

DOES EXPOSURE TO POLITICAL ADS IMPACT THE EFFECTIVENESS OF PRODUCT ADS?¹

Kyle A. Dropp and Shanto Iyengar

Americans frequently view both televised political and product advertisements within the same commercial break during the campaign season. Does viewing a political ad in tandem with a commercial message alter product brand preferences or purchase intentions? We ran a 1,200 person experiment in Spring 2012 and randomly assigned individuals to view an Amazon Kindle ad in tandem with two positive political ads, two negative ads or two apolitical product ads. We measure potential spillover effects using real-time dial tests and a post-test questionnaire battery. We build on psychological theory and show that positive political advertisements violate low expectations of political messages, leading to an experimentally induced positive mood. Consistent with our theory, we find that exposure to positive political advertisements improves product purchase intention relative to the control condition. Meanwhile, exposure to negative advertisements reduces evaluations of the product ad's effectiveness but does not affect overall product purchase intentions.

¹Working Paper - please do not cite

Introduction

We conduct a series of controlled experiments to determine whether partisan political advertisements spoil or enhance the effect of product ads, a question with implications for the \$59 billion televised advertising industry in the United States.

We study this research question for a series of reasons. First, televised political advertisements are more common than ever, with spending quadrupling since 1996. Such partisan messages precede or follow product advertisements during the same 2-3 minute commercial break. While commercial televised ad spending dwarfed televised political advertising spending in 2010, \$59.0 billion² to \$2.3 billion,³ political advertising represents a sizable proportion of total fall advertising expenditures in key time slots of many media markets. There is stark geographic targeting of political messages in battleground areas, a large percentage of total campaign advertising is aired in the last two months of the campaign and the proportion of total ads aired that have political content is especially high on popular shows such as local television news, sports and national television news.

Second, political and product advertisements are distinct and operate under different sets of rules, causing different reactions among viewers. Product advertisements are much less likely to contain inflammatory or divisive content compared with political ads, and commercial advertisements are highly regulated by the Federal Trade Commission while there is more limited oversight of the accuracy of the content of political messages. We believe that the content of such partisan political messages causes strong partisan reactions and alters respondents' moods. And mood affects purchase intentions and consumer behavior, according to

²<http://www.emarketer.com/Article.aspx?R=1008304>

³<http://www.adweek.com/news/television/political-media-spending-hits-all-time-high-104027>

numerous psychological and marketing studies.

We ran a 1,200 person experiment in Spring 2012 where respondent view three 30-second advertisements. We experimentally manipulate mood by assigning individuals to view an Amazon Kindle ad with two positive political ads, two negative ads or two apolitical product ads (control). We measure potential spillover effects using real-time dial tests and a post-test questionnaire battery. We build on psychological theory and show that positive political advertisements violate the low a priori expectations of political messages, leading to an experimentally induced positive mood. We link this experimentally induced mood to consumer behavior—exposure to positive political advertisements improves product purchase intention relative to the control condition. Meanwhile, exposure to negative advertisements reduces evaluations of the product ad’s effectiveness but does not affect overall product purchase intentions.

Theory

Psychological studies have shown that an individual’s mood affects his purchase intentions, brand selection, charitable giving and more (see Gardner 1985 for a review). For example, respondents experimentally induced to have a positive mood are more likely to give more money to charity (Moore, Rosenwood 1973), and respondents who hear a positive news segment (versus negative) are more likely to express positive feelings about a stranger (Veitch 1976). Further, studies have shown that mood states can be easily influenced (Isen et al 1982).

We argue that exposure to political advertisements alters respondents’ moods, thereby affecting post-test evaluations such as favorability toward the brand or product purchase intention.

We experimentally induce the respondent's mood by varying the tone and sponsor of the political advertisements. Attack ads, which feature harsh language and gloomy music, should lead to a more negative mood among respondents.

Positive ads, on the other hand, should experimentally induce a positive mood. Such ads contain patriotic images such as American flags, uplifting music and dialogue stressing shared, consensual goals. Burgoon and Hale (1988) show that stimuli that violates expectations in a positive manner can induce a positive mood. For example, consider a visit to a car dealer or auto repairman, an experience that most people expect to be negative. A stress free experience with no haggling would violate expectations and induce a positive mood; on the other hand, an experience filled with haggling may not significantly depress our mind, given our expectations.

Similarly, individuals anticipate that advertisements with political content will be extremely negative and vitriolic and that candidates do nothing but attack others. When exposed to a positive ad with uplifting images and shared value statements, it may induce a positive mood and lead to more positive reviews of messages subsequent to the political message. Negative messages, on the other hand, confirm the a priori expectations.

We predict that respondents exposed to positive political advertisements will evaluate political advertisements more favorably; however, individuals exposed to vitriolic content in negative partisan messages will likely rate product ads less favorably.

The Instrument

Advertising messages

We administered a 1,200 person political advertising experiment in April and May 2012 using a nationally representative sample with YouGov/Polimetrix. Respondents answered a pre-test questionnaire, viewed three 30-second video advertisements and filled out an extensive post-test questionnaire focused on public affairs and media usage.

At the experiment's core, the investigators randomly manipulated overall political advertising exposure (zero, two or three political ads), tone (positive or negative), partisan balance (100% Democratic, 100% Republican or even split) and issue content (i.e., healthcare, the economy or personal background). The control condition viewed three product advertisements. The political advertisements viewers see are sponsored by Mitt Romney and Barack Obama, the two major candidates in the 2012 presidential election. The ads can be viewed here: <http://pclresearch.stanford.edu/romney/>

Respondents were randomly assigned to view an Amazon Kindle advertisement in conjunction with either two political or two product advertisements. The three advertisements were intended to replicate a typical commercial break. Three hundred respondents viewed the 30-second Kindle ad along with two positive political advertisements, another 300 saw the Kindle ad with two negative political advertisements and a final 300 viewed two apolitical product messages with the Kindle ad. The order in which individuals viewed the Kindle ad – first, second or third – was randomized within each treatment group.

Dependent variables

Post-test questionnaire items

Respondents answered an extensive questionnaire after viewing the three advertisements. Five items specifically addressed the effectiveness of the Kindle product advertisement, while other questions gauged political participation, vote choice and favorability toward individuals and groups.

First, respondents were shown pictures of three tablets –the Apple iPad, the Amazon Kindle and the Barnes and Noble Nook – and asked which product they were most likely to purchase. Next, respondents agreed or disagreed with the following statements about the Kindle ad: “The ad was informative”, “The ad was effective”, “The ad was entertaining” and “I would consider purchasing an Amazon Kindle.”⁴

These items present an opportunity to demonstrate that political advertising affects respondents’ evaluations of the effectiveness of product messages and, more importantly, their purchase intention.

Dial tests

Respondents used a dial widget while viewing each message to record how favorably they felt about the advertising sponsor. Respondents were instructed to move the dial between -100 (very unfavorable) and 100 (very favorable). The scale started at 0, the neutral position, and two measurements were recorded each second. For instance, respondents viewing a Barack Obama ad were instructed to move the dial based on how they felt about Obama throughout the advertisement. If exposure to political advertising affects respondents’ evaluations of product messages, we

⁴The response options were strongly agree, agree, disagree and strongly disagree.

should see elevated or reduced dial test ratings when viewers see product messages subsequent to political advertisements.

Ads and Post-test questionnaire

Table 1 on Page 6 displays the proportion of respondents who selected an iPad, Kindle or Nook as the tablet they were most likely to purchase. The table presents suggestive evidence that respondents’ purchase intentions are affected by political advertisements.

Table 1: Proportion of individuals selecting a particular tablet across treatment groups

| | Control | Positive | Negative | Pos/Neg |
|-----------------------|---------|----------|----------|---------|
| Amazon Kindle | 0.326 | 0.401 | 0.336 | 0.368 |
| Apple iPad | 0.529 | 0.490 | 0.551 | 0.521 |
| Barnes and Noble Nook | 0.145 | 0.108 | 0.114 | 0.111 |
| n | 300 | 300 | 300 | 600 |

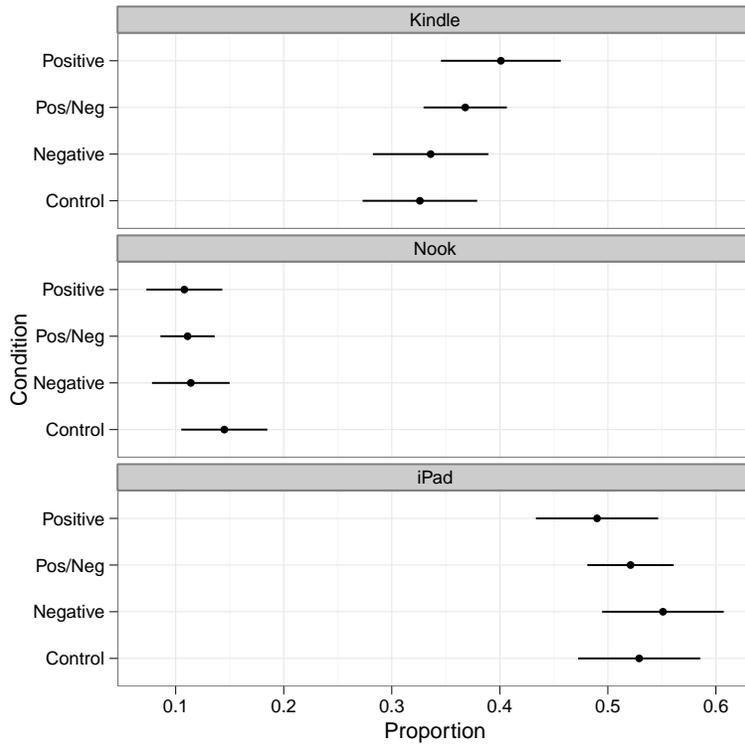
Figure 1 on Page 7 displays responses to the tablet product purchase item for respondents who viewed a Kindle ad combined with two product ads (“Control”), two positive political ads (“Positive”), two negative political ads (“Negative”) or any political ads (“Pos/Neg”). The dot represents the point estimate and there are lower and upper bands for 95% confidence intervals.

The top panel in Figure 1 shows that respondents who saw two positive political ads, along with an Amazon Kindle ad, were more likely to say they would purchase an Amazon Kindle compared with respondents in the baseline condition ($t=2.11$, $p<.05$). Forty percent of respondents in the positive condition selected the Kindle, compared with 33 percent in the three product ad condition. The Apple iPad has a 20 percentage point advantage over the Kindle in the control condition (53 to 33) compared

with a nine percentage point advantage (49 to 40) in the positive ad treatment.

Exposure to negative advertisements did not affect responses to the product purchase intention item. Thirty-four percent of respondents who saw negative political ads selected the Kindle, compared with 33 percent in the control condition.

Figure 1: Q26 - If you were considering purchasing a tablet, and the choices were the Amazon Kindle, the Apple iPad, and the Barnes and Noble Nook, which would you choose?



Respondents also stated whether they agreed or disagreed with a series of four questions describing the Amazon Kindle. The questions specifically asked respondents whether they believed the ad was informative,

entertaining and effective, and whether they would consider purchasing a Kindle.

Table 2 on Page 8 displays the proportion of respondents who strongly agree with each question, along with 95% confidence intervals in parentheses. The table demonstrates that respondents who viewed two positive ads were more likely to say they will purchase a Kindle ($t=2.25$, $p<.05$) compared with the baseline condition. This finding is consistent with results displayed in Figure 1.

On the other hand, respondents in the condition that paired the Kindle ad with two negative ads were less likely to strongly agree that the Kindle ad was informative ($p<.05$), effective ($p<.05$) or entertaining ($p<.05$), compared with the baseline condition. Product purchase intention is not significantly different from the control group. Findings from the pooled group, “Pos/Neg”, are driven by effects in the negative advertisement group.

Table 2: Proportion of respondents who strongly agree with each question. 95% confidence intervals are in parentheses

| | Control | Positive | Negative | Pos/Neg |
|-----------------|---------|----------|----------|---------|
| Informative | 0.154 | 0.165 | 0.117 | 0.141 |
| 95% CI | (0.041) | (0.042) | (0.036) | (0.028) |
| Effective | 0.212 | 0.209 | 0.146 | 0.177 |
| 95% CI | (0.046) | (0.046) | (0.04) | (0.031) |
| Entertaining | 0.213 | 0.247 | 0.155 | 0.201 |
| 95% CI | (0.046) | (0.049) | (0.041) | (0.032) |
| Purchase Intent | 0.153 | 0.207 | 0.175 | 0.191 |
| 95% CI | (0.041) | (0.046) | (0.043) | (0.031) |
| Number of cases | 300 | 300 | 300 | 600 |

In summary, the data suggests positive political ads improve purchase intention of product ads, while it appears that negative ads reduce attribute ratings of product ads without affecting purchase intention.

Ad order effects and dial tests

The previous section examined the impact of exposure to political advertisements on product ad evaluations in a post-test survey questionnaire. This section examines results from a dial test widget to measure the real-time impact of viewing a political ad on ratings of a subsequent commercial messages.

Table 3 on Page 10 provides the mean dial test score at the end of 11 product and political advertisements. The scores range from from -100 (very unfavorable) to 100 (very favorable), and 0 is the neutral position.

Respondents rate product ads more favorably than political advertisements. These Eggo, Kindle and Chrysler advertisements consistently end with favorable ratings in the +20 to +30 range. Positive political advertisements receive more favorable reviews than do negative political advertisements. Mean ratings for positive political messages typically end with ratings in the +5 to +15, while nearly all negative ads have mean ratings below 0.

Second, the ad sponsor clearly polarizes partisan viewers. Co-partisans (i.e., Democrats viewing an Obama ad) nearly always rate ads favorably, while out-partisans (i.e., Democrats viewing a Romney ad) rate the ad very negatively. This explains why mean scores for most political ads are near 0, the neutral position.

Figure 3 on Page 12 tests whether individuals evaluate the Kindle ad differently when they view it in the third position after a positive polit-

Table 3: Dial test descriptives

| Ad | Tone | Sponsor | Mean Ending value | | |
|--------------|----------|---------|-------------------|-----|-----|
| | | | Overall | Dem | GOP |
| Kindle | N/A | N/A | 29 | 30 | 29 |
| Chrysler | N/A | N/A | 19 | 28 | 20 |
| Eggo | N/A | N/A | 24 | 24 | 31 |
| Auto | Negative | Obama | 1 | 32 | -34 |
| Healthcare | Negative | Obama | -5 | 23 | -31 |
| Jobs | Negative | Obama | 1 | 35 | -32 |
| Auto | Positive | Obama | 16 | 54 | -38 |
| Credit Card | Positive | Obama | 6 | 52 | -34 |
| Stimulus | Negative | Romney | -14 | -36 | 21 |
| Middle Class | Negative | Romney | -8 | -33 | 24 |
| Promises | Negative | Romney | -15 | -42 | 19 |
| Background | Positive | Romney | 5 | -29 | 53 |
| Lead | Positive | Romney | 8 | -42 | 57 |

ical ad, a negative political ad or a product message. While the mean ratings trajectories look similar across conditions, individuals who view the Kindle ad after a negative political advertisement provide higher dial test ratings compared with respondents in the control or positive ad conditions. Individuals who view a Kindle ad after a negative political ad provide a mean end rating to the Kindle ad of 38. Respondents who view the Kindle ad after a product ad have a mean end value of 28, while those viewing the Kindle ad after a positive message have a mean end value of approximately 25. This is evidence for a halo effect, where the respondent strongly differentiates the negative content of a previously viewed attack ad from the current product ad by providing higher reviews to the Kindle ad.

Figure 2: More positive views of the Kindle ad when it is viewed third after two negative political ads

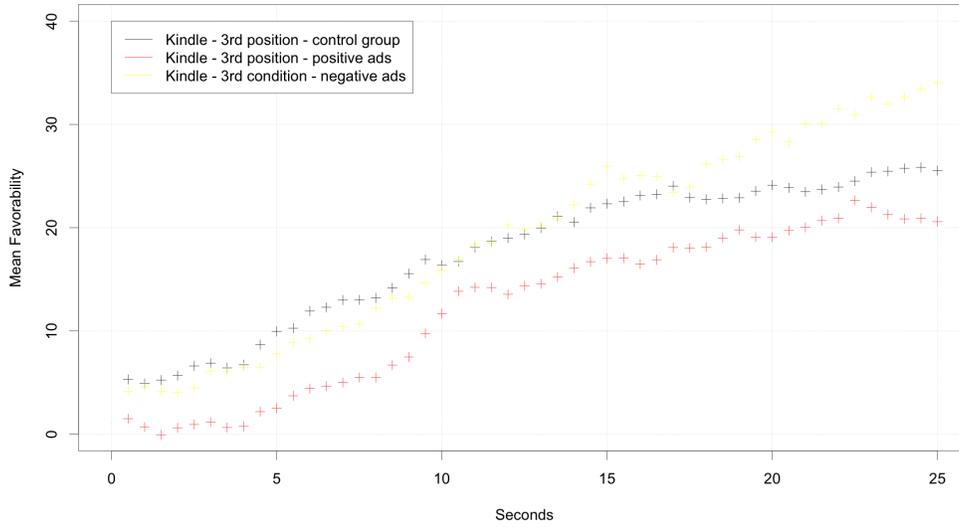


Figure 3 on Page 12 provides a placebo test and displays that when the Kindle ad is viewed first, prior to any political content, the trajectories across the three treatment groups are nearly indistinguishable. The mean ending value position for positive, negative and control conditions range from 33 to 35.

Figure 3: Placebo - no difference in positive views of the Kindle ad when it is viewed first across conditions

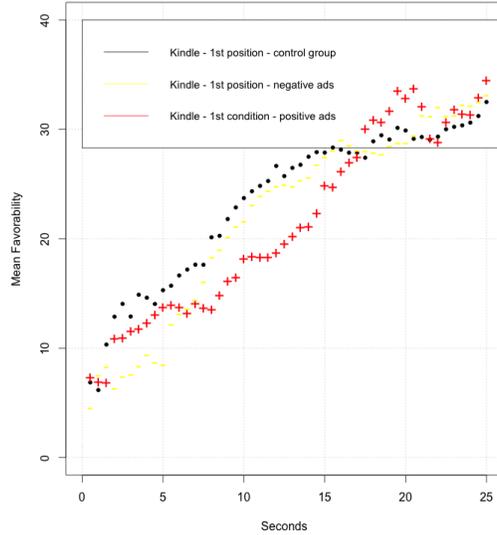
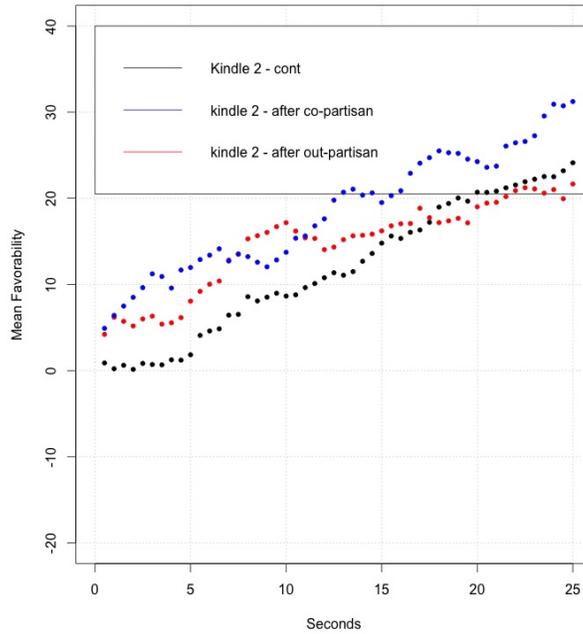


Table 3 on Page 10 illustrated that Democrats nearly always rated Obama ads favorably while responding negatively to ads from the Mitt Romney, the Republican candidate. Since respondents were randomly assigned to view a co-partisan or out-partisan ad in the first order, we can test whether the experimentally induced mood shift affects evaluations of product advertisements. Figure 4 on Page 13 displays mean favorability values for respondents who saw a Kindle ad in the second position but were randomly assigned to either view a co-partisan, out-partisan or product message in the first position. For example, Republicans who view an Obama ad in the first position are in the out-partisan group and Republicans who view a Romney ad first are in the co-partisan group.

Those viewing a co-partisan advertisement immediately before the Kindle ad evaluate the Amazon ad slightly more favorably. For example, the co-partisan group has a mean ending value of 30, compared with 22 in the

control condition and 20 in the out-partisan group.

Figure 4: This chart compares individuals who view a Kindle ad after a product ad, co-partisan ad or out-partisan ad. Overall, those viewing the Kindle ad after a co-partisan ad evaluate the ad slightly more favorably



Conclusion

We administered an original 1,200 person experiment in Spring 2012 and randomly assigned individuals to view an Amazon Kindle ad in tandem with two positive political ads, two negative ads or two apolitical product ads. Building on psychological theory, we find that exposure to positive political advertisements improves product purchase intention relative to the control condition. Meanwhile, exposure to negative advertisements reduces evaluations of the product ad's effectiveness but does not affect

overall product purchase intentions. The results are stronger for the post-test questionnaire and more mixed for the real-time ad dial tests.

It is worth noting that the treatment effects observed in this study are typically borderline statistically significant, and at times only suggestive. We need to investigate further the impact of political ads on product ad evaluations, a question with important consequences for the country's huge commercial advertising industry.

First, we should replicate the study using a different, less expensive product category than tablet computers. Amazon Kindle's require thought when purchasing, so it is striking that we observe any significant finding in this experiment. Future studies could explore the impact of political advertising on product evaluations for categories such as cereal, coffee or fast food. We anticipate treatment effects will be larger in such instances.

Second, the vitriol apparent in recent political advertising may not have been captured by the political advertisements used in this experiment. Therefore, these messages may not have fully captured the impact of mood on product evaluations.

Third, as with all laboratory experiments, this experiment has external validity concerns. We attempted to make the treatments realistic by creating ads from real campaign content and advertising clips. However, the impact of political advertisements on mood may be limited when campaigns are airing the same messages dozens of instances on the same network.