19, p < .10$). Perceived undesirable qualities in Romney were not significantly predicted by either anger or contempt.

To summarize the results of $H_2$, three out of the four anger measures significantly or marginally predicted perceived undesirable outcomes while controlling for contempt. Specifically, anger toward Romney during the debate, anger ever felt toward Romney, and anger ever felt toward Obama predicted perceived undesirable outcomes by that candidate. This suggests that there does seem to be a relationship between feelings of anger toward a candidate and perceptions of undesirable outcomes being caused by that candidate. None of the contempt measures, however, significantly predicted any negative perceptions. Therefore, feelings of contempt toward a candidate do not seem related to perceived undesirable qualities. In fact, only anger ever felt toward Obama predicted perceptions of undesirable qualities in Obama, suggesting that anger may actually have more of a relationship with perceived undesirable qualities than contempt does. Overall then, $H_2$ found support for predictions regarding anger, but not contempt.

Hypotheses 3 ($H_3$) and 4 ($H_4$) make predictions based on which candidate a participant prefers, so only participants who preferred a candidate were used in the analyses ($n = 88$ for Obama and $n = 22$ for Romney). With regard to the primary research questions, $H_3$ and $H_4$ attempt to answer the second question (how do expressions of anger and contempt by a candidate influence their supporters?). $H_3$ examines how expressions of anger and contempt by the participants' preferred candidate influenced favorability and perceptions toward the opposing candidate, while $H_4$ examines how expressions of anger and contempt by the participants' preferred candidate influenced favorability and perceptions toward the preferred candidate.
Before $H_3$ and $H_4$ were tested, correlations were run to examine the bivariate relationships between perceived expressions of anger or contempt (i.e., button press measures in the Speaker Expression condition) and recalled expressions of anger or contempt (i.e., the corresponding questionnaire items measuring expressed anger and contempt by the candidates). Specifically, these correlations aimed to test (a) whether participants who perceived more anger in one candidate would perceive more anger in the other candidate, (b) whether participants who perceived more contempt in one candidate would perceive more contempt in the other candidate, (c) whether participants who perceived more anger also perceived more contempt, and (d) whether participant's responses on the SE button press measures were similar to their responses on the corresponding questionnaire items.

As shown in table 7, participants who perceived one candidate to express more anger also perceived the other candidate to express more anger. This was the case for both the button press measures and the questionnaire measures (SE, $r = .81$, $p < .001$; QA, $r = .35$, $p < .001$). The same was found for expressions of contempt (SE, $r = .64$, $p < .001$; QA, $r = .30$, $p < .001$). This suggests that some participants may (a) be more prone to perceive expressions of anger and contempt or (b) are better at recognizing expressions of anger and contempt. Perceived expressions of anger by a candidate were also highly correlated with perceived expressions of contempt by that candidate on the button presses (Obama, $r = .47$, $p < .01$; Romney, $r = .51$, $p < .01$) and the questionnaire items (Obama, $r = .47$, $p < .001$; Romney, $r = .24$, $p < .01$), which may be further evidence of individual differences in perceiving or recognizing anger and contempt, or correlations between anger and contempt expressed by the candidates.
Table 7

**Correlations Between Button Presses (SE Condition) Measures and Corresponding Questionnaire (QA) Items**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Obama Expresses Anger</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obama Expresses Contempt</td>
<td>0.47**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recalled Anger</td>
<td>0.50**</td>
<td>0.16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recalled Contempt</td>
<td>0.10</td>
<td>0.48**</td>
<td>0.47***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Romney Expresses Anger</td>
<td>0.81***</td>
<td>0.52***</td>
<td>0.15</td>
<td>-0.09</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Romney Expresses Contempt</td>
<td>0.45**</td>
<td>0.64***</td>
<td>0.13</td>
<td>0.32†</td>
<td>0.51**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recalled Anger</td>
<td>0.51**</td>
<td>0.20</td>
<td>0.35***</td>
<td>0.00</td>
<td>0.51**</td>
<td>0.22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recalled Contempt</td>
<td>0.15</td>
<td>0.31†</td>
<td>0.19</td>
<td>0.30***</td>
<td>0.25</td>
<td>0.49**</td>
<td>0.24**</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* SE = on-line log button press data in Speaker Expression condition, QA = questionnaire ratings (anger ever felt, contempt ever felt). ***p < .001, **p < .01, *p < .05, †p < .10
As well, the button press measures were highly correlated with the corresponding questionnaire item for both anger (Obama, $r = .50, p < .01$; Romney, $r = .51, p < .01$) and contempt (Obama, $r = .48, p < .01$; Romney, $r = .49, p < .01$).

Hypothesis 3 predicted that for participants who prefer a candidate, perceived expressions of anger and contempt by their preferred candidate would be related to (a) an increase in particular negative perceptions of the opposing candidate and (b) a decrease in favorability toward the opposing candidate. To examine the bivariate relationships, a set of correlations relating to participants who preferred Obama was calculated, followed by a set of correlations relating to participants who preferred Romney. These correlations are displayed in Table 8.

To test the comparative impacts of candidate’s expressions of anger and contempt on their supporters’ perceptions and favorability toward the opposing candidate, a series of multiple regression models was created using both anger and contempt as predictors. These models are shown in Table 9. Due to the small number of Romney supporters, all of the analyses involving Romney supporters in the SE condition face serious statistical power issues. Because of this, the results from these analyses cannot be considered conclusive.

Even with anger and contempt controlling for each other in the regression models, every significant relationship observed with the correlations remained significant or marginally significant in the regressions. A candidate’s expressions of anger did not predict perceived undesirable outcomes by the opposing candidate any better than expressions of contempt. However, a candidate’s expressions of contempt predicted perceived undesirable qualities in the opposing candidate marginally better than
Table 8

**H3: Correlations between Preferred Candidate’s Expressed Emotions, Perceptions of the Opposing Candidate and Favorability Toward the Opposing Candidate**

<table>
<thead>
<tr>
<th>Prefer Obama</th>
<th>Perceived Desirable Outcomes by Obama</th>
<th>Perceived Desirable Qualities in Obama</th>
<th>Change in Favorability to Obama</th>
<th>Prefer Romney</th>
<th>Perceived Desirable Outcomes by Romney</th>
<th>Perceived Desirable Qualities in Romney</th>
<th>Change in Favorability to Romney</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obama</td>
<td>0.13</td>
<td>0.25</td>
<td>-0.04</td>
<td>Romney</td>
<td>0.12</td>
<td>0.06</td>
<td>-0.37</td>
</tr>
<tr>
<td>Expresses</td>
<td>n = 18</td>
<td>n = 18</td>
<td>n = 17</td>
<td>Expresses</td>
<td>n = 10</td>
<td>n = 10</td>
<td>n = 10</td>
</tr>
<tr>
<td>Anger (SE)</td>
<td></td>
<td></td>
<td></td>
<td>Anger (SE)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obama</td>
<td>0.56*</td>
<td>0.51*</td>
<td>-0.07</td>
<td>Romney</td>
<td>0.17</td>
<td>0.35</td>
<td>-0.63†</td>
</tr>
<tr>
<td>Expresses</td>
<td>n = 18</td>
<td>n = 18</td>
<td>n = 17</td>
<td>Expresses</td>
<td>n = 10</td>
<td>n = 10</td>
<td>n = 10</td>
</tr>
<tr>
<td>Contempt (SE)</td>
<td></td>
<td></td>
<td></td>
<td>Contempt (SE)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anger</td>
<td>-0.21*</td>
<td>-0.30**</td>
<td>0.02</td>
<td>Romney</td>
<td>0.26</td>
<td>0.05</td>
<td>0.24</td>
</tr>
<tr>
<td>Expressed by</td>
<td>n = 87</td>
<td>n = 87</td>
<td>n = 86</td>
<td>(QA)</td>
<td>n = 21</td>
<td>n = 21</td>
<td>n = 21</td>
</tr>
<tr>
<td>Obama (QA)</td>
<td></td>
<td></td>
<td></td>
<td>Contempt</td>
<td>-0.23</td>
<td>-0.11</td>
<td>0.15</td>
</tr>
<tr>
<td>Expressed by</td>
<td>n = 87</td>
<td>n = 87</td>
<td>n = 86</td>
<td>Romney</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contempt (QA)</td>
<td></td>
<td></td>
<td></td>
<td>(QA)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. SE = on-line log button press data in Speaker Expression condition, QA = questionnaire ratings (anger ever felt, contempt ever felt). ***p < .001, **p < .01, *p < .05, †p < .10

expressions of anger. Obama's perceived expressions of contempt (button presses) were significantly related to an increase in perceptions of undesirable outcomes caused by Romney (among Obama supporters, β = .65, p < .05), but Obama's recalled expressions of anger (questionnaire) were significantly related to a decrease in perceptions of undesirable outcomes caused by Romney (among Obama supporters, β = -.25, p < .05). A similar pattern emerged for Obama supporters' perceptions of undesirable qualities in Romney. Specifically, Obama's perceived expressions of
Table 9

*H*₂: Multiple Regression Models Testing Relationships between Preferred Candidate’s Expressed Emotions, Favorability Toward the Opposing Candidate, and Perceptions of the Opposing Candidate

<table>
<thead>
<tr>
<th>Prefer Obama</th>
<th>Perceived Undesirable Outcomes by Romney</th>
<th>Perceived Undesirable Qualities in Romney</th>
<th>Change in Favorability to Romney</th>
<th>Prefer Romney</th>
<th>Perceived Undesirable Outcomes by Obama</th>
<th>Perceived Undesirable Qualities in Obama</th>
<th>Change in Favorability to Obama</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obama</td>
<td>-0.19</td>
<td>0.00</td>
<td>-0.01</td>
<td>Romney</td>
<td>-0.03</td>
<td>-0.64</td>
<td>0.40</td>
</tr>
<tr>
<td>Romney</td>
<td></td>
<td></td>
<td></td>
<td>Obama</td>
<td>-0.03</td>
<td>-0.64</td>
<td>0.40</td>
</tr>
<tr>
<td>Obama</td>
<td>0.65*</td>
<td>0.51†</td>
<td>-0.07</td>
<td>Romney</td>
<td>0.20</td>
<td>0.86†</td>
<td>-0.96†</td>
</tr>
<tr>
<td>Romney</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adj. R²</td>
<td>0.25</td>
<td>0.17</td>
<td>-0.14</td>
<td>Adj. R²</td>
<td>-0.25</td>
<td>0.05†</td>
<td>0.30</td>
</tr>
<tr>
<td>n</td>
<td>87</td>
<td>87</td>
<td>86</td>
<td>n</td>
<td>21</td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>Recalled Anger Expressed by Obama (QA)</td>
<td>-0.25*</td>
<td>-0.32**</td>
<td>0.02</td>
<td>Recalled Anger Expressed by Romney (QA)</td>
<td>0.34</td>
<td>0.09†</td>
<td>0.21</td>
</tr>
<tr>
<td>Recalled Contempt Expressed by Obama (QA)</td>
<td>0.10</td>
<td>0.05†</td>
<td>0.02</td>
<td>Recalled Contempt Expressed by Romney (QA)</td>
<td>-0.32</td>
<td>-0.13†</td>
<td>0.09†</td>
</tr>
<tr>
<td>Adj. R²</td>
<td>0.03</td>
<td>0.07†</td>
<td>-0.02</td>
<td>Adj. R²</td>
<td>0.07†</td>
<td>-0.09†</td>
<td>-0.04</td>
</tr>
</tbody>
</table>

*Note.* Beta weights in **bold** represent analyses that directly test the hypothesis SE = on-line log button press data in Speaker Expression Condition, QA = questionnaire ratings (of preferred candidate’s expressed emotions) in all conditions. ***p < .001, **p < .01, *p < .05, †p < .10

Contempt were marginally related to an increase in perceptions of undesirable qualities in Romney (among Obama supporters, β = .51, p < .10), but Obama's recalled
expressions of anger were significantly related to a decrease in perceptions of undesirable outcomes caused by Romney (among Obama supporters, $\beta = -0.32, p < .01$).

With regard to change in favorability, only Romney's perceived expressions of contempt (button presses) marginally predicted a decrease in his supporters' favorability toward Obama ($\beta = -0.96, p < .10$). The beta weights for Romney's perceived expressions of anger and contempt were relatively large for predicting perceptions of undesirable qualities in Obama, but did not reach statistical significance, perhaps due to an insufficient number of observations.

Summarizing the results of testing hypothesis 3, out of the twelve models that used expressions of contempt to predict either (a) negative perceptions or (b) decrease in favorability, in only three instances was contempt a significant predictor or marginally significant predictor. In each of them, the button presses were used as a predictor, while none of the models using the questionnaire item for expressed contempt was significant. This suggests that either (a) the sample in the SE condition was significantly different than the Romney and Obama supporters as a whole, (b) there is in fact some difference between the button press measure and the questionnaire measure, or (c) participants who were in the button press condition paid closer attention to expressions of contempt.

There was, however, another interesting trend in the button press data. Specifically, expressions of anger by Romney predicted a decrease in perceptions of undesirable qualities in Obama and an increase in favorability toward Obama, while expressions of contempt by Romney predicted an increase in perceptions of undesirable qualities in Obama and a decrease in favorability toward Obama. While it's true that the only marginally significant predictor was contempt predicting favorability ($\beta = -0.96, p <$
.10), the beta weights for the effect of Romney's expressions of anger and contempt on Obama's perceived undesirable qualities were relatively large (β = -64. for anger, β = .86 for contempt), suggesting that with a larger sample this relationship could become significant. As well, Obama’s expressions of contempt were significantly related to an increase perceptions of undesirable qualities in Romney (β = .51, p < .10) and marginally related to an increase in perceptions of undesirable outcomes by Romney (β = .65, p < .05). A comparison of the second row of Table 9 with the other rows suggests that expressions of contempt are more effective at hurting the opposing candidate than expressions of anger are.

A similar trend emerged for Obama's expressions of anger and contempt in the questionnaire data. Specifically, Obama's recalled expressions of anger significantly predicted a decrease in his supporters' negative perceptions of Romney (undesirable outcomes, β = -.25, p < .01; undesirable qualities, β = -.32, p < .05), and the beta weights for Obama's recalled expressed contempt non-significantly predicted an increase in negative perceptions of Romney, although these beta weights were small (.10 and 0.05). However, the reverse was true for Romney's recalled expressions of anger and contempt, so recalled expressions of anger non-significantly predicted increased negative perceptions of Obama, while recalled expressions of contempt non-significantly predicted decreased negative perceptions of Obama. Confusingly, Romney's recalled expressions of anger also non-significantly predicted an increase in his supporters' favorability toward Obama. Overall, these results do not support the predictions regarding anger, although the predictions regarding contempt found some support. As well, the prediction that expressions of contempt would be more damaging
Hypothesis 4 predicted that, for participants who prefer a candidate, expressions of anger and contempt by the preferred candidate would be related to an increase in positive perceptions and an increase in favorability toward that candidate. For this hypothesis, undesirable outcomes and undesirable qualities have been replaced with desirable outcomes and desirable qualities, since the aim is to test how expressions of anger and contempt by a candidate might improve perceptions and favorability toward that candidate.

First, correlation matrices, shown in Table 10, were created to test the predicted bivariate relationships. Next, a series of multiple regression models, shown in Table 11, were created using expressed anger and contempt by the participant's preferred candidate to test how they relate to positive perceptions and favorability toward that candidate. None of the button press measures were significant. In the questionnaire data, Obama's recalled expressions of anger marginally predicted a decrease in his supporters' perceptions of desirable outcomes from Obama being elected president ($\beta = -.20, p < .10$). For Romney, the relationship was opposite, so Romney's recalled expressions of anger marginally predicted an increase in his supporters' perceptions that he would cause desirable outcomes if elected ($\beta = .44, p < .10$). Obama's recalled expressions of anger also marginally predicted a decrease in Obama supporters' perceptions of desirable qualities in him ($\beta = -.21, p < .10$). As well, Romney's recalled expressions of contempt significantly predicted a decrease in favorability toward Romney among his supporters ($\beta = -.48, p < .05$). So, although recalled expressions of contempt were not predictive of either perceived desirable outcomes or desirable
qualities, both candidate’s supporters disliked their candidate at least somewhat more when they recalled the candidate to express more contempt.

Table 10

$H_4$: Correlations between Preferred Candidate’s Expressed Emotions, Positive Perceptions of the Preferred Candidate, and Favorability Toward the Preferred Candidate

<table>
<thead>
<tr>
<th>Prefer Obama</th>
<th>Perceived Desirable Outcomes by Obama</th>
<th>Perceived Desirable Qualities in Obama</th>
<th>Change in Favorability to Obama</th>
<th>Prefer Romney</th>
<th>Perceived Desirable Outcomes by Romney</th>
<th>Perceived Desirable Qualities in Romney</th>
<th>Change in Favorability to Romney</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obama Expresses Anger (SE)</td>
<td>-0.11</td>
<td>0.19</td>
<td>-0.14</td>
<td>Romney Expresses Anger (SE)</td>
<td>0.31</td>
<td>-0.12</td>
<td>0.07</td>
</tr>
<tr>
<td>Obama Expresses Contempt (SE)</td>
<td>-0.26</td>
<td>0.38</td>
<td>-0.21</td>
<td>Romney Expresses Contempt (SE)</td>
<td>0.12</td>
<td>-0.25</td>
<td>0.00</td>
</tr>
<tr>
<td>Recalled Anger Expressed by Obama (QA)</td>
<td>-0.19†</td>
<td>-0.21†</td>
<td>-0.11</td>
<td>Recalled Anger Expressed by Romney (QA)</td>
<td>0.43†</td>
<td>0.04</td>
<td>-0.31</td>
</tr>
<tr>
<td>Recalled Contempt Expressed by Obama (QA)</td>
<td>-0.06</td>
<td>-0.03</td>
<td>-0.19†</td>
<td>Recalled Contempt Expressed by Romney (QA)</td>
<td>0.09</td>
<td>-0.15</td>
<td>-0.53*</td>
</tr>
</tbody>
</table>

Note. SE = on-line log button press data, Speaker Expression Condition; QA = questionnaire ratings (of preferred candidate’s expressed emotions), in all conditions. ***p < .001, **p < .01, *p < .05, †p < .10.

Interestingly, although expressing contempt hurt both candidates with regard to favorability, expressing anger improved perceptions of Romney in the eyes of his supporters while damaging perceptions of Obama in the eyes of his. Recalled
Table 11

*H₄: Multiple Regression Models Testing Preferred Candidate’s Expressed Emotions, Positive Perceptions of the Preferred Candidate, and Favorability Toward the Preferred Candidate*

<table>
<thead>
<tr>
<th>Prefer Obama</th>
<th>Perceived Desirable Outcomes by Obama</th>
<th>Perceived Desirable Qualities in Obama</th>
<th>Change in Favorability to Obama</th>
<th>Prefer Romney</th>
<th>Perceived Desirable Outcomes by Romney</th>
<th>Perceived Desirable Qualities in Romney</th>
<th>Change in Favorability to Romney</th>
</tr>
</thead>
<tbody>
<tr>
<td>n</td>
<td>18</td>
<td>18</td>
<td>17</td>
<td>n</td>
<td>10</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Obama Expresses Anger (SE)</td>
<td>0.03</td>
<td>0.01</td>
<td>-0.05</td>
<td>Romney Expresses Anger (SE)</td>
<td>0.62</td>
<td>0.24</td>
<td>0.20</td>
</tr>
<tr>
<td>Obama Expresses Contempt (SE)</td>
<td>-0.28</td>
<td>0.37</td>
<td>-0.19</td>
<td>Romney Expresses Contempt (SE)</td>
<td>-0.39</td>
<td>-0.44</td>
<td>-0.15</td>
</tr>
<tr>
<td>Adj. R²</td>
<td>-0.06</td>
<td>0.03</td>
<td>-0.09</td>
<td>Adj. R²</td>
<td>-0.10</td>
<td>-0.18</td>
<td>0.30</td>
</tr>
<tr>
<td>n</td>
<td>88</td>
<td>88</td>
<td>86</td>
<td>n</td>
<td>21</td>
<td>21</td>
<td>19</td>
</tr>
<tr>
<td>Recalled Anger Expressed by Obama (QA)</td>
<td>-0.20†</td>
<td>-0.22†</td>
<td>-0.05</td>
<td>Recalled Anger Expressed by Romney (QA)</td>
<td>0.44†</td>
<td>0.08</td>
<td>-0.17</td>
</tr>
<tr>
<td>Recalled Contempt Expressed by Obama (QA)</td>
<td>0.02</td>
<td>-0.05</td>
<td>-0.17</td>
<td>Recalled Contempt Expressed by Romney (QA)</td>
<td>-0.03</td>
<td>-0.17</td>
<td>-0.48*</td>
</tr>
<tr>
<td>Adj. R²</td>
<td>0.01</td>
<td>0.02</td>
<td>0.02</td>
<td>Adj. R²</td>
<td>0.09</td>
<td>-0.08</td>
<td>0.22</td>
</tr>
</tbody>
</table>

*Note.* Beta weights in **bold** represent analyses the directly test the hypothesis. SE = on-line log button press data, QA = questionnaire ratings (of preferred candidate’s expressed emotions). ****p < .001, **p < .01, *p < .05, †p < .10

expressions of anger by Obama were marginally related to a *decrease* in positive
perceptions of him among his supporters.

Counter to this, recalled expressions of anger by Romney are related to a marginal increase in his supporters perception that he would cause desirable outcomes. However, the only significant relationship found was that expressions of contempt by Romney were related to a decrease in favorability among his supporters. This demonstrates a clear difference between anger and contempt in how they impact favorability and positive perceptions of presidential candidates. Given that Romney's expressions of anger seemed to benefit Romney while Obama's expressions of anger seemed to damage Obama, it's possible that there is a racial component to these findings. In order to test whether race might be a factor, supplementary analyses were run for Obama using black participants in one set of models and non-black participants in another. No difference was found in the significance or the beta weights for Obama's expressions of anger. However, Obama's expressions of contempt were marginally related to an increase in favorability among black Obama supporters ($\beta = .39, p < .09, n = 21$), while Obama's expressions of contempt were significantly related to a decrease in favorability among non-black Obama supporter ($\beta = -.28, p < .05$). This suggests that there is an effect of race on how Obama's expressions of contempt are related to favorability among his supporters. Although these findings do not fully support hypothesis 4, they demonstrate that expressions of anger and contempt, in particular circumstances, can benefit a candidate.

Hypothesis 5 tested whether participants’ felt anger and felt contempt toward the opposing candidate would relate to an increase in positive perceptions and favorability toward their preferred candidate. Since this hypothesis makes predictions based on
positive perceptions, again, desirable qualities and outcomes (as opposed to undesirable) are used in the analyses. Again, as in the other hypotheses, a series of correlations were run to test the predicted relationships, shown in Table 12.

Next, a series of multiple regression models were created to test the relationships between each emotion (controlling for the other), perceptions of the candidates, and

Table 12

<table>
<thead>
<tr>
<th>Prefer Obama</th>
<th>Perceived Desirable Outcomes by Obama</th>
<th>Perceived Desirable Qualities in Obama</th>
<th>Change in Favorability to Obama</th>
<th>Prefer Romney</th>
<th>Perceived Desirable Outcomes by Romney</th>
<th>Perceived Desirable Qualities in Romney</th>
<th>Change in Favorability to Romney</th>
</tr>
</thead>
<tbody>
<tr>
<td>Felt Anger to Romney (AE)</td>
<td>-0.12 ( n = 22 )</td>
<td>0.14 ( n = 22 )</td>
<td>0.42* ( n = 22 )</td>
<td>Felt Anger to Obama (AE)</td>
<td>-0.24 ( n = 7 )</td>
<td>-0.27 ( n = 7 )</td>
<td>0.78† ( n = 6 )</td>
</tr>
<tr>
<td>Felt Contempt to Romney (AE)</td>
<td>-0.23 ( n = 22 )</td>
<td>0.07 ( n = 22 )</td>
<td>0.29</td>
<td>Felt Contempt to Obama (AE)</td>
<td>0.56 ( n = 7 )</td>
<td>0.46 ( n = 7 )</td>
<td>0.49 ( n = 6 )</td>
</tr>
<tr>
<td>Anger Ever Felt to Romney (QA)</td>
<td>-0.05 ( n = 75 )</td>
<td>0.00 ( n = 75 )</td>
<td>0.01 ( n = 73 )</td>
<td>Anger Ever Felt to Obama (QA)</td>
<td>0.17 ( n = 21 )</td>
<td>0.11 ( n = 18 )</td>
<td>0.22 ( n = 17 )</td>
</tr>
<tr>
<td>Contempt Ever Felt to Romney (QA)</td>
<td>-0.02 ( n = 75 )</td>
<td>0.04 ( n = 75 )</td>
<td>-0.19† ( n = 73 )</td>
<td>Contempt Ever Felt to Obama (QA)</td>
<td>0.15 ( n = 21 )</td>
<td>-0.30 ( n = 18 )</td>
<td>0.09 ( n = 17 )</td>
</tr>
</tbody>
</table>

Note. SE = on-line log button press data, QA = questionnaire ratings (of preferred candidate’s expressed emotions). ***p < .001, **p < .01, *p < .05, †p < .10
Table 13

*H*$_5$: Multiple Regression Models Testing Relationships between Felt Emotion Toward Opposing Candidate, Positive Perceptions of the Preferred Candidate, and Favorability Toward the Preferred Candidate

<table>
<thead>
<tr>
<th>Prefer Obama</th>
<th>Perceived Desirable Outcomes by Obama</th>
<th>Perceived Desirable Qualities in Obama</th>
<th>Change in Favorability to Obama</th>
<th>Prefer Romney</th>
<th>Perceived Desirable Outcomes by Romney</th>
<th>Perceived Desirable Qualities in Romney</th>
<th>Change in Favorability to Romney</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>n</em></td>
<td>22</td>
<td>22</td>
<td>22</td>
<td><em>n</em></td>
<td>7</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Felt Anger to Romney (AE)</td>
<td><strong>0.11</strong></td>
<td>0.19</td>
<td><strong>0.46</strong></td>
<td>Felt Anger to Obama (AE)</td>
<td><strong>-0.97</strong></td>
<td>-0.91†</td>
<td><strong>0.78</strong></td>
</tr>
<tr>
<td>Felt Contempt to Romney (AE)</td>
<td><strong>-0.31</strong></td>
<td><strong>-0.07</strong></td>
<td><strong>-0.04</strong></td>
<td>Felt Contempt to Obama (AE)</td>
<td>1.16**</td>
<td>1.02*</td>
<td><strong>0.00</strong></td>
</tr>
<tr>
<td>Adj. $R^2$</td>
<td>-0.04</td>
<td>0.03</td>
<td>0.09</td>
<td>Adj. $R^2$</td>
<td>0.82</td>
<td>0.57</td>
<td>0.35</td>
</tr>
</tbody>
</table>

| *n*          | 75                                    | 75                                     | 73                              | *n*          | 21                                     | 18                                       | 17                                |
| Anger Ever Felt to Romney (QA) | **-0.03** | 0.06 | **0.14** | Anger Ever Felt to Obama (QA) | **0.21** | 0.43 | **0.16** |
| Contempt Ever Felt to Romney (QA) | **-0.04** | **-0.02** | **-0.28*** | Contempt Ever Felt to Obama (QA) | 0.05 | **-0.50**† | **0.02** |
| Adj. $R^2$   | -0.02 | -0.03 | 0.03 | Adj. $R^2$ | -0.07 | 0.13 | -0.11 |

*Note.* Beta weights in **bold** represent analyses that directly test the hypothesis. AE = on-line log button press data in Audience Emotion condition, QA = questionnaire ratings (emotions felt toward candidates). **\(p < .001\), *\(p < .01\), *\(p < .05\), †\(p < .10\)

favorability toward the candidates. As shown in Table 13, there were four significant
relationships and two marginally significant relationships. First, Romney supporters’ felt anger toward Obama (button presses) significantly predicted a decrease in perceived desirable outcomes by Romney ($\beta = -.97, p < .05$), but felt contempt toward Obama significantly predicted an increase in perceived desirable outcomes by Romney ($\beta = 1.16, p < .01$). A similar pattern emerged, in the button press data, for Romney supporters’ perceptions of desirable qualities in Romney.

Specifically, Romney supporters’ felt anger toward Obama marginally predicted a decrease in perceived desirable qualities in Romney ($\beta = -.91, p < .10$), but felt contempt toward Obama significantly predicted an increase in perceived desirable outcomes by Romney ($\beta = 1.02, p < .05$). However, there are several issues with these models. First, the sample size for Romney participants in the AE condition was tiny ($N=6$), and the models had very high adjusted $R^2$s. This indicates that the models are likely overfitting the data, meaning they follow the training set (our sample) too closely (Hastie et al., 2009). Second, Romney supporters’ contempt ever felt toward Obama marginally predicted a decrease in perceived desirable qualities in Romney ($\beta = -.50, p < .10$). The fact that the corresponding questionnaire measures were (a) non-significant or (b) marginally significant in the opposite direction makes overfitting even more likely. Therefore, the results from the button press data for Romney supporters must be interpreted with great caution. Finally, and contrary to the prediction, Obama supporters’ contempt ever felt toward Romney was significantly related to a decrease in favorability toward Obama ($\beta = -.28, p < .05$). Overall, there does not seem to be support for hypothesis 5.
Discussion

Summary of Results

In this study, I tested how anger and contempt related to participants’ perceptions and feelings of favorability toward presidential candidates. I sought to examine this relationship in a number of contexts, represented by five hypotheses. H₁ examined how participants’ feelings of anger and contempt towards candidates while watching the debate were related to change in favorability toward those candidates. H₂ examined how participants’ feelings of anger and contempt toward the candidates while watching the debate were related to perceptions of those candidates. H₃ examined how expressions of anger and contempt by the participant's preferred candidate related to perceptions and favorability toward the opposing candidate. H₄ examined how expressions of anger and contempt by the participant’s preferred candidate related to perceptions and favorability toward the preferred candidate, and H₅ examined how participant's feelings of anger and contempt toward the opposing candidate related to perceptions and favorability toward their preferred candidate.

Hypothesis 1 had mixed results. As was shown in Table 4, felt anger marginally predicted a decrease in favorability toward Obama, but not Romney. Felt contempt marginally predicted a decrease in favorability toward Romney, but felt contempt toward Obama marginally predicted an increase in favorability toward Obama. However, several supplementary analyses, using anger and contempt ever felt toward a candidate found that recalled contempt to Obama non-significantly predicted a decrease in favorability toward Obama. As well, when felt contempt toward Obama and felt contempt toward Romney were both used to predict change in favorability toward Obama, felt contempt
toward Obama became non-significant while felt contempt toward Romney became a marginally significant predictor of increased favorability to Obama. Anger ever felt toward Romney, unlike felt anger, was a significant predictor of a decrease in favorability toward Romney, while contempt ever felt, unlike felt contempt, was non-significant. Overall-- once the apparently spurious relationship of favorability and felt contempt to Obama was explained in terms of correlated felt contempt to Romney—increased favorability to Obama was marginally predicted by lower felt anger toward Obama and higher contempt ever felt toward Romney, and significantly predicted by higher anger ever felt toward Romney. Increased favorability to Romney was significantly predicted by lower anger ever felt to Romney.

As was shown in Table 6, tests of hypothesis 2 found that felt and recalled contempt toward a candidate were not related to perceived undesirable outcomes by that candidate or perceived undesirable qualities in that candidate. However, in accord with hypothesis 2, felt anger toward Romney during the debate marginally predicted an increase in perceptions of Romney causing undesirable outcomes, and anger ever felt significantly predicted this. As well, recalled anger toward Obama marginally predicted the perceptions that Obama would cause undesirable outcomes. Recalled anger toward Obama also predicted the perception that Obama has undesirable qualities. Thus the theoretical distinction between anger vs. contempt as differentially predicting appraisals of undesirable outcomes vs. undesirable qualities was not supported.

Tests of hypothesis 3, shown in Table 9, did not find much evidence that a preferred candidate’s expressions of anger negatively impacted perceptions and favorability toward the opposing candidate. In fact, candidates’ expressions of anger
were in a few cases related to a decrease in their supporters’ negative perceptions of the opposing candidate and an increase in favorability toward the opposing candidate. This trend was seen non-significantly in the button press data for both candidates, and reached marginal significance the questionnaire data relating recalled expressions of anger by Obama to decreased favorability toward Obama among his supporters. However, expressions of contempt, in a few cases, were related to an increase in negative perceptions toward the opposing candidate and a decrease in favorability toward the opposing candidate. Specifically, Obama’s expressions of contempt (a) significantly predicted an increase in perceptions of undesirable outcomes by Romney (among Obama supporters) and (b) marginally predicted an increase in perceived undesirable qualities in Romney (among Obama supporters). As well, Romney’s expressions of contempt were marginally related to a decrease in Romney supporters’ favorability toward Obama.

Tests of hypothesis 4, shown in Table 11, found that expressions of anger and contempt by the candidates, overall, were related to a decrease in their supporters’ positive perceptions and favorability toward them. The sole exception to this was that Romney’s expressions of anger were marginally related to an increase in his supporters’ perceptions that he would cause desirable outcomes if elected. The results from hypotnthesis 4 did not support more positive perceptions and increased favorability among a candidate’s supporters from the candidate expressing anger and contempt, but suggest that expressions of a particular emotion by one candidate may be more effective than expressions of the same emotion by another candidate.

As shown in Table 13, tests of hypothesis 5 found evidence that arousing feelings
of contempt toward an opposing candidate may be effective at improving perceptions and favorability toward your own candidacy (at least for Romney supporters). In contrast, feelings of anger toward Obama predicted more negative perceptions of Romney among his supporters. However, the models that were significant had abysmally small sample sizes, which, when combined with the high R squared, suggests that the models may be overfitting the data. This means that these results should be interpreted with great caution, and before any conclusions can be reached, must be tested on a larger sample size. As well, recalled contempt toward Romney (among Obama supporters) was significantly related to a decrease in favorability toward Obama, while recalled contempt toward Obama (among Romney supporters) was marginally related to a decrease in perceived desirable qualities in Romney. This does not support hypothesis 5.

**Interpretation and Implications**

Contrary to expectations, participants’ feelings of anger and contempt toward the candidates during the debate were not universally related to a decrease in favorability toward those candidates (H₁). As shown in Table 4, feelings of anger toward Obama were marginally associated with a decrease in favorability toward Obama, and feelings of contempt toward Romney were marginally associated with a decrease in favorability toward Romney. These results are in line with the hypothesis and with past research on anger and research on contempt. Specifically, feelings of anger and contempt are associated with negative appraisals of another person or groups’ character or intent (Fischer & Roseman, 2007; Frijda, Kuipers, & ter Schure, 1989; Izard, 1977; Rozin, Lowery, Haidt, Imada, 1999; Tausch et al., 2011; Ufkes & Otten, 2011).

Given that participants’ anger did not predict a decrease in favorability toward
Romney and only marginally predicted a decrease in favorability toward Obama, it's possible that feelings of anger and contempt simply are not reliable predictors of a decrease in favorability. However, there is a possibility that there was an error with the methods. First, the sample size may have simply been too small to find significance. Second, it's possible the weak results were due to the dependent variable of change in favorability. Overall, variance in change in favorability was very low. Participants tended to have very similar responses for both the pre- and post-debate thermometer ratings, meaning changes in favorability were relatively small, and suggesting that participants' feelings of favorability didn't seem to be very affected by the debate itself. Participants' opinions about the candidates were most likely already fully formed, so perhaps watching 30 minutes of a debate was not going to change those opinions. This would explain why participants' feelings of anger had little to no effect on change in favorability. Importantly, however, this does not discount the effect of anger generally on feelings of favorability, since it could be that feelings of anger over time are what causes a decrease in favorability.

Feelings of contempt, like anger, had mixed results, although the results for contempt were more difficult to understand. Contempt toward Romney marginally predicted a decrease in favorability (as predicted), while feelings of contempt toward Obama marginally predicted an increase in favorability. Given that the sample was primarily Obama supporters, it seems likely that although participants may have felt contempt toward Obama, they still preferred him to Romney. Perhaps watching the debate made them remember the fact that they disliked Romney, so although they felt contempt toward both candidates, they reaffirmed their dislike of Romney and their liking
of Obama. Recalled contempt and recalled anger were used in the same model to predict change in favorability toward Obama to see if this trend would be replicated, but it was not. The beta weight for recalled contempt to Obama was non-significant and negative (-0.05), suggesting that feelings of contempt are not what drove the increase in favorability.

In addition, the model that used felt contempt toward Obama and felt contempt toward Romney to predict change in favorability to Obama found that contempt toward Romney was driving the increase in favorability toward Obama. This is interesting, since this finding is in line with what hypothesis 5 predicted. Specifically, hypothesis 5 predicted that participants’ feelings of contempt toward an opposing candidate would increase favorability toward their preferred candidate because of contempt’s theoretical and empirical relation to the ethics of community (Rozin, Lowery, Imada, Haidt, 1999) and its social exclusion component (Fischer & Roseman, 2007). However, since most of the participants were run after the election, the feelings of contempt toward Romney may have arisen from participants’ knowledge that Romney had already lost the election. Specifically, participants may have viewed him as incompetent and non-threatening (Ufkes & Otten, 2011), which would have reaffirmed Obama supporters belief that Obama was the best candidate.

With regard to hypothesis 2, some support was found for anger’s association with perceived undesirable outcomes, although contempt was not specifically associated with perceived undesirable qualities. In fact, as shown in Table 6, anger was found to have more of an association with perceived undesirable qualities than contempt. This is contrary to the hypothesized appraisals related to anger and contempt that were found in
Fischer & Roseman’s (2007) study on the distinct social functions of anger and contempt. Specifically, feelings of anger toward a person were associated with trying to “alter an undesired outcome by changing the other person’s behavior through attacking (Fischer & Roseman, 2007, p. 112)”, while feelings of contempt were associated with appraisals of bad character. The results from hypothesis 2 showed that feelings of anger toward Obama were related to both perceived undesirable outcomes and perceived undesirable qualities, although anger toward Romney only significantly predicted perceived undesirable outcomes. As well, results from testing hypotheses 3 and 4 found that expressions of anger or contempt by one of the candidates were related to both (un)desirable outcomes and (un)desirable qualities of themselves and the opposing candidate.

This could mean that the questions asking about (un)desirable outcomes and (un)desirable qualities are not context specific enough, so perhaps anger and contempt are each related to certain types of (un)desirable outcomes or (un)desirable qualities. Specifically, undesirable outcomes or qualities related to incompetence might arouse contempt (Ufkes & Otten, 2011), while undesirable outcomes or qualities related to goal blockage might arouse anger (Roseman, 2011). For example, if a Republican thought that the recent economic issues were due to Obama’s mishandling of the economy, he might be more likely to feel contempt than anger. However, if that same Republican lost a lot of money due to the economic slump, (s)he’ll also probably feel anger.

With regard to hypothesis 5, as was shown in Table 13, participants’ feelings of anger toward the opposing candidate seemed to decrease positive perceptions or favorability toward their preferred candidate. Anger was predicted to increase
perceptions and favorability toward a participant’s preferred candidate because it has been found to increase heuristic processing, which increases the use of general information (such as party loyalty) and decreases objective evaluation of evidence when making a decision (Parker & Isbell, 2010; Lerner & Tiedens, 2006; Bodenhausen, Kramer, & Susser, 1994). The fact that Romney supporters’ feelings of anger toward Obama were related to a decrease in positive perceptions of Romney suggests that Romney supporters may have been unhappy with Romney’s performance during the debate. Specifically, their anger at Obama may have, at least in part, arisen from the fact that he won the election. Since Romney lost, they may have been blaming him, and therefore decided that he was not capable of causing desirable outcomes and did not have desirable qualities.

Although participants’ feelings of anger did not seem to improve their perceptions and favorability toward their preferred candidate, the results show contempt ever felt toward Romney among Obama supporters significantly predicted a decrease in favorability toward Obama. This, surprisingly, is counter to the supplemental analysis from hypothesis 1, which found that when felt contempt toward Obama and felt contempt toward Romney were used in the same model to predict change in favorability toward Obama, only felt contempt toward Romney predicted a significant increase in favorability toward Obama.

As was shown in Table 13, the extent to which Romney supporters ever felt contempt toward Obama was marginally related to a decrease in perceived desirable qualities in Romney. Contempt was predicted to be a uniting emotion because of its theoretical and empirical relation to the ethics of community (Rozin, Lowery, Imada,
Haidt, 1999) and its social exclusion component (Fischer & Roseman, 2007). However, this was not the case in the current study. In fact, these results suggest that arousing contempt may backfire.

Several interesting patterns emerged when testing how expressions of anger or contempt by participants’ preferred candidate impacted their perceptions and favorability toward the opposing candidate (H₃) and toward their preferred candidate (H₄). Specifically, as shown in Table 9, expressions of anger by a candidate seemed to be related to their supporters’ improved perceptions of the opposing candidate and, as shown in Table 11, damaged perceptions of themselves. This is interesting because it suggests that there is a sort of backlash against the candidates for expressing anger. In fact, the backlash seems strong enough to not only damage a candidate in their supporters’ eyes, but to also improve their supporters’ perceptions of the opposing candidate.

The exception to this backlash were Romney’s expressions of anger, as shown in Table 11, which were found to marginally predict his supporters’ agreement that he would cause desirable outcomes if elected. Expressions of anger and contempt by a candidate were predicted to improve positive perceptions and favorability toward that candidate because of research on social power, which found that people viewing an angry person implicitly judged them to have several leader-oriented traits, such as competence, power, and dominance (Clark, Pataki, & Carver, 1996; Knutson, 1996; Tiedens, 2001; Lerner & Tiedens, 2006). The fact that showing anger hurt Obama while (partially) helping Romney provides some support for this idea, although these results make it clear that simply expressing anger is not a guaranteed way for candidates to
improve their image. More likely, expressing anger is effective (a) in specific situations, such as a candidate challenging an incumbent (Romney challenging Obama), or (b) for a specific candidate.

Candidates’ expressions of contempt were a double-edged sword. As shown in Table 9, Obama's expressions of contempt were related to an increase in his supporters' perceptions of undesirable outcomes by Romney and undesirable qualities in Romney, while Romney's expressions of contempt were related to a decrease in his supporters' favorability toward Obama. This is evidence that expressing contempt can indeed damage an opposing candidate. However, as shown in Table 11, Romney's expressions of contempt were also significantly related to a decrease in his supporters' favorability toward him, and nine out of the other 11 models showed contempt to non-significantly predict worse perceptions and favorability toward the expressing candidate.

Interestingly, however, Black Obama supporters differed from the rest of the Obama supporters with regard to how they were influenced by Obama’s expressions of contempt. Specifically, Obama’s expressions of contempt were related to an increase in favorability toward Obama for Black supporters, but a decrease in favorability for non-black supporters. This suggests that race has an effect on when expressions of contempt are effective, and could help to explain why Romney’s expressions of anger benefited him among his supporters, while Obama’s expressions of anger damaged him among his supporters. Black supporters may have liked Obama’s expressions of contempt toward Romney because finally a Black man was defeating a wealthy white man in the race to be President of the United States. As well, this would suggest a unifying ability of contempt, since the Black president and his Black supporters united in
their contempt of the incompetent wealthy White candidate.

From this, we can conclude that expressing contempt is potentially more damaging to an opponent than expressing anger. Looking back at Tables 9 and 11, the data show that expressions of anger can be damaging, but can also somehow seem to improve perceptions and favorability toward the opposing candidate. However, anger expressed in the right way can also benefit a candidate, as we see with Romney in Table 11. Therefore, these results provide evidence that anger and contempt are unique emotions with distinctive effects. Each emotion seems to be better suited to particular situations, although what exactly these situations are is still unknown.

Limitations

Studying something as fast-paced and dynamic as a U.S. presidential race can create a plethora of difficulties and concerns. A primary concern in the present study was that a majority of the participants (n = 112 out of N = 138) in the study were run after the election for president was over. Since Romney dropped out of the public eye almost immediately after he lost, participants who were run up to a year after the election may have had very different perceptions of him during the time of the study than they had during the actual race. It's likely the case that Republicans and Democrats both felt differently towards Obama and Romney after Romney disappeared from the news than they did when he was a contender against Obama. As well, since Democrats no longer face any threat from Romney and since Republicans are potentially threatened by Obama and his actions as president, it seems likely that Republicans would feel more negative about Obama than Democrats about Romney. This would also suggest that the differences found between Democrats and Republicans in this study (discussed below)
could be due simply to the timing of the study (relative to the debate and the election).

Several problems arose in the analysis of the hypotheses, two of which relate to Type 1 errors. First, many of the models were tested on way too small of a population. It's possible that the frequent lack of significance, at least in part, was due to this lack of statistical power for many of the analyses. Second, the significant models with particularly small sample sizes ($n < 20$) run the risk of overfitting the model to the data, increasing the probability of a Type 1 error. A second problem is that a large number of models were created (48 total), greatly increasing the chances of a Type 1 error. Technically, using the Bonferroni correction would solve this issue, but it would be absurdly conservative. Taking these issues into account, a few of the significant results should be taken with caution and considered to be more exploratory in nature.

**Future Research**

In light of the limitations of this study, a number of improvements could be made for future research. First, any follow up study must increase the sample size. Several of the relationships were either only marginally significant or were close to marginal significance, signaling that a larger sample size might accurately identify a pattern. Second, non-partisan participants, or at least participants who do not prefer a candidate, should be examined to determine how anger and contempt might influence swing voters. Third, if another study were to use the same debate-watching format, then it would absolutely be preferable to run all participants before the election. This way, participants will hopefully be more aware of the issues, have more of a stake in what was being debated, and will pay closer attention to the debate itself. Fourth, the measure used for change in favorability might not be the best measure to detect the influences of anger
and contempt on favorability, so perhaps some exploration of alternatives to this would be beneficial.

**Conclusions**

This study has shown that anger and contempt do differentially predict perceptions of and favorability toward presidential candidates. Participants’ feelings of anger toward Obama, while watching the debate, and participants’ feelings of contempt toward Romney, also while watching the debate, were related to a decrease in favorability toward those candidates. Feelings of anger during the debate were more related to perceptions of the candidates than feelings of contempt. Participants’ feelings of anger toward the opposing candidate during the debate predicted a decrease in positive perceptions of their preferred candidate (at least for Romney supporters), and contempt ever felt toward the opposing candidate were related to a decrease in positive perceptions and favorability toward their preferred candidate. With regard to emotions expressed by the candidates, it seems that contempt was a more effective emotion at damaging the perceptions of and favorability toward the opposing candidate, but anger had the potential to increase positive perceptions of a candidate among his supporters, and both emotions sometimes damaged perceptions of the expressing candidate. Overall, these patterns suggest that expressing anger and contempt might be useful in different situations and for different candidates.
Appendices

A. Debate Study Questionnaire

Questionnaire RI 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 in 2012?
   □ Very much interested
   □ Somewhat interested
   □ Not much interested

2. In 2008 Barack Obama ran on the Democratic ticket against John McCain for the Republicans. Do you remember for sure whether or not you voted in that election?
   □ Yes, I voted ⇒ CONTINUE to question 3.
   □ No, I didn’t vote ⇒ SKIP to question 4.
   □ Don’t know ⇒ SKIP to question 4.

3. Which candidate did you vote for?
   □ John McCain
   □ Barack Obama
   □ Other candidate (PLEASE SPECIFY) ______________________
   □ Don’t know

4. In the 2012 Republican Presidential primary, Mitt Romney ran against Michelle Bachmann, Herman Cain, Newt Gingrich, John Huntsman, Gary Johnson, Ron Paul, Rick Perry, Buddy Roemer, and Rick Santorum for the Republican nomination. Do you remember for sure whether or not you voted in that election?
☐ Yes, I voted ⇒ CONTINUE to question 5.
☐ No, I didn’t vote ⇒ SKIP to question 6.
☐ Don’t know ⇒ SKIP to question 6.
5. Which candidate did you vote for?
   □ Michelle Bachmann
   □ Herman Cain
   □ Newt Gingrich
   □ John Huntsman
   □ Gary Johnson
   □ Ron Paul
   □ Rick Perry
   □ Buddy Roemer
   □ Mitt Romney
   □ Rick Santorum
   □ Don’t know

   □ Yes, I voted ⇒ CONTINUE to question 7.
   □ No, I didn’t vote ⇒ SKIP to question 8.
   □ Don’t know ⇒ SKIP to question 8.

7. Which candidate did you vote for?
   □ Ed Cowan
   □ Bob Ely
   □ Craig Freis
   □ Bob Greene
   □ John Haywood
   □ Robert Jordan
   □ Keith Judd
   □ Barack Obama
   □ Cornelius O’Connor
   □ Edward O’Donnell
   □ Darcy Richardson
   □ Jim Rogers
   □ Vermin Supreme
   □ Randall Terry
   □ Aldous Tyler
   □ John Wolfe
8. Generally speaking, do you usually think of yourself as a REPUBLICAN, a DEMOCRAT, an INDEPENDENT, or what?
   - □ Republican ⇒ CONTINUE to question 9.
   - □ Democrat ⇒ SKIP to question 10.
   - □ Independent ⇒ SKIP to question 11.
   - □ Other party (PLEASE SPECIFY) ___________________ ⇒ SKIP to question 11.
   - □ No preference ⇒ SKIP to question 11.
   - □ Don’t know ⇒ SKIP to question 11.

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

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

| 100° | Very warm or favorable feeling |
| 85°  | Quite warm or favorable feeling |
| 70°  | Fairly warm or favorable feeling |
| 60°  | A bit more warm or favorable than cold feeling |
| 50°  | No feeling at all |
| 40°  | A bit more cold or unfavorable feeling |
| 30°  | Fairly cold or unfavorable feeling |
| 15°  | Quite cold or unfavorable feeling |
| 0°   | Very cold or unfavorable feeling |

12. How would you rate Mitt Romney? _____

13. How would you rate Barack Obama? _____

14. How would you rate Paul Ryan? _____
15. How would you rate Joe Biden? _____

16. How would you rate the Democratic Party? _____

17. How would you rate the Republican Party? _____
Questions to be Answered While Viewing Political Communications

**Speaker Expression Condition:**

18. While you are watching, please press the key labeled "Obama expresses Anger" whenever Barack Obama expresses ANGER toward someone.
19. While you are watching, please press the key labeled "Obama expresses Contempt (scorn)" whenever Barack Obama expresses CONTEMPT (scorn) toward someone.
20. While you are watching, please press the key labeled "Romney expresses Anger" whenever Mitt Romney expresses ANGER toward someone.
21. While you are watching, please press the key labeled "Romney expresses Contempt (scorn)" whenever Mitt Romney expresses CONTEMPT (scorn) toward someone.

**Audience Emotion Condition:**

22. While you are watching, please press the key labeled "Anger toward Obama" whenever you feel ANGER toward Barack Obama.
23. While you are watching, please press the key labeled "Contempt to Obama" whenever you feel CONTEMPT (scorn) toward Barack Obama.
24. While you are watching, please press the key labeled "Anger toward Romney" whenever you feel ANGER toward Mitt Romney.
25. While you are watching, please press the key labeled "Contempt to Romney" whenever you feel CONTEMPT (scorn) toward Mitt Romney.

**Candidate Evaluation Condition:**

26. While you are watching, please press the key labeled "+ Obama" whenever you have a FAVORABLE impression of Barack Obama.
27. While you are watching, please press the key labeled "- Obama" whenever you have an UNFAVORABLE impression of Barack Obama.
28. While you are watching, please press the key labeled "+ Romney" whenever you have a FAVORABLE impression of Mitt Romney.
29. While you are watching, please press the key labeled "- Romney" whenever you have an UNFAVORABLE impression of Mitt Romney.
ANONYMOUS CODE #_________
(not linked to your name)

Questionnaire RI 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.

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<tr>
<th>Temperature</th>
<th>Description</th>
</tr>
</thead>
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<tr>
<td>100°</td>
<td>Very warm or favorable feeling</td>
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<tr>
<td>85°</td>
<td>Quite warm or favorable feeling</td>
</tr>
<tr>
<td>70°</td>
<td>Fairly warm or favorable feeling</td>
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<td>60°</td>
<td>A bit more warm or favorable than cold feeling</td>
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<tr>
<td>50°</td>
<td>No feeling at all</td>
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<tr>
<td>40°</td>
<td>A bit more cold or unfavorable feeling</td>
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<tr>
<td>30°</td>
<td>Fairly cold or unfavorable feeling</td>
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<td>15°</td>
<td>Quite cold or unfavorable feeling</td>
</tr>
<tr>
<td>0°</td>
<td>Very cold or unfavorable feeling</td>
</tr>
</tbody>
</table>

30. How would you rate Mitt Romney? _____

31. How would you rate Barack Obama? _____

32. How would you rate Paul Ryan? _____
33. How would you rate Joe Biden? _____

34. How would you rate the Democratic Party? _____

35. How would you rate the Republican Party? _____

PLEASE ANSWER THE FOLLOWING QUESTIONS (questions 36-56) BASED ON WHAT YOU THOUGHT AND FELT WHILE YOU WERE WATCHING THE DEBATE TODAY.

36. During the debate, how often did Mitt Romney express COMPASSION?

- Very often
- Fairly often
- Occasionally
- Rarely

- Don’t know

37. During the debate, how often did Mitt Romney express PRIDE?

- Very often
- Fairly often
- Occasionally
- Rarely

- Don’t know

38. During the debate, how often did Barack Obama express COMPASSION?

- Very often
- Fairly often
- Occasionally
- Rarely

- Don’t know
39. During the debate, how often did Barack Obama express PRIDE?

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

40. During the debate, how much ANGER did Mitt Romney express toward his opponent?

1  2  3  4  5  6  7  8  9
Hardly any  A great deal

41. During the debate, how much CONTEMPT (SCORN) did Mitt Romney express toward his opponent?

1  2  3  4  5  6  7  8  9
Hardly any  A great deal

42. During the debate, how much ANGER did Barack Obama express toward his opponent?

1  2  3  4  5  6  7  8  9
Hardly any  A great deal

43. During the debate, how much CONTEMPT (SCORN) did Barack Obama express toward his opponent?

1  2  3  4  5  6  7  8  9
| Hardly any | A great deal |
44. Regardless of which candidate you happen to support, who do you think did the better job in the debate you just watched?
   □ Mitt Romney
   □ Barack Obama

45. How has your opinion of Mitt Romney been affected by the debate? Is your opinion of Mitt Romney more favorable, less favorable, or has it not changed much?
   □ More favorable
   □ Less favorable
   □ Not changed much
   □ Unsure

46. Please briefly explain your answer to question 45.

47. 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

48. Please briefly explain your answer to question 47.
49. 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 Mitt Romney would cause important UNDESIRABLE OUTCOMES, if he was elected President?
- [ ] Strongly agree
- [ ] Agree
- [ ] Neither Agree nor Disagree
- [ ] Disagree
- [ ] Strongly Disagree

50. 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 Mitt Romney would cause important DESIRABLE OUTCOMES if he was elected President?
- [ ] Strongly agree
- [ ] Agree
- [ ] Neither Agree nor Disagree
- [ ] Disagree
- [ ] Strongly Disagree

51. 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 Mitt Romney has important UNDESIRABLE QUALITIES?
- [ ] Strongly agree
- [ ] Agree
- [ ] Neither Agree nor Disagree
- [ ] Disagree
- [ ] Strongly Disagree

52. 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 Mitt Romney has important DESIRABLE QUALITIES?
- [ ] Strongly agree
- [ ] Agree
- [ ] Neither Agree nor Disagree
- [ ] Disagree
- [ ] Strongly Disagree
53. 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

54. 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

55. 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

56. 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
Think about MITT ROMNEY. Has Mitt Romney, because of the kind of person he is or because of something he has done, ever made you feel afraid?

□ Yes ⇒ CONTINUE to question 58.
□ No ⇒ SKIP to question 59.
□ Don’t know ⇒ SKIP to question 59.

57. If you answered yes to question 57, how often would you say you’ve felt afraid?

□ Very often
□ Fairly often
□ Occasionally
□ Rarely

□ Don’t know

58. Has Mitt Romney, because of the kind of person he is or because of something he has done, ever made you feel hopeful?

□ Yes ⇒ CONTINUE to question 60.
□ No ⇒ SKIP to question 61.
□ Don’t know ⇒ SKIP to question 61.

59. If you answered yes to question 59, how often would you say you’ve felt hopeful?

□ Very often
□ Fairly often
□ Occasionally
□ Rarely

□ Don’t know

60. Has Mitt Romney, because of the kind of person he is or because of something he has done, ever made you feel angry?

□ Yes ⇒ CONTINUE to question 62.
□ No ⇒ SKIP to question 63.
□ Don’t know ⇒ SKIP to question 63.

61. If you answered yes to question 61, how often would you say you’ve felt angry?

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

Has Mitt Romney, because of the kind of person he is or because of something he has done, ever made you feel proud?
Yes ⇒ CONTINUE to question 64.
No ⇒ SKIP to question 65.
Don’t know ⇒ SKIP to question 65.

62. If you answered yes to question 63, how often would you say you have felt proud?

Very often
Fairly often
Occasionally
Rarely
Don’t know

63. Has Mitt Romney, because of the kind of person he is or because of something he has done, ever made you feel contemptuous (scornful)?

Yes ⇒ CONTINUE to question 66.
No ⇒ SKIP to question 67.
Don’t know ⇒ SKIP to question 67.

64. If you answered yes to question 65, how often would you say you’ve felt contemptuous (scornful)?

Very often
Fairly often
Occasionally
Rarely
Don’t know

65. Has Mitt Romney, because of the kind of person he is or because of something he has done, ever made you feel admiring?

Yes ⇒ CONTINUE to question 68.
No ⇒ SKIP to question 69.
Don’t know ⇒ SKIP to question 69.

66. If you answered yes to question 67, how often would you say you’ve felt admiring?
□ Very often
□ Fairly often
□ Occasionally
□ Rarely
□ Don’t know

67. Has Mitt Romney, because of the kind of person he is or because of something he has done, ever made you feel disappointed?

□ Yes ⇒ CONTINUE to question 70.
□ No ⇒ SKIP to question 71.
□ Don’t know ⇒ SKIP to question 71.

68. If you answered yes to question 69, how often would you say you’ve felt disappointed?

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

69. Has Mitt Romney, because of the kind of person he is or because of something he has done, ever made you feel enthusiastic?

□ Yes ⇒ CONTINUE to question 72.
□ No ⇒ SKIP to question 73.
□ Don’t know ⇒ SKIP to question 73.

70. If you answered yes to question 71, how often would you say you’ve felt enthusiastic?

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

71. Think about BARACK OBAMA. Has Barack Obama, because of the kind of person he is or because of something he has done, ever made you feel afraid?

□ Yes ⇒ CONTINUE to question 74.
□ No ⇒ SKIP to question 75.
□ Don’t know ⇒ SKIP to question 75.
72. If you answered yes to question 73, how often would you say you’ve felt afraid?
   □ Very often
   □ Fairly often
   □ Occasionally
   □ Rarely
   □ Don’t know

73. Has Barack Obama, because of the kind of person he is or because of something he has done, ever made you feel hopeful?
   □ Yes ⇒ CONTINUE to question 76.
   □ No ⇒ SKIP to question 77.
   □ Don’t know ⇒ SKIP to question 77.

74. If you answered yes to question 75, how often would you say you’ve felt hopeful?
   □ Very often
   □ Fairly often
   □ Occasionally
   □ Rarely
   □ Don’t know

75. Has Barack Obama, because of the kind of person he is or because of something he has done, ever made you feel angry?
   □ Yes ⇒ CONTINUE to question 78.
   □ No ⇒ SKIP to question 79.
   □ Don’t know ⇒ SKIP to question 79.

76. If you answered yes to question 77, how often would you say you’ve felt angry?
   □ Very often
   □ Fairly often
   □ Occasionally
   □ Rarely
   □ Don’t know

77. Has Barack Obama, because of the kind of person he is or because of something he has done, ever made you feel proud?
   □ Yes ⇒ CONTINUE to question 80.
   □ No ⇒ SKIP to question 81.
   □ Don’t know ⇒ SKIP to question 81.
78. If you answered yes to question 79, how often would you say you have felt proud?

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

79. 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 ⇒ CONTINUE to question 82.
☐ No ⇒ SKIP to question 83.
☐ Don’t know ⇒ SKIP to question 83.

80. If you answered yes to question 81, how often would you say you’ve felt contemptuous (scornful)?

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

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

☐ Yes ⇒ CONTINUE to question 84.
☐ No ⇒ SKIP to question 85.
☐ Don’t know ⇒ SKIP to question 85.

82. If you answered yes to question 83, how often would you say you’ve felt admiring?

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

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

☐ Yes ⇒ CONTINUE to question 86.
84. If you answered yes to question 85, how often would you say you’ve felt disappointed?
   □ Very often
   □ Fairly often
   □ Occasionally
   □ Rarely
   □ Don’t know
85. Has Barack Obama, because of the kind of person he is or because of something he has done, ever made you feel enthusiastic?
   □ Yes  ⇒ CONTINUE to question 88.
   □ No  ⇒ SKIP to question 89.
   □ Don’t know  ⇒ SKIP to question 89.
86. If you answered yes to question 87, how often would you say you’ve felt enthusiastic?
   □ Very often
   □ Fairly often
   □ Occasionally
   □ Rarely
   □ Don’t know
87. Think about MITT ROMNEY. How important to you is your opinion about Mitt Romney?
   □ Extremely important
   □ Very important
   □ Somewhat important
   □ Not too important
   □ Not at all important
88. How certain are you of your opinion about Mitt Romney?
   □ Extremely certain
   □ Very certain
   □ Somewhat certain
   □ Not too certain
   □ Not at all certain
89. My opinion of Mitt Romney is based on my moral sense of the way things should be.
□ Strongly agree
□ Agree
□ Neither Agree nor Disagree
□ Disagree
□ Strongly Disagree
90. Think about BARACK OBAMA. How important to you is your opinion about Barack Obama?
   - Extremely important
   - Very important
   - Somewhat important
   - Not too important
   - Not at all important

91. How certain are you of your opinion about Barack Obama?
   - Extremely certain
   - Very certain
   - Somewhat certain
   - Not too certain
   - Not at all certain

92. My opinion of Barack Obama is based on my moral sense of the way things should be.
   - Strongly agree
   - Agree
   - Neither Agree nor Disagree
   - Disagree
   - Strongly Disagree
FOR EACH OF THE FOLLOWING STATEMENTS, PLEASE RATE HOW MUCH YOU AGREE OR DISAGREE:

93. Some groups of people are simply inferior to other groups.
   □ Strongly agree
   □ Agree
   □ Neither Agree nor Disagree
   □ Disagree
   □ Strongly Disagree

94. We would have fewer problems if we treated people more equally.
   □ Strongly agree
   □ Agree
   □ Neither Agree nor Disagree
   □ Disagree
   □ Strongly Disagree

95. We should do what we can to equalize conditions for different groups.
   □ Strongly agree
   □ Agree
   □ Neither Agree nor Disagree
   □ Disagree
   □ Strongly Disagree

96. It’s OK if some groups have more of a chance in life than others.
   □ Strongly agree
   □ Agree
   □ Neither Agree nor Disagree
   □ Disagree
   □ Strongly Disagree
97. 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?

Liberal/Conservative

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

98. The FIRST televised Presidential debate between Barack Obama and Mitt Romney took place on Wednesday, October 3, 2012, 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

99. The SECOND televised Presidential debate between Barack Obama and Mitt Romney took place on Tuesday, October 16, 2012, and was moderated by Candy
Crowley. How much of the SECOND Presidential debate did you happen to watch (before participating in this study)?

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

100. The THIRD televised Presidential debate between Barack Obama and Mitt Romney took place on Monday, October 22, 2012, 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

103. 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

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

☐ Mitt Romney
☐ Barack Obama
☐ Other candidate (PLEASE SPECIFY)________________________

105a. Did you prefer one of the candidates for PRESIDENT?

☐ Yes ⇒ CONTINUE to question 105b.
☐ No ⇒ SKIP to question 106.
☐ Don’t know ⇒ SKIP to question 106.

105b. Who did you prefer?

☐ Mitt Romney
☐ Barack Obama
☐ Ross C. “Rocky” Anderson
☐ Jeffrey “Jeff” Boss
☐ Virgil H. Goode, Jr.
☐ James Harris
Gary Johnson  □ Peta Lindsay  □ Merlin Miller  □ Jill E. Stein  □ Don’t know

105c. Would you say that your preference for this candidate was STRONG or NOT STRONG?
□ Strong  □ Not strong  □ Don’t know

106. 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 ⇒ CONTINUE to question 107a.
☐ □ No, I didn’t vote ⇒ SKIP to question 108.
☑ □ Don’t know ⇒ SKIP to question 108.

107a. How about the election for President? Did you vote for a candidate for PRESIDENT?
☐ □ Yes, I voted for President ⇒ CONTINUE to question 107b.
☐ □ No, I didn’t vote for President ⇒ SKIP to question 108.
☐ □ Don’t know ⇒ SKIP to question 108.

107b. Who did you vote for?
☐ □ Mitt Romney ✔
☐ □ Barack Obama ✔

108. 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  □ Don’t know
109. On the average day, about how many hours do you personally watch television? ______

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

111. During a typical week, how many days do you watch, read, or listen to news (not including sports) from TV, newspapers, radio, or the Internet?
- None
- One day
- Two days
- Three days
- Four days
- Five days
- Six days
- Seven days
- Don’t know

112. What is the month and year of your birth? Month: □ January  □ February  □ March  □ April  □ May  □ June  □ July  □ August  □ September  □ October  □ November  □ December  Year: 19_____.

113. What is your sex?
- Male
- Female

114. Are you now married, widowed, divorced, separated, or never married?
- Married
- Widowed
- Divorced
- Separated
□ Never married

115. 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

116. Are you doing any work for pay at the present time?
- □ Yes ⇒ CONTINUE to question 117.
- □ No ⇒ SKIP to question 119.

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

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

119. Please mark the box of the income group that includes the income of all members of your family living in your household in 2011 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
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<tr>
<td>$135,000 – $149,000</td>
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<tr>
<td>$150,000 and over</td>
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</tbody>
</table>
Please mark the box of the income that you yourself received in 2011 before taxes, not including any of the income received by your spouse or the rest of your family. 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
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□ $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 – $134,000
□ $135,000 – $149,000
□ $150,000 and over

120. What racial or ethnic group or groups best describes you?
□ Black
□ Asian
□ Native American
□ Hispanic or Latino
□ White
□ Other (Please specify) ____________________
□ Don’t know

122. What is your native language?_______________

123. Are you:
☐ A U.S. citizen
☐ Not a U.S. citizen
☐ A U.S. citizen born in Puerto Rico, the U.S. Virgin Islands, or the Northern Marianas Islands

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

*IF YOU HAVE FINISHED THIS QUESTIONNAIRE AND OTHER PEOPLE IN THE ROOM ARE STILL WORKING, JUST SIT BACK AND RELAX OR WORK QUIETLY—WITHOUT TALKING TO ANYONE—UNTIL EVERYONE IS DONE.
References


Russell, J. A. (1991). The contempt expression with research associating feelings of contempt with negative appraisals of another person or groups’ character or intent


