How do negative political ads impact public trust in candidates?

Giti Zahedzadeh
Claremont Graduate University
Giti.zahedzadeh@cgu.edu

Jennifer Merolla
Claremont Graduate University
jennifer.merolla@cgu.edu

Abstract

Scholars have lauded campaigns for their ability to communicate information that helps citizens make voting decisions. However, some lament the increasingly negative tone of contemporary campaigns. In this paper we contribute to the broad literature on the effect of negative advertisements on candidate evaluations, by looking carefully at one important mechanism through which negative advertisements operate, namely political trust. While studies have looked at the effect of attack ads on turnout and candidate evaluations, they have not fully explored the mechanisms driving these relationships (Lau and Redlawsk, 2006). We investigate the impact of negative political advertising specifically, on evaluations of both the sponsor and target. We use a laboratory experiment in which subjects take part in a hypothetical election and are randomly assigned to a control group or a negative advertising condition. One novelty of our study is that instead of only relying on attitudinal reports of trust in candidates, we generate a behavioral measure of trust by having participants play “the candidate” in the well-known trust game introduced in Kreps (1990) and Berg et al. (1995). We explore how the negative advertisement affects both measures of trust and how these in turn influence candidate evaluations.
Introduction

Scholars have repeatedly voiced concerns about the detrimental impact of negative campaign tactics, especially attack advertising, on citizen participation and democratic processes (Ansolabehere and Iyengar 1996). They argue that negative advertising turn voters off and keeps them away from the polls, thus contributing to an uninvolved electorate. Ansolabehere et al. (1994) and Ansolabehere and Iyengar (1995) concluded that "campaign advertising has contributed significantly to the disappearance of the nonpartisan voter," (146), that "negative campaigns contribute to the general antipathy towards politicians and parties," (113) and that negative advertising poses "a serious threat to democracy" (12). They also claim that negative advertisements lead to lower evaluations for both the target and the sponsor, which may cause the public to disengage from politics.

Early research seemed to support a link between negative ads and demobilization. For example, Ansolabehere et al. (1994) demonstrated that exposure to attack advertising in and of itself significantly decreased voter engagement and participation. However, the theory behind these findings were called into question by a host of scholars who argued that negative ads may actually increase participation since individuals may learn more information from negative ads, particularly those focused on issues (Freedman, Goldstein and Franz, 2004). This debate spurned a large literature and the jury seems to suggest that negative ads may not be as detrimental to turnout as Ansolabehere and colleagues found (Lau 2001, Martin 2004).

Why might individuals lament negativity in campaigns so much if they actually can stimulate voter involvement? Are there any ways in which negativity has harmful effects in the political system? In this piece we ask whether negative ads lead to more negative evaluations of candidates. Furthermore, we explore one potential mechanism by which negative ads may
operate, through trust in candidates. In this piece we look carefully at how negative ads affect trust in the target and sponsoring candidate and how this in turn affects candidate evaluations. We explore these relationships using an experimental design in which we are able to gather both attitudinal and behavioral measures of trust in the sponsor and target of a negative advertisement. One novelty of our study is the use of the well-known trust game introduced in Kreps (1990) and Berg et al. (1995) to quantify the level of trust in candidates, in addition to attitudinal measures of trust. We also look at whether trust in candidates mediates the effect of negative ads on overall candidate evaluations.

The Effects of Negativity

Attack advertising contains an aggressive, one-sided assault, designed to draw attention to an opponent's weaknesses in either character or issue positions (Pfau and Kenski 1990). Attack advertising and negative advertising often are used interchangeably, but attack advertising also represents the most malicious form of negative advertising. Negative advertising directly assaults a targeted candidate for broken promises, a poor voting record, public misstatements, and the like. Such advertising often is referred to as "mudslinging" (Garramone 1984).

Research has shown that negative advertising makes a greater impression on an audience than positive or neutral advertising because of the greater weighting given to negative information over positive information. Specifically, individuals weigh negative information more heavily than positive information when forming evaluations of social stimuli (Hodges 1974; Kellermann 1989). It is therefore believed that negative ads will have greater weight than positive ads. In more formal terms, negativity refers to the tendency for negative information to have more weight than equally extreme or equally likely positive information in various impression-formation or cognitive processing tasks (Lau, 1982). Research by Lang, Dhillon, and
Dong (1995) suggests that arousing negative televised messages are remembered better than calm televised messages, even though negative messages are allocated fewer cognitive processing resources. Perhaps negative political advertising is more emotionally arousing than standard positive or neutral political advertising. In fact, enhanced arousal may be especially likely to result from exposure to negative advertising during heated political campaigns as candidates vie for a relatively small percentage of uncommitted voters (Pinkleton, 1997).

The first strand of research on negative ads has focused on the effects of ads on turnout, and the scholarship has been mixed as to whether negative ads harm turnout. As was mentioned in the introduction, Ansolabehere et al. (1994) addressed the effects of negative campaign advertising on turnout. Using an experimental design in which advertising tone is manipulated within identical audiovisual context, they find that exposure to negative advertisements dropped intentions to vote by 5%. They replicate their result through an aggregate-level analysis of turnout and campaign tone in the 1992 Senate elections and found similar substantive effects. In trying to explain the pattern of results, the authors considered three explanations: partisan demobilization, a plague-on-both-houses effect, and general cynicism. First, individuals exposed to negative advertisements may withdraw support from candidates who were attacked. Second a plague-on-both-your-houses effect generates blanket negativity towards both candidates. Third, attack advertising demobilizes voters by affecting more general attitudes about the political process. Their evidence pointed toward the third mechanism. Among their experimental participants, exposure to attack advertising significantly weakened confidence in the responsiveness of electoral institutions and public officials. They conclude that as campaigns become more negative and cynical, so does the electorate (Ansolabehere et al. 1994, 834). Furthermore, Basil, Schooler, and Reeves (1991) found that negative advertisements reduced
positive attitudes toward both candidates in the race, thereby indirectly reducing political involvement.

However, not all scholars agreed with the demobilization thesis. Geer and Finkel (1998) argue that there are at least three reasons to believe that negative spots will stimulate voter participation. First, as several scholars have reported (Brians and Wattenberg 1996; Geer 2006), negative advertising conveys a significant amount of policy and retrospective performance information to voters, and it is a truism that more knowledgeable voters are more likely to participate (Erikson and Tedin 1995). Second, there is evidence that negative information is given more weight in political information processing, as it provides individuals with unexpected, "non-normative" data that can be used to evaluate politicians (Lau 1985). Garramone et al.(1990, 301) argue that by facilitating candidate image differentiation and attitude polarization, negative political advertising may aid voters in feeling more confident about their voting decisions and may intensify their involvement in political races. Third, negative advertisements may produce stronger emotional and affective responses than positive ones. These reactions could augment turnout by arousing the voter's enthusiasm for his or her preferred candidates, or by increasing the degree to which the voter cares about the outcome of the election. The emotional response to negative ads also may be one of increased anxiety, which may then stimulate further learning about candidates' personalities or issue positions in order for the voter to make a more informed decision (Marcus and MacKuen 1993).

With respect to the empirical evidence, Lau et al (2002) found fairly consistent evidence that negative campaigning in Senate elections generally mobilizes, rather than demobilizes, the electorate. Their evidence comes from 189 different election campaigns and over 8,300 survey respondents across six different election years. They argue that campaign negativism has a
curvilinear effect on turnout, with most observed levels of negativism actually stimulating turnout. Only at extremely high levels does negativism in political campaigns generally suppress turnout. Freedman, Goldstein and Franz (2004) argue that “political advertising is rife with both informational and emotional content and actually contributes to a more informed, more engaged, and more participatory citizenry.” With detailed advertising data from the 2000 election, they show that exposure to campaign advertising produces citizens who are more interested in the election, have more to say about the candidates, are more familiar with who is running, and ultimately are more likely to vote. Importantly, these effects are concentrated among those citizens who need it most: those with the lowest pre-existing levels of political information. Lau et al (2007) examined the accuracy of the conventional wisdom and the legitimacy of the fears about the consequences for the political system via meta-analysis, a systematic, quantitative review of the literature. They found no reliable evidence that negative campaigning depresses voter turnout, though it does slightly lower feelings of political efficacy, trust in government, and possibly overall public mood.

The second strand in the literature has looked at the effects of negative advertisements on candidate evaluations, for both the sponsor and the target. The findings in the literature indicate that evaluations of the targeted candidate worsen in greater proportion than evaluations of the sponsoring candidate among persons exposed to negative issue advertising (Shapiro and Rieger 1992). Audiences have rated candidates as being less qualified, less honest, less serious, less sincere, less successful, and less fiscally responsible after exposure to negative political advertising (Kaid and Boydston 1987). Pinkleton (1997) conducted an experiment to determine the effects of negative comparative political advertising on candidate and advertising evaluations. His results indicate that negative comparative advertising lowers targeted-candidate
evaluations without lowering sponsoring-candidate evaluations, despite the low credibility ratings received by such advertising. In terms of voter backlash, he finds that sponsorship of negative comparative advertising had a minimal impact on the sponsoring candidate's evaluations (Pinkleton, 1997). Fridkin and Kenney (2004) examined the effectiveness of negative campaigning replicating the campaign environment for nearly 100 Senate elections involving thousands of voters. Their results suggest that negative messages delivered in a legitimate fashion and focusing on a relevant topic depress evaluations of opponents. In contrast, negative messages containing irrelevant information delivered in an overly strident manner depress evaluations of both candidates involved in the campaign. They conclude that the impact of negative messages varies depending on (a) the status of the candidate delivering the message, (b) the characteristics of the citizens receiving the message, and (c) the style of the candidates’ criticisms (e.g., policy vs. personal attacks).

In this paper, we look at a mechanism by which candidate evaluations may be lowered given exposure to negative advertising, namely trust in political candidates. Trust is indispensable in friendship, love, families and organizations, and plays a key role in politics (Arrow, 1972). In the absence of trust in a country’s institutions and leaders, political legitimacy breaks down (Zak et al. 2005). Evidence indicates that trust contributes to economic, political and social success (Knack et al., 1997 and Zak et al. 2001). In this piece we investigate whether negative ads affect trust in the target and sponsoring candidate and if this in turn affects how participants evaluate the candidates. We explore these relationships using an experimental design in which subjects are randomly assigned to view a negative advertisement and we are able to gather both attitudinal and behavioral measures of trust in the candidates. We use the well-known trust game introduced in Kreps (1990) and Berg et al. (1995) to quantify the level of trust
in candidates, in addition to attitudinal measures of trust. Furthermore, we look at whether trust in candidates mediates the effect of negative ads on overall candidate evaluations. We summarize these relationships in Figure 1. We first see that negative ads are hypothesized to decrease trust in the target candidate (H1), as well as the sponsor (H2). These evaluations should then lead to lower summary evaluations of the target (H3) and sponsor (H4). In the next section, we outline the method we use to test these expectations.

**Figure 1** - Exploring Mechanism of Negative Ad Impacting Candidate Evaluations

**Experimental Design**

The study was conducted between December and February of 2012 with a sample of subjects from the Claremont Colleges. We chose to use a context of an election in Wisconsin for the office of Wisconsin's 8th congressional district. Subjects in the study were randomly assigned to a control group or a negative advertisement condition. They were then asked to play the trust game, to be elaborated on below, and then answer a battery of survey questions. We seek to see if trust in the target and sponsor was decreased among those in the negative advertising condition, and whether these evaluations in turn lead to lower candidate evaluations and trust in government. Below, we report on more details of the experimental design.
**Sample and Procedures**

Claremont College Staff and graduate students were recruited by email advertisements promising monetary reward for participation in a political decision-making task. They were told that they could earn between $5 and $15 dollars, depending on their play in a decision making task. Sixty individuals agreed to participate in the study (college staff n=7; students n=53). Participants could come to the research lab for the experiment or they could choose to complete the study offsite at a place and time of their choosing, and only 8 chose to do the study in the lab. With respect to demographic characteristics, 44% of the participants were male (27 persons) and 56% were female (35 persons). The mean income was $40,000-$50,000 per year (total household income); the mean age was 30-34 years old; 44% had a Masters degree; and, the majority were white (71%). Our sample is therefore more educated and younger than the national population, and contains more females. With respect to partisanship, the majority considered themselves Democrats (44%) followed by the Independents (29%); Republicans made up only 14% of our population. 6 participants (10%) considered themselves “extremely liberal”, 21 (33%) as “liberal” and 13 (21%) as “slightly liberal”. 16 participants (25%) considered themselves “Moderate”. In tests of whether subjects were evenly distributed across experimental conditions by these characteristics, we only found an imbalance on gender.

For those who decided to complete the study onsite, they first filled out a consent form. After signing the form, the participant was taken into the next room and was assigned a computer. Participants were informed that they would receive the instructions for each part separately, remain anonymous during the experiment (i.e., identified by code numbers) and would be paid in the end. For the online study, each participant was assigned a code number which they had to enter at the end of the study. The consent form was included in the email each
participant received after an initial inquiry requesting participation in the study. At the end of the consent form, we included the link to the study. Clicking on the link to the study meant that the participant had consented to the study and was ready to commence. After completing the study, participants were urged to email the principal investigator for notification of study completion. The principal investigator would then email the debriefing form and schedule for a time so the participants could come to the lab and be compensated. The study was programmed in Qualtrics.

In Part I, participants onsite and online were asked to complete a questionnaire collecting information on demographic characteristics and were then randomly assigned to either the treatment or control conditions. In Part II, they were then asked to think of themselves as citizens of the state of Wisconsin where a Democrat Steve Kagan was running against a Republican John Gard. After reading this description, those in the treatment group watched an attack ad sponsored by Steve Kagan against John Gard. Following exposure to the treatment (or not for the control group), all participants were asked to play the trust game. Participants were assigned randomly to play the trust game with either John Gard or Steve Kagan. After the trust game, they were asked to complete a more comprehensive questionnaire, which included questions about trust in the candidates, overall candidate evaluations and the political system. After finishing the survey, onsite participants were debriefed and compensated, while the researcher followed up with those who did the study online to arrange for payment. The whole study took between 15-20 minutes to complete.

Treatment

As we indicated above, participants were asked to think of themselves as citizens of the state of Wisconsin who would be voting in an upcoming election for Wisconsin's 8th congressional district. We chose an out of state race because we wanted to avoid a race in which
participants already knew the candidates. We were successful in this as our results suggested our participants had neither heard of John Gard nor Steve Kagan.

In 2006, when Republican Congressman Mark Green of Wisconsin's 8th Congressional District announced that he would run for Governor instead of re-election, most of the political establishment assumed the seat would stay in Republican hands. Only one Democrat had held the seat in over thirty years—and he was a one-termer. Republicans had a stellar candidate in the race—Wisconsin House Speaker John Gard. Steve Kagen was a first-time democratic candidate facing opponents in a September Democratic primary. The ad we used was sponsored by Steve Kagen who accused Gard of Pinocchio-like lying. The ad shows a profile image of Gard's nose growing longer and longer then jarringly labeled Gard, then a 19-year state lawmaker, as "the most corrupt politician in Madison."¹

We chose to go back a few election cycles since we wanted to use an ad that participants would not be very familiar with. First, we wanted to avoid the possibility that our participants had an opinion toward either candidate. Second, the ad portrayed John Gard as a liar which was pertinent particularly since the participants were to play the trust game with either the target candidate or the sponsor.

Sixty participants completed the study. Participants were randomly assigned to four different groups: Control Group, Play Gard in the Trust Game (n=7); Control Group, Play Kagan in Trust Game (n=10); Ad Group, Play Gard in the Trust Game (n=23); and, Ad Group, Play

¹ The ad can be found at: http://www.youtube.com/watch?v=rlFuyuiNWM4&list=FLnfts9icdIdGUqT-3KjQGnQ&index=166&feature=plpp_video
The script of this ad is in the Appendix.
Kagan in the Trust Game (n=20)\(^2\). Everyone in the ad treatment group watched the negative ad before being playing the trust game with Gard or Kagan. No one in the control group watched the ad played the trust game with either Gard or Kagan. We elaborate on the details of the trust game in the next sections. All of our participants in the treatment group found the ad to be negative and the majority (76\%) did not find the ad to be humorous.

*Measures of Trust*

The standard approach to measuring trust in political science is to directly ask subjects for their level of trust (Cook and Gronke, 2005). Some scholars within political science as well as economists are skeptical of attitudinal reports and advocate for behavioral measures where possible. The trust game of Berg, Dickhaut and McCabe (1995) has become the standard laboratory experiment in economics for measuring trust. Trust, as defined by Luhmann (1979), encompasses people’s beliefs about others and their willingness to use that knowledge as the basis for action. The trust game aims at measuring senders’ willingness to trust a receiver. In the original trust game designed by Berg et al. (1995), the trustor is given a sum of money. In the first move, the trustor must decide how much, if any, to send to a trustee. Any money sent to the trustee is then tripled. The trustee makes the second move, deciding how much money to return to the trustor. Under the assumption of selfish preferences and rational choice theory, the only sub-game perfect Nash equilibrium is for the trustor to send no money to the trustee, using backward induction to infer that the trustee will never return any money. Money sent by the trustor is commonly used to measure his trust that the trustee will return his money. Money returned by the trustee is used to measure his trustworthiness.

\(^2\) The number of participants in the treatment and control groups is unequal since 3 participants did not complete the study and Qualtrics continued the randomization process, however, we had to stop the study as soon as the number of participants reached 60.
In lab experiments, participants do not tend to play the sub-game perfect Nash equilibrium. Berg et al. (1995) find that only two out of 32 trustors sent nothing, and of the 30 trustees who were sent money, only six returned nothing. One of the standard assumptions in economics is that individuals are motivated by only their material self-interest. However, experimental economists have used economic games, such as the Berg et al. (1995) trust game, to show that people are willing to forfeit monetary rewards so that co-players can gain, which violates the self-interest assumption (Fehr and Schmidt, 2002). The game appears to offer an unusually clear and precise measure of one player’s willingness to trust another and a similarly clear measure of the extent to which this degree of trust is justified. In the original interpretation of trust-game choices, first-mover transfers are a manifestation of trust. Participant’s decision to send thus satisfies one accepted definition of trust: the deliberate willingness of an agent to make herself vulnerable to the actions of another agent (Rousseau, Sitkin, Burt, & Camerer, 1998).

We wanted to generate a similar type of behavioral measure of trust, but rather than measure trust among individuals within our study, we wanted to generate a behavioral measure of trust in the candidates. We wanted to see the participants’ decisions in a trust game with real monetary stakes. Participants knew that they could earn anywhere from $5-$15, but since this was a one-shot game they needed to decide wisely: Can the candidate they were to play the game with be trusted? Each participant was initially endowed with $5. The participants had the option of choosing a costly trusting action by giving money to the candidate. If the participant transferred money, the total amount available for distribution between the two players’ increased but, initially, the candidate reaped the whole increase. Would the candidate honor the investor’s trust by sharing the monetary increase generated by the investor’s transfer? Thus, if the participant gives money to the trustee and the latter shares the proceeds of the transfer, both
players end up with a higher payoff. The participant is therefore caught in a dilemma: if he trusts and the candidate shares, the participant increases his payoff, but he is also subject to the risk that the candidate will abuse this trust. In the latter case, the participant is worse off than if he had not trusted at all and, adding insult to injury, the candidate has an unfair payoff advantage relative to the participant. Hence, the participants have to overcome their aversion against this risk in order to trust, allowing us to address the question of whether the negative ad has an impact on the trusting behavior toward the candidate with whom the participant plays the trust game.

Participants in our study were randomly assigned to play a one-shot trust game with Steve Kagan, the sponsor of the attack ad, or John Gard, the target. Participants were told that the candidates’ had given us instruction as to how much money was to be returned to the participants in the trust game, since it is unlikely that subjects would believe the candidates were playing in real time. We told them that we would reveal this information later in the study (so as not to affect the responses to the survey questions following the game). This element of deception was necessary in order to have subjects believe they were playing real candidates. We programmed the one-shot trust game in a way that the candidate would always return 50% of his earning. (i.e. if the participant transferred $2, [$2*3=$6] then [$6/2=$3] $3 was returned to the participant.) At the conclusion of the study participants were told that the election between John Gard and Steve Kagan had already taken place and that they were not actually playing with these individuals in the trust game. After the study was completed, they were told that this deception was needed so the participants believed they were actually transferring money to either the sponsor or target candidate. Because of the deception in the study, all participants received the maximum amount that they could have earned in the trust game ($15).
The amount transferred to the candidates in the trust game serves as our first set of dependent variables. We expect that participants exposed to the negative ad will send less to John Gard, the target of the attack, compared to individuals in the control group who were not exposed to the ad (H1a). The literature is more mixed on the effect of negative ads on the sponsoring candidate, with some studies finding a null effect and others finding a backlash effect. We therefore test whether participants exposed to the negative ad send less to Steve Kagan, the sponsor of the attack, compared to individuals in the control group who were not exposed to the ad (H2a).

All participants were asked if the extent to which they trust John Gard and Steve Kagan regardless of whom they played the trust game with. The attitudinal trust questions were asked after the trust game. All participants were asked: “to what extent do you trust candidate John Gard/Steve Kagan”? This measure was on a five point scale with higher values indicating higher levels of trust. Participants who played the trust game with Kagan were asked about Kagan first and about Gard at the next stage. The situation reversed if they played the trust game with Gard first. The attitudinal measure is a subjective measure of trust whereas the behavioral measurement is quantifiable in terms of monetary transfers.

**Results**

We first show the mean amount of money transferred between those who played John Gard and Steve Kagan by experimental condition in Figure 2. Turning first to the target of the negative ad, the mean monetary transfer to Gard in the control group is higher (n=7, mean =1.28, SD= 1.38) than the mean monetary transfer to Gard in the negative ad treatment group (n=23, mean= .82, SD= 1.55). However, a Wilcoxon-Mann-Whitney U test suggests that there is not a statistically significant difference between the underlying distributions of the monetary transfer
between the two groups \((z = 1.081, p = 0.2798)\). Part of the reason for these weak effects could be the small sample size, since they are otherwise going in the expected direction. With respect to the sponsor of the ad, we also see that mean monetary transfers to Kagan are higher in the control group \((n=10, \text{mean}=4, \text{SD}=1.24)\) than in the negative ad group \((n=20, \text{mean}= 1.9, \text{SD}=1.68)\), and these differences are statistically meaningful according to the Wilcoxon-Mann-Whitney U test results \((z = 2.932, p = 0.0034)\). Thus, our results do find evidence of a backlash effect with respect to trust.

**Figure 2**- Mean amount of money transferred between those who played Gard and Kagan by experimental condition

We now turn to the attitudinal measures of trust in target and sponsor. We look at this in two ways. In order to make comparisons with the behavioral measure of trust, we first look at mean trust evaluations in the control and ad group among those who only played John Gard and those who only played Steve Kagan. We then replicate these analyses for the whole sample, since this substantially increases our N. In Figure 2, we should mean trust for John Gard and Steve Kagan by experimental condition as well as for the sub-sample and full sample.
Turning first to those who played the trust game with John Gard, we see that mean trust in him is higher in the control group (mean = 2.28, SD = .75) than in the negative ad treatment group (mean = 1.95, SD = .92); however, these differences are not statistically significant. This pattern is therefore similar to what we find with the behavioral measure of trust. If we then look at mean trust in Gard among the whole sample by experimental condition, we again find that trust in him is higher among those in the control group who did not see the negative ad (mean = 2.64, SD = .78) compared to those in the treatment group who did see the negative ad (mean = 2.06, SD = .91), and these differences are significant according to a t-test (two tailed t-test, n=60, p = 0.02). These latter results are therefore consistent with our expectations and likely obtain given the larger sample size.

Now turning to the sponsor of the negative ad and starting with those who only played Steve Kagan, we find that mean trust in Kagan is higher in the control group who did not watch the negative ad (mean = 3.5, SD = .84) compared to those who watched the negative ad (mean = 2.6, SD = .75), and these differences are statistically significant according to a t-test (two tailed t-test, n=30, p = 0.006). These findings are thus consistent to what we find for the behavioral measure of trust. Among the whole sample, we find a similar pattern in which mean trust in Kagan is higher among those in the control group (mean = 3.52, SD = .79) compared to those in the negative ad group (mean = 2.51, SD = .73), and these differences are also statistically significant (two tailed t-test, n=60, p = 0.00).

We therefore seem to find fairly strong support for our first two hypotheses, which stated that trust in the target and sponsor of a negative ad would decline. Our results also suggest that the findings are similar regardless of whether a behavioral or attitudinal measure of trust in the
candidates is used. Our next step is to test whether these evaluations in turn affect overall evaluations of the candidates, as Figure 1 outlines.

We checked for possible mediating effects of trust on feelings towards Gard and Kagan in candidate evaluations. We asked participants for their degree of warmth toward Gard and Kagan using the standard 101 point feeling thermometer. The Baron & Kenny method is the most commonly used test of mediation, however, it has its limitations (e.g. low power, Type I error). The Sobel-Goodman test is more accurate but works well in large samples. On the other hand, Bootstrapping offers a much better alternative as it works well with small samples and imposes no distributional assumptions (Preacher and Hayes, 2008). Bootstrapping involves repeatedly random sampling observations with replacement from the data set and computing the statistic of interest in each resample. (Shrout & Bolger, 2002) The bootstrapping results show a direct mediating effect in both the Kagan group (Bootstrap SE= .2265612, p=0.013) and the Gard group (Bootstrap SE= 1783046, p=0.010); however, the results show only an indirect mediating effect in the Kagan group (Bootstrap SE=.1601649, p=0.002) but not in the Gard group (Bootstrap SE=.1534503, p=0.440).

Discussion

One interesting thing to note from our results is that participants in Gard control group transferred less monetary units to him (n=7, mean=1.28) relative to those in Kagan control group (n=10, mean=4). This may be due to the fact that the majority in our sample are democrats (or independents who lean towards Democratic Party). Since Kagan was practicing medicine before entering politics (and our participants were informed about each candidates’ history), this may have also led to more trust in Kagan than Gard. These differences should not however make any difference to the experimental effects.
In addition, participants in the Gard ad group transferred less monetary units to him (n=23, mean=.82) in the trust game relative to those in the Kagan ad group (n=20, mean=1.9). However, the interesting result suggested by Wilcoxon-Mann-Whitney U test is that the negative ad seemed to have decreased trust in the sponsor far more than the target and that watching the ad compelled the participants to make less monetary transfer to Kagan. This supports Ansolabehere et al.’ conclusion that negative advertisements leads to lower evaluations for both the target and the sponsor. Our finding is, however, not supporting Shapiro and Rieger (1992) who indicated that evaluations of the targeted candidate worsen in greater proportion than evaluations of the sponsoring candidate among persons exposed to negative issue advertising. Contrary to our results, Pinkleton (1997) also found that sponsorship of negative comparative advertising had a minimal impact on the sponsoring candidate's evaluations.

Furthermore, we checked for mean trust in the candidates between those in the control group and ad treatment group among those who played the trust game with either candidate, as well as in the whole sample. These results essentially mirrored those of the trust game. Both candidate evaluations (trust in candidate) dropped by those who watched the ad, however, this drop was statistically significant only in the case of Kagan for the sub-sample, but was statistically significant for both candidates in the whole sample. This suggests that participants watching the attack ad deemed both candidates as less trustworthy implying that the negative ad indeed had an impact. Finally, we checked for possible mediating effect of feelings towards Gard and Kagan in candidate evaluations. We found direct mediating effect with regard to both candidates. These results suggest that the negative ad we used harmed evaluations of both candidates through decreased trust.
In sum, sponsorship of negative advertising had a significant impact on the sponsoring candidate's evaluation among those who played the trust game with Kagan and across the whole sample. The target-candidate evaluations did decline as a result of the use of negative advertising in the whole sample but not among those who played the trust game with the target. The net effect of sponsoring such advertising appears to be a greater detriment to the sponsor candidate than to the target candidate. The main limitations of our study include the use of mostly graduate students as participants, who are highly educated and may therefore not be fully representative of the general electorate. Most of the study was conducted offsite/online which offered less control to the experimenter. Finally, we had a very small sample which may result in the lack of statistical representation of a phenomenon.
REFERENCES


Appendix

Political Ad:

*My name is Steve Kagan and I approve this message.*

“For 20 years John Gard has been a professional politician in Madison. He voted to raise his own pay and raise your taxes. Now he denies it. He voted with the insurance companies to make health care more expensive. Now he says the opposite. He was even caught patting his expense account and exposed to the ethics scandal. No wonder John Gard has been called the most corrupt politician in Madison. We’ve seen this character before.”