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## Here Today, Gone Tomorrow? Assessing How Timing and Repetition of Scandal Information Affects Candidate Evaluations

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Scholars and political consultants alike know that during a campaign even the hint of a scandal has the potential to distract from a candidate's policy messages—or even worse—can have dire consequences on Election Day. But does it matter whether the scandal breaks early as opposed to late in the campaign? And how do citizens respond when the scandal drags on for weeks? This study represents the first effort to shed light on these temporal dynamics. Results reveal that timing affects the immediate impact of scandal information, the rate at which those initial effects decay, and candidate evaluations offered at the campaign's conclusion. Additionally, I develop two competing hypotheses regarding how citizens may process scandal information when it is repeated throughout a campaign. Empirical tests suggest that voters eventually reach a saturation threshold after which additional repetition of scandal information has negligible effects on evaluations unless new details are a prominent feature of ongoing coverage, in which case repetition can extend the negative effects of scandal.

KEY WORDS: information processing, timing, repetition, decay rates, saturation threshold, scandal

Scandals seem to plague every election cycle and media coverage of a candidate's malfeasance on the campaign trail, whether it involves mistresses, misdirected campaign funds, or risqué text messages, is able to captivate the public's attention sometimes for days or even weeks at a time. Scholars and political consultants alike know that even the hint of a scandal can have a negative impact on voters' candidate evaluations and in some cases can mean the difference in an electoral win or loss. When the media spotlight shines on a political scandal, abundant research has shown that this type of negative information that draws into question the candidate's character is highly accessible in voters' minds. The focus of prior research has been on how the presence of scandal affects information processing. I contend that the timing and repetition of scandal information also have important implications for how voters form their assessments, and here I examine how these temporal dynamics influence candidate evaluations. What, if any, difference does it make if a scandal breaks early or late in the campaign? How do citizens respond when scandal coverage drags on throughout the campaign?

To gain leverage on both of these questions, I utilize three distinct datasets. Two of these involved original data collection via a pair of panel experiments in which participants' assessments were regularly monitored over multiple weeks as small pieces of substantive information on the candidate's policy positions were released along with scandal information. By combining the control of an experiment with the over-time nature of a panel study, this innovative design makes it possible

to manipulate the timing and frequency of scandal information while assessing both the immediate and persistent effects on candidate evaluations. Additionally, a brief replication using data from the 2006 Congressional Elections Study (CES) provides real-world confirmation of some of the experimental findings. Before reviewing these data further, I begin by outlining a theoretical account of how the impact of scandal information on voters' assessments is expected to vary depending on whether the scandal emerges near the onset or at the conclusion of the campaign. Next, I develop two competing hypotheses regarding how citizens may process scandal information when it repeatedly emerges during a campaign. I conclude by reporting and assessing the results.

#### **Considering the Timing of Political Scandals**

To summarize the bulk of research that has examined the electoral consequences of being implicated in a scandal while on the campaign trail: the presence of scandal matters. Prior research documents how scandalous activity can adversely impact a candidate's political future either due to lower vote margins (e.g., Peters & Welch, 1980; Welch & Hibbing, 1997) or, in some cases, the decision to strategically retire (e.g., Groseclose & Krehbiel, 1994; Jacobson & Dimock, 1994; Swearingen & Jatkowski, 2011). When it comes to how citizens process scandal information, the primary focus has been on the nature and accessibility of such salacious details. Drawing on psychological theories regarding accessibility, political scientists have shown that information about a candidate's character, particularly when it involves competence and integrity, stands out in voters' minds (e.g., Stone, Maisel, & Maestas, 2004; Mondak, 1995; Mondak & Huckfeldt, 2006). This tendency to consider the personal qualities of political figures when forming impressions has been shown to hold cross-nationally (Canache, Mondak, & Cabrera, 2000; Pancer, Brown, & Widdis Barr, 1999). In the control of the personal qualities of political figures when forming impressions has been shown to hold cross-nationally (Canache, Mondak, & Cabrera, 2000; Pancer, Brown, & Widdis Barr, 1999). In the control of the personal qualities of political figures when forming impressions has been shown to hold cross-nationally (Canache, Mondak, & Cabrera, 2000; Pancer, Brown, & Widdis Barr, 1999).

Additionally, scholars have explored a variety of factors that may condition the extent to which scandal influences candidate evaluations. For instance, Fischle (2000) focuses on voter characteristics and argues that prior attachments can constrain citizens' reactions to scandal. Other accounts have considered the way the scandal is covered by the media. Owen (2000) shows that when scandal information is presented as entertainment news, it has less impact on candidate evaluations. Candidate response may also influence how voters react to allegations of scandal (Sonner & Wilcox, 1999).

Another set of factors that is likely to influence the impact of information connecting a candidate to wrongdoing relates to the temporal dynamics of the scandal coverage. This research represents the first effort to empirically investigate how that the timing and repetition of scandal information influences individuals' candidate evaluations. I argue that when it comes to the impact of scandal information, timing and repetition should matter in predictable ways that are outlined below. I begin by reviewing the theoretical expectations pertaining to the timing of the scandal.

In essence, prior research has assumed that scandal information holds equal weight in people's minds regardless of *when* the scandal begins to receive media coverage. However, the order information is encountered has been shown to have important implications for information processing. Important insights can be gained by assessing the effects of scandal timing on candidate assessments immediately after learning of the candidate's misconduct as well as at the campaign's conclusion. First, I hypothesize that scandal information when it is released early rather than late in a campaign will have a larger immediate impact on candidate evaluations and that those effects will decay at a relatively slower rate. I contend that there is value in assessing the immediate or short-term impact of scandal information as well as the rate at which such effects decay. Not only are candidates able to feel the immediate impact of a scandal as attested to by research on the strategic decision to retire

<sup>&</sup>lt;sup>1</sup> Admittedly, what is considered "scandalous" may vary across time and across cultures.

(e.g., Groseclose & Krehbiel, 1994; Jacobson & Dimock, 1994; Swearingen & Jatkowski, 2011), but challengers are also sensitive to candidates' vulnerabilities that result from implications of scandal (e.g., Krasno & Green, 1988). Second, I hypothesize that the negative effects of a late-breaking scandal may be greater at the campaign's conclusion than those associated with an early-breaking scandal. Despite the intuitive nature of this hypothesis, this work represents the first effort to empirically assess this claim.

In terms of how timing may affect the initial impact of learning of a candidate's connection to scandal, my expectations are informed by extensive research in psychology on primacy effects showing that the first pieces of information can be the most powerful while the impact of middle or later information is comparatively much weaker (Anderson & Hubert, 1963; Dreben, Fiske, & Hastie, 1979; Lichtenstein & Srull, 1987). Research on primacy effects must be considered in tandem with what we know about low-information campaigns, which is the context approximated in this study. When it comes to state-level elections and even U.S. House elections, voters often know (or remember) little to nothing about the candidates at the start of a campaign. If scandal information is among the first pieces of information, it may be given greater weight not only because it is encountered first but because it represents a large portion of what voters know about the candidate. Consequently, the effects of the first pieces of information may be comparatively harder to displace, meaning a slower decay rate.

By the end of a campaign, even in low-information elections, voters have had a chance to encounter multiple pieces of information about the candidate. Their impressions may have more or less crystallized. As individuals' information stockpiles accumulate, information about scandal that is released later in the campaign will represent an additional consideration that is only one among many others (Chong, 1993; Zaller, 1992; Zaller & Feldman, 1992). Thus learning of a scandal that implicates the candidate's character near the campaign's conclusion may render relatively smaller changes in people's evaluations and a faster decay rate compared to when the same scandalous information enters the scene at the start of the campaign. Additionally, recent research has shown that the presence of scandal information has the capacity to enhance the accessibility of policy information in people's memories (Miller, 2010). Thus the initial impact of scandal information that is released late in a campaign may be attenuated because information about the candidate's earlier policy stances becomes activated in voters' minds.

In terms of how timing may influence candidate assessments at the campaign's conclusion, we must consider research on accessibility (Chong, 1993; Zaller, 1992; Zaller & Feldman, 1992) as well as the nature of information decay rates. Not only is a late-breaking scandal likely to be a more accessible consideration in voters' minds because it was more recently encountered but also such information will have had less time to decay compared to if that same information had been released at the onset of a multiple-week campaign.

#### **Repetition of Scandal Information**

The nature of scandal coverage tends to be negative in tone and involves information that casts a shadow on the candidate's competence, integrity, or both. Taking into consideration these qualities, it should be no surprise that these details pertaining to scandal often remain at the top of voters' heads. In addition to information content, accessibility also can be influenced by how frequently voters encounter information (Scarborough, Cortese, & Scarborough, 1977). Scandalous activity on the campaign trail tends to attract media attention that persists for days or weeks, but it remains an empirical question as to *how* the perpetual reminders of the candidate's wrong-doings affect voters' assessments over time. Prior research has tended to assess the effects of scandal by focusing solely on candidate evaluations or vote choice at the conclusion of the campaign. I contend that important insights also can be garnered by attending to how voters process

scandal information over the course of a campaign. I propose and test two hypothesized ways that repetition of scandal information may affect the formation of voters' candidate evaluations over time. The longitudinal framework of the panel experimental design enables unique insights into these temporal dynamics.

The media's tendency to amplify a candidate's association with scandal has aroused concern that in such cases voters' decisions will be more heavily influenced by scandal-related considerations than by policy considerations. Research in psychology on the power of negative information to be weighed more heavily and to be better remembered than positive information (e.g., Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001; Pratto & John, 1991) gives credence to this claim. If the constant reminders of the candidate's connection to a scandal are present in the media, the connection may be strengthened in voters' minds. Consequently, as this process repeats, candidate evaluations may suffer. It may be that repetition intensifies and extends the negative effects of scandal much like pouring fresh salt on an open wound. According to the *Intensification Hypothesis*, candidate evaluations will continue to suffer with each subsequent reminder of the candidate's wrongdoings.

Conversely, it may be the case that constant reminders of a candidate's involvement in disreputable dealings may cause voters to eventually tune out subsequent discussion of the scandal. According to the Saturation Hypothesis, candidate evaluations may continue to suffer until a saturation threshold is reached, after which candidate evaluations will no longer be affected by additional repetition of scandal information. Recent research on campaigns and elections finds that the lifespan of campaign information is incredibly short-lived and that new information quickly displaces old information in voters' minds (Gerber, Gimpel, Green, & Shaw, 2011; Hill, Lo, Vavreck, & Zaller, 2007, 2008; Mitchell, 2008, 2012, 2013). If the power and lifespan of new political information are taken seriously, then additional mentions of a candidate's involvement with a scandal may carry less weight in voters' minds simply because they have already incorporated this information into their running assessment of the candidate (Hastie & Park, 1986; Lodge, McGraw, & Stroh, 1989; Lodge, Steenbergen, & Brau, 1995; McGraw, Lodge, & Stroh, 1990). After the information is no longer a new and novel piece of information, voters may feel it is unnecessary to make further adjustments to their candidate assessments. Contrary to the *Intensi*fication Hypothesis, the Saturation Hypothesis predicts that additional mentions of the candidate's connection to a scandal will eventually have no effect on candidate evaluations. The longitudinal design of the panel experiment provides me the opportunity to empirically assess which of these two predictions holds.

In summary, I seek to address two specific questions. First, I examine whether the timing of a political scandal matters for candidate evaluations in terms of the immediate impact, the rates at which those immediate effects decay, and the impact at the campaign's conclusion. Second, I assess whether the repetition of scandal information extends the effects of scandal. Previous research interested in understanding why some politicians are able to scrape together enough electoral support to garner a win while others are not as successful following a scandal have not considered these temporal dynamics.

#### Investigating the Effects of Scandal with a Ten-Week Panel Experiment

To empirically address the two lines of inquiry developed above demands a longitudinal framework coupled with the control of an experimental design. Toward these two ends, I designed a 10-week panel experiment where a combination of scandal and policy information about a hypothetical U.S. House candidate was slowly distributed each week. The key experimental manipulations to be discussed further below involved the timing and frequency of the release of information pertaining to the candidate's involvement with a scandal.

#### **Participants**

Participants entering the panel experiment were 302 undergraduate students enrolled in an introductory political science course. Participation was one means of fulfilling a required research component of the course. Although the use of undergraduate samples may evoke external validity concerns particularly with some research questions (Henrich, Heine, & Norenzayan, 2010; Sears, 1986; but see Druckman & Kam, 2011), these concerns should be minimal here given that the focus is on how individuals process information over time. Additionally, I view the lack of longitudinal designs as a greater threat to external validity. Fifty-one percent of participants were female, and 94% were White. Participants were somewhat overrepresented by Republicans with 50% self-identifying as Republicans, 28% as Democrats, and 22% as Independents. Participants were more evenly divided on ideology, with 41% indicating they were conservative, 29% liberal, and 30% moderate. The panel experiment enjoyed a rather high retention rate of 80%, where 242 of the 302 participants who began the panel experiment completed each of the 10 weekly surveys.<sup>2</sup>

#### Design

My design makes use of a panel experiment where scandal and issue information about a hypothetical U.S. House candidate, Fred Davis, was gradually released and participants' candidate evaluations were measured over 10 weeks as shown in the timeline of Figure 1. The flow of campaign information concluded in Week Nine, but a battery of postassessment measures was readministered in Week Ten. The central experimental manipulation involved the timing and frequency of the scandal information that was released over the course of the 10-week campaign. Using a  $3 \times 2$ design, participants were randomly assigned to one-of-six conditions. The conditions associated with the timing and frequency of the scandal information corresponds with an early without repetition, an early with repetition, and a late condition. In the early without repetition condition, scandal information was released at the onset of the campaign but not repeated. In the early with repetition condition, scandal information was released at the beginning of the campaign and multiple times over the course of the campaign. Finally in the *late* condition, the release of the scandal information occurred near the end of the campaign. Additionally, the type of scandal was varied. Participants were randomly assigned to receive information about a sex scandal or about a corruption scandal. The central analyses below collapse the type conditions because diagnostic tests revealed no statistically significant differences between the evaluations offered each week based on the type of scandal.3

The study was administered each week via online surveys. In the first week, all participants provided information on demographic characteristics, partisanship, and ideology and completed an issue inventory where they were asked to evaluate 10 policy statements using a 4-point scale, ranging from strongly agree to strongly disagree.<sup>4</sup> Subjects then read a brief article introducing the fictitious political candidate, Congressman Fred Davis of Storm Lake, Iowa, a three-term House incumbent who had just easily won the Republican primary. To preserve the realism of the information, participants were not informed that the candidate was hypothetical.<sup>5</sup> Davis' partisan affiliation was

<sup>&</sup>lt;sup>2</sup> I tested whether attrition was due to systematic factors by regressing whether a participant successfully completed all 10 weekly surveys on the available demographic variables. Demographics did not successfully predict a participant's likelihood of completing all 10 weeks of the panel experiment.

<sup>&</sup>lt;sup>3</sup> Scandal type did not successfully predict candidate evaluations either in a series of weekly models or in the panel model used later in this article.

<sup>&</sup>lt;sup>4</sup> The selected policy statements had clear partisan associations based on evaluations by another undergraduate class.

<sup>&</sup>lt;sup>5</sup> Reliance on a hypothetical candidate could limit the external validity of these findings because in real-world elections, individuals may begin a campaign with priors about the candidate that modify the effects of new information. Thanks to an anonymous reviewer for raising this point.

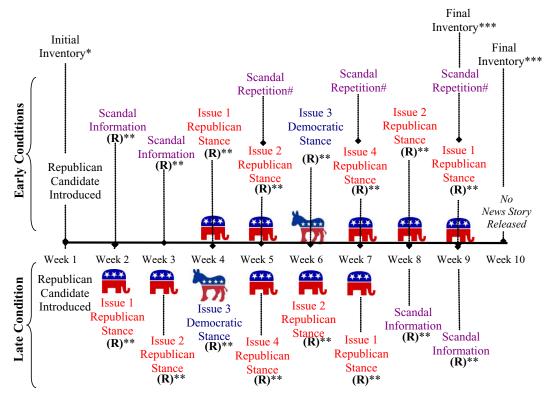


Figure 1. Ten-week panel-experiment timeline.

displayed in the title and three times in the body of the article. All of the subjects were then asked to indicate their impression of Davis, using a 10-point scale, ranging from strongly negative to strongly positive. The wording of the evaluation question was as follows: "We are interested in how positive or negative you feel toward Fred Davis. Please indicate your feeling toward Davis on the scale below. A score of 10 means that you feel strongly positive toward him, a score of 1 means that you feel strongly negative and scores between 1 and 10 mean that you feel somewhat positive or negative."

Participants in both of the early conditions learn of scandal allegations in Week Two and additional information pertaining to the scandal is released in Week Three. Specifically, the first piece of scandal information involves the initial allegations of involvement with a scandal where the candidate was unavailable for comment. The second piece of scandal information involves a press conference where the candidate denies any unethical conduct. Participants in the late condition do not receive this information until Week Eight and Week Nine. Additionally, participants in the *early* 

<sup>\*</sup>Prior to receiving the first news story, all respondents completed the initial inventory which included an issue and demographics battery of questions.

<sup>\*\*</sup>Davis' partisanship was reinforced in each weekly article through the inclusion of a parenthetical "R."

<sup>\*\*\*</sup>Following the candidate evaluation question in Week Nine and in Week Ten, all respondents completed a battery designed to test their memory of the Congressman's policy position.

<sup>#</sup>The early without repetition and early with repetition conditions received the same news story content except in the early with repetition condition, the news story in Weeks Five, Seven, and Nine, concluded with a brief mention of the candidates' involvement in a scandal.

<sup>&</sup>lt;sup>6</sup> Prior to offering their candidate evaluation, participants were asked a multiple-choice question regarding the news story's content.

with repetition condition were reminded of the candidate's scandal allegations in Weeks Five, Seven, and Nine. Participants in this condition received an article that contained the same issue content as their counterparts in the *early without repetition* condition but the article ended with a brief sentence that mentioned Davis' prior scandal allegations.

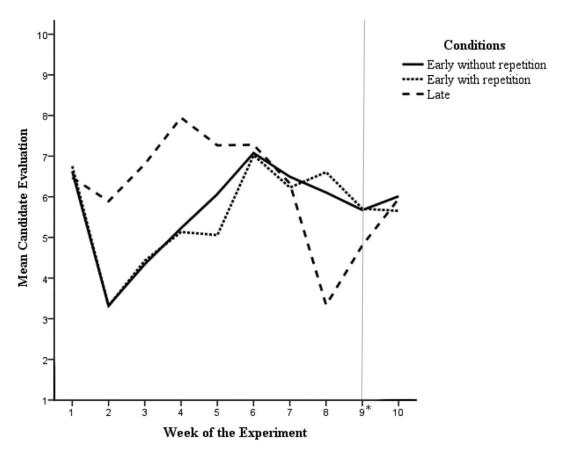
The additional six weeks of news articles involved issue information about the candidate that was distributed in Weeks Four through Nine in the early conditions or Weeks Two through Seven in the late condition. The order and content of the issue information was the same across conditions. It was only the timing of the release of the information that varied such that two weeks of scandal information preceded the six weeks of issue information in the early conditions and followed the issue information in the late condition. Participants received six issue-related articles that discussed four distinct issues. The first and last piece of issue information that participants learn about Davis is that he opposes establishing deadlines for troop withdrawal from Iraq (Weeks Four and Nine for the early conditions; Weeks Two and Seven for the late condition). The second and next-to-last piece of issue information involves Davis' opposition to universal health care (Weeks Five and Eight for the early conditions; Weeks Three and Six for the late condition). The third piece of information involves the one instance where Davis took a position typically associated with Democrats where he supports expanding employment discrimination protection to include sexual orientation (Week Six for the early conditions and Week Four for the late condition). The fourth piece of information involves Davis' support of tax cuts (Week Seven for the early conditions and Week Five for the late condition).

In terms of partisan consistency, Davis is portrayed as a "regular" Republican whose issue positions are consistent with those typically associated with the Republican Party on 75% of the issues, in this case three of the four issues discussed. In terms of volume, the experiment was designed to mimic real-world low-information congressional campaigns. Each week participants were asked to read a brief two-paragraph article from the fictitious online newspaper, *The Storm Lake Gazette*. Every article reminded participants of Davis' party affiliation through inclusion of a parenthetical "R." The central analyses presented below examine fluctuations in candidate evaluations that occurred through Week Nine, the last week when campaign information was released.

A critical advantage of the panel experiment is that opinion about the candidate is measured every week over the course of multiple weeks as issue and scandal information is released. Taking advantage of the panel design, I am able to assess whether timing affects the initial impact of scandal information, the rate at which those initial effects decay, and candidate evaluations offered at the campaign's conclusion. Additionally, I am able to assess how repetition of scandal information influences candidate evaluations in an environment where new issue information continually emerges. Specifically, I am able to parse out whether it is the case that each additional repetition lowers where the candidate stands in the minds of the public as proposed by the *Intensification Hypothesis* or if the *Saturation Hypothesis* holds more weight, and it is the case that additional reminders of the candidate's wrongdoings eventually fail to continue to lower candidate assessments.

#### Overview of the Effects of Scandal

Before examining in greater detail the effects of scandal information within a longitudinal framework, let us first review the general temporal patterns in candidate evaluation. This can also serve as a check to see if the variation across time corresponds in expected ways to the key experimental conditions. Figure 2 displays mean candidate evaluations by week for the three scandal-timing conditions of *early without repetition*, *early with repetition*, and *late*. The most striking pattern in the candidate evaluation data is that as predicted, scandal matters greatly. The largest swings in candidate evaluation are observed during the week when the scandal initially



**Figure 2.** Scandal-timing conditions and volatility in candidate evaluation. \*Week Nine represents the conclusion of the campaign and is the last week when new campaign information was released. A t-Test confirmed that the difference in mean candidate evaluations in Week Nine between the two early conditions and the late condition is statistically different at the p < .01 level in both cases. A battery of postassessment measures including candidate evaluation was readministered in Week Ten.

breaks, Week Two for both of the early conditions and Week Eight for the late condition. As expected, candidate evaluations drop substantially during those weeks.

However, there are also indications that the initial effects of scandal have a rapid rate of decay, as shown by the mean candidate evaluations that are recorded the following week, Week Three for the two early conditions, and Week Nine for the late condition, when scandal information is once again released. Mean evaluations are already nearly a point higher on the 10-point scale and continue to climb a week later. The similarity of candidate evaluations in the final week of the experiment also suggests that particularly in the absence of new campaign information, the effects of past information decay quite rapidly. Although not conclusive, this pattern of results is in line with the predictions of the *Saturation Hypothesis*. Rather than subsequent mentions of the scandal producing increasingly negative evaluations, the initial effects appear to be weakening.

A final feature of Figure 2 that warrants mention is that the candidate evaluation trends for the *early without repetition* and *early with repetition* conditions are strikingly similar. This is to be expected because the information exposure received by these two groups was exactly the same except that participants in the *early with repetition* condition were reminded of the scandal beginning in Week Five and again in Weeks Seven and Nine. As evidenced by the modest dips in candidate

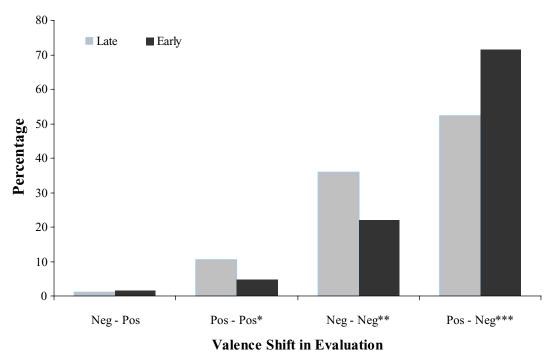
evaluation in these weeks for the *early with repetition* condition, it does appear that repetition of scandal information has an impact but that the effects due to repetition pale in comparison to when the scandal initially breaks. Once again, there appears to be support for the notion that, at least under certain conditions, repetition rather than intensifying the effects of scandal can reach a saturation threshold after which additional repetition fails to further impact candidate evaluations.

#### **Does Scandal Timing Matter?**

To gain a better sense of how candidate evaluations were affected by the timing of the scandal, I began by assessing individuals' immediate reactions to the first allegations of misconduct. If the impact of scandal wanes when the candidate's misconduct is revealed later in the campaign, then the magnitude of change in evaluations should be smaller. A substantively meaningful way to assess the magnitude of change in candidate evaluations is to examine changes in valence such as when an individual shifts from holding a positive to a negative evaluation. Recall that candidate evaluations were measured using a 10-point scale that ranged from 10 (strongly positive) to 1 (strongly negative). Thus, responses from 6 to 10 can be considered some variant of a positive evaluation and responses from 1 to 5 indicate a strongly to slightly negative evaluation. An overwhelming majority of participants' evaluations dropped after learning of the scandal, 89% of participants in the early conditions and 81% of participants in the late condition. But how many of those participants went from being on the positive side of the scale to holding a negative impression of the candidate? To investigate the patterns of valence changes in evaluation, I coded whether an individual had a positive or negative evaluation the week before the scandal information is released. Similarly, I also classified evaluations as positive or negative during the week the first piece of scandal information is released.

Figure 3 displays the percentage of participants who fall into the four possible patterns of valence shifts. Each of the differences between the early and late conditions but one is statistically significant. The most notable difference between the early conditions and the late condition pertains to the number of participants whose evaluations shift from positive to negative. Almost three-fourths of participants (72%) in the early conditions who first encounter scandal in the second week of the campaign shift from having a positive evaluation of Davis in Week One to having a negative evaluation in Week Two. However, barely half (52%) of participants who learn of scandal for the first time in Week Eight shift from a positive to a negative evaluation. Remember that in Week Two, participants have only just been introduced to the candidate, whereas by Week Eight participants have been introduced to the candidate and subsequently exposed to six weeks of issue information. Thus, the negative impact of scandal information appears to be attenuated when participants have a greater number of considerations to draw upon when evaluating Davis.

Another notable difference between the early conditions and the late condition involves the relative stability in the valence of candidate evaluations. Only 5% of participants in the early conditions began with a positive evaluation and maintained a positive evaluation following the scandal. This figure more than doubles in the late condition where 11% of participants who were favorable toward Davis in Week Seven continued to have a positive evaluation in Week Eight after learning that Davis was accused of involvement in a scandal. A similar pattern is found for those holding negative evaluations toward Davis before the scandal breaks. Among those who learn of the scandal early in the campaign, 22% began with a negative evaluation and maintained a negative evaluation after learning of the scandal. Correspondingly there are 36% falling into this category in the late condition. The outliers who shift from a negative to a positive evaluation are likely just that, outliers, because only four individuals fall into this category. This was the only pattern of valence change for which there was not a statistically significant difference between the early and late conditions.



**Figure 3.** Candidate evaluation valence shifts after first scandal mention across timing conditions. Difference significant as follows: \*p < .10, \*\*p < .05, \*\*\*p < .01 Late Condition: N = 86

Early Conditions: N = 186

Thus far, I have examined the differences in the immediate or short-term impact of scandal information when the timing of the scandal varies between early versus late in the campaign. But what about the rates at which these initial effects decay? Recall that scandal information was presented to all participants during two consecutive weeks (See Figure 1). Thus I am able to assess how participants responded between the time they first learn of the scandal allegation to the following week when they received a second article regarding the candidate's connection to scandal. Figure 4 displays the individual-level evaluation-change values that occur from the week the scandal is first mentioned to the following week when scandal information is again released to participants. For participants in the two early conditions, the evaluation-change values are calculated by subtracting candidate evaluation in Week Three from candidate evaluation in Week Two. For participants in the late condition, the evaluation-change values are calculated by subtracting candidate evaluation in Week Nine from candidate evaluation in Week Eight. What stands out from this figure is that by the second week when scandal information is present, candidate evaluations are already starting to rebound as reflected by the positive change values. Almost three-fourths of individuals (73%) in the late condition had candidate evaluations that were more favorable after the second mention of scandal than they were upon first hearing of the scandal, whereas nearly six out of 10 (58%) participants in the early conditions also began to feel more positive toward Davis by the third week even in the face of hearing about the scandal a second time. Once again, it appears that when participants have a greater number of considerations to draw upon, the impact of negative information is attenuated, and the initial effects decay at a relatively faster rate.

Finally, comparison of candidate evaluations offered at the conclusion of the campaign in Week Nine shows that assessments of Davis were significantly lower in the late condition compared to the

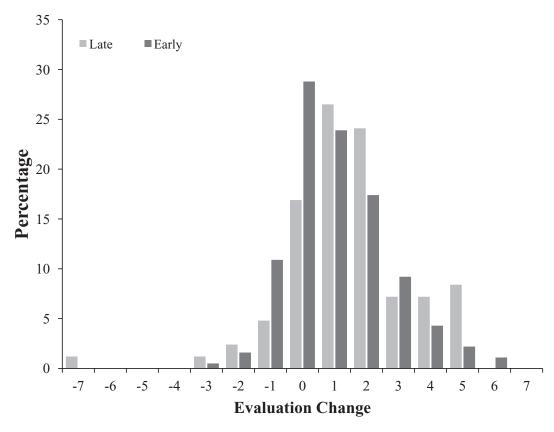


Figure 4. Change in candidate evaluations after second-scandal mention by timing condition. Late condition: N = 83, second-scandal mention in Week Nine. Early conditions: N = 184, second-scandal mention in Week Three.

early conditions (see Figure 2). Despite the rapid rate at which the effects of scandal decay and the fact that the decay occurs at a relatively faster pace in the case of a late-breaking scandal, there is also less time remaining within which candidate evaluations can recover. Considering these factors together, it is not surprising that candidate evaluations are lower when the scandal broke two weeks as opposed to nearly two months prior to the campaign's conclusion. A brief replication using data from the 2006 Congressional Election Study (CES) provides additional confirmation of this finding. Two features of the 2006 CES are important to note. This was a nationally representative public opinion survey that involved oversampling of open and competitive districts, and responses were geocoded making it possible to locate individual respondents within congressional districts. For a complete description of the study and the sampling framework, see Mitchell and Mondak (2008).

Using 2006 CES data, Hendry, Jackson, and Mondak (2008) show that individual vote choice for incumbents and the incumbents' party in U.S. House districts implicated in scandal was lower than vote choice for their counterparts in scandal-free districts. In my replication, to disentangle whether the magnitude of these effects depended on the timing of the scandal, I introduce two dichotomous measures. The first, *Early Scandal*, is coded 1 if the district involved a scandal the occurred early in the campaign where early is classified as occurring before the month of September. The second, *Late Scandal*, is coded 1 if the district involved a scandal that occurred late in the campaign, in other

Table 1. Scandal	Timing	and	the	2006	House	Vote:	Α	Brief
Replication								

Variable	Coefficient	Robust Standard Error
Early Scandal	66	.67
Late Scandal	-1.69**	.57
Strength of Identification with Incumbent Party	1.01*	.07
Republican Incumbent	-1.60*	.30
Open Seat	77***	.32
Constant	-1.22*	.27

*Note.* Model is weighted to reflect oversampling of competitive Congressional districts.

Dependent Variable: Reported Vote Choice

N = 866

Log-Pseudolikelihood = -271.43

Wald  $\chi^2 = 183.72$ Pseudo- $R^2 = .51$ 

words, during or after the month of September.<sup>7</sup> During the 2006 campaigns, a total of 28 House districts were linked to scandal (see Hendry, Jackson, & Mondak [2008] for the complete listing), news of scandal involving five of these districts broke days before or during the month of October. Following the authors' coding decisions for the remaining variables, the dependent variable is whether the respondent voted for the incumbent (in open-seat races, this is a vote for the same party as the incumbent). The traditional 7-point measure of partisanship was recoded to reflect *Strength of Identification with Incumbent Party* such that the variable ranges from 0 to 6 with higher values reflecting stronger identification. Additionally, a dichotomous measure, *Republican Incumbent*, was included to capture whether the incumbent was a Republican where 1 = yes and whether the district involved an *Open Seat*, again with 1 = yes.

Results from the logistic regression model are presented in Table 1. Notably, the effects associated with the *Late Scandal* variable are the strongest in the model. This finding indicates that the presence of a late-breaking scandal significantly lowered the probability of a respondent reporting voting for the incumbent or the incumbent's party in the case of open-seat races. But what about the effects of scandals that broke early, in some cases much earlier in the election cycle? The coefficient operating on the variable, *Early Scandal*, is insignificant, suggesting that respondents in a district that involved an early-breaking scandal were no less likely to vote for the incumbent compared to incumbents in districts that were scandal free. This finding is in line with the results from the panel experiment that show a rapid rate of decay of the effects of scandal information. In the case of early-breaking scandals, voters' assessments had sufficient time to rebound to the point that they were indistinguishable from those of voters in districts that were not scandal ridden. These results seem to also support the *Saturation Hypothesis*. Below I provide a closer examination of how voter assessments are influenced by repetition of scandal information.

<sup>\*</sup>Indicates simple logistics regression coefficient estimate significant at .10 level

<sup>\*\*</sup>Indicates simple logistics regression coefficient estimate significant at .01 level

<sup>\*\*\*</sup>Indicates simple logistics regression coefficient estimate significant at .001 level

<sup>&</sup>lt;sup>7</sup> Districts in the sample coded as early scandal districts were AZ 5th, CA 11th, IL 14th, MO 7th, NC 11th, NH 2nd, OH 15th, OH 18th, NY 20th, PA 6th, PA 8th, PA 10th, RI 1st, TX 22nd, and WV 1st. Dennis Hastert (IL 14th) and John Sweeney (NY 20th), who were linked to a string of distinct scandals that occurred throughout 2006, were classified as belonging to early-breaking scandal districts. Late-breaking scandal districts were FL 16th, KS 2nd, NM 1st, NY 19th, and PA 7th.

#### Is the Lifespan of Scandal Effects Extended by Repetition?

To investigate how repetition of scandal information affects candidate evaluations, we can take advantage of the panel experimental design and compare how individuals processed policy information across the three timing conditions. Recall that the content and order in which the policy information was presented to participants was the same across conditions. The only difference was that participants in the two early conditions received policy information beginning in Week Four, immediately after receiving scandal information the two prior weeks, whereas participants in the late condition began receiving the policy information in Week Two after being introduced to the candidate in Week One. The critical difference of interest relates to the two early conditions where in the early with repetition condition, scandal information was repeated three more times over the course of the campaign. Because opinion about Davis was measured every week, it is possible to construct a six week panel model. Below I will review the construction of the variables before discussing the findings.

The dependent variable,  $Candidate\ Evaluation_t$ , is constructed with data from the weekly 10-point evaluation of Davis. Observations on the dependent variable were obtained at six points, from Week Four (t=1) to Week Nine (t=6) of the study for the early conditions and from Week Two (t=1) to Week Seven (t=6) of the study for the late condition. These weeks were selected because they represent the weeks in which participants received issue information with the only difference being the number of times individuals encountered scandal information.

Because participants in the *early with repetition* condition received three additional mentions of scandal, I have the opportunity to assess how repetition of scandal information influences candidate evaluations over time. The critical independent variables include *First Scandal Repetition*, which is coded 1 during Week Five if the participant was in the *early with repetition* condition, with values of 0 otherwise. *Second Scandal Repetition*, and *Third Scandal Repetition*, are similarly coded to capture whether the participant was in the *early with repetition* condition and received a second scandal reminder in Week Seven and a third scandal reminder in Week Nine respectively. To empirically determine whether the *Intensification Hypothesis* or the *Saturation Hypothesis* holds two possible patterns are of interest. If each of the three variables is significant, this would suggest that repetition matters and that each time scandal information is highlighted in the news, this leads to lower candidate evaluations. This pattern would lend support to the *Intensification Hypothesis*. Conversely and in line with the *Saturation Hypothesis* it could be that repetition matters to a point but with decreasing returns in which case we would expect significant effects only for *First Scandal Repetition*, and possibly for *Second Scandal Repetition*, Inclusion of the three variables that measure the additional scandal mentions enables me to disentangle these dynamics.

Earlier we saw that the effects of scandal tend to decay quite rapidly although to a lesser extent when the scandal breaks early as opposed to late in the campaign. However, the extent to which some of those effects persist over the campaign as new pieces of policy information are released has yet to be assessed. Hence, it is necessary to account for differences in candidate evaluations that may be due to any lasting effects of having previously learned of the scandal allegations surrounding the candidate. Toward this end, I included the variable *Prior Scandal* which is coded 1 if the participant was in either of the two early conditions or 0 if the participant was in the late condition and had not yet received any scandal information. If the initial effects of scandal leave a lasting mark on candidate evaluations over the six weeks as issue information is released then a statistically significant negative coefficient will be obtained for *Prior Scandal*.

To control for fluctuations in candidate evaluations due to exposure to issue information, it is necessary to account for immediate or short-lived effects resulting from issue information received by the participant the same week the evaluation was offered and any enduring or long-lived effects resulting from the accumulation of all issue information received prior to evaluating the candidate.

To capture the immediate effects of issue information, I include the variable *Issue*<sub>1</sub>, which is constructed to reflect the extent to which participants agree with Davis's issue position the week of the evaluation. The coding was –1 (strongly disagree with Davis's issue stance), –.5 (disagree), .5 (agree) and 1 (strongly agree).<sup>8</sup> I expect that the current week's issue information will exert strong influence on participants' evaluations and thus will produce a large positive coefficient associated with the variable *Issue*<sub>1</sub>.

It is also possible that issue information received in previous weeks continues to exert influence on candidate evaluations after the moment the information is received. To investigate the existence of enduring effects of issue information, it is necessary to consider whether information received in previous weeks exerts influence on candidate evaluations. According to the logic of the online model, individuals instantaneously update their online tallies upon receiving new information (Hastie & Park, 1986; Lodge et al., 1989; Lodge et al., 1995; McGraw et al., 1990). To represent prior exposure to issue information, I constructed the variable, *Issue Tally*<sub>t</sub>, which indicates the participant's issue positions relative to those of the candidate for all past issues, including the current week's issue. This variable is simply the average of all past weeks' values and the current week's value for a given respondent on the variable *Issue*<sub>t</sub>. At t = 4 (Week Seven in the early conditions; Week Five in the late condition), for example, participants had received four pieces of policy information. If the participant strongly agreed with Davis on all four issues, then the value for *Issue Tally*<sub>t</sub> at t = 4 would be 1, whereas a value of 0 would be assigned if the participant strongly agreed with Davis on two issues and strongly disagreed on the other two. A positive coefficient on *Issue Tally*<sub>t</sub> would provide support for the enduring effects of issue information.

Finally, *Partisanship*, is measured using a conventional 7-point scale (1 = strong Democrat to 7 = strong Republican). Having Davis' Republican affiliation reinforced each week is expected to produce effects that persist throughout the campaign, with the direction of those effects based on the participant's partisan affiliation (Campbell, Converse, Miller, & Stokes, 1960; see also Converse & Markus, 1979).

To summarize, the current design allows me to assess the immediate and enduring changes in candidate evaluation attributed to exposure to issue information, represented by  $Issue_t$  and  $Issue_t$   $Tally_t$ , while controlling for the persistent effects associated with Partisanship. Additionally, I am able to assess the extent to which the effects of scandal persist throughout the campaign as new issue information is released as represented by the coefficient operating on the  $Prior\ Scandal\ variable$ . Most critically, I am able to investigate how repetition of scandal information matters for candidate evaluation by including the three variables,  $First\ Scandal\ Repetition_t$ ,  $Second\ Scandal\ Repetition_t$ , and  $Third\ Scandal\ Repetition_t$ .

The coefficient estimates from the random-effects model are reported in Table 2.<sup>10</sup> Recall that, with the exception of the 7-point partisanship scale, all independent variables have scale values that range from -1 to 1. As a result, direct comparison of most coefficients is possible. The large coefficients in Table 2 for transient information exposure involving issue information—*Issue*<sub>1</sub>—as well as for, *Partisanship*, were to be expected. The effect for partisanship indicates that, controlling for the impact of other information, the evaluations of strong Democrats and strong Republicans will differ by over two full points on the 10-point evaluation scale. Evaluations are projected to differ by over two points for participants who strongly agree rather than strongly disagree with the candidate's

<sup>8</sup> These values are constructed by using Davis' position on the week's issue and data from the initial issue inventory where respondents were asked to evaluate 10 policy proposals.

<sup>&</sup>lt;sup>9</sup> Although issue information could also produce enduring effects because the information was stored in memory, I opted not to include a measure of memory because the memory measures recorded in Week Nine were influenced by whether participants received the policy information early or late in the campaign. Unsurprisingly, participants who received the information in the later weeks of the campaign had higher recall rates in the final week of the study.

<sup>10</sup> The Hausman specification test, the generally accepted way of choosing between the random and fixed-effects models, revealed that the random-effects model was more appropriate given the nature of the panel data.

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Variable	Coefficient	Standard Error				
First Scandal Repetition,	-1.00***	.21				
Second Scandal Repetition,	.23	.21				
Third Scandal Repetition,	14	.21				
Prior Scandal	63***	.16				
Issue <sub>t</sub>	1.22***	.09				
Issue Tally <sub>t</sub>	.11	.17				
Partisanship	.34***	.05				
Constant	5 30***	25				

Table 2. A Panel Model of the Effects of Scandal on Candidate Evaluation

Dependent Variable: Candidate Evaluation,

\*\*\*Indicates random effects coefficient estimate significant at .001

level

Observations = 1506

Number of Respondents = 251

Wald  $\chi^2 = 520.31$ 

 $R^2$  within = .22,  $R^2$  between = .41,  $R^2$  overall = .30

stance on the current week's issue. In line with the Michigan model, partisanship serves to anchor candidate evaluations but as suggested by accessibility models posited by Zaller and Feldman (1992) and by Chong (1993), highly accessible information, and in this case issue information drives variations in candidate evaluations. In line with recent work on the short-lived nature of information effects (Gerber et al., 2011; Hill et al., 2007, 2008; Mitchell, 2008, 2012, 2013), the variable capturing the enduring effects of past exposure to issue information, *Issue Tally*<sub>1</sub>, generates insignificant effects. Thus, exposure to issue information matters for candidate evaluations the week the information is released but the enduring effects of issue information appear to be short-lived.

But what about the enduring effects of scandal information? The negatively signed coefficient for *Prior Scandal* indicates that some of the effects of scandal persist throughout the campaign. Participants who learn of scandal prior to receiving policy information have evaluations that are over half a point lower on the 10-point scale than participants who receive the same policy information but have not yet received scandal information.

Let us now turn our attention to the critical question of how repetition of scandal information influences candidate evaluations. The significant coefficient operating on the variable First Scandal Repetition, indicates that in the week when participants are first reminded of Davis' involvement in a scandal, that evaluations drop by roughly 1 point on the 10-point scale. However, both of the additional scandal variables, Second Scandal Repetition, and Third Scandal Repetition, are not statistically significant indicating that after the second reminder of the candidate's scandal allegations, voters do not further punish the candidate. This evidence suggests that voters can reach some saturation threshold after which additional repetition of scandal information has negligible effects on evaluations. Furthermore, it does not appear to be the case that participants simply ignored the ongoing coverage. Additional evidence from Week Ten of the study speaks to this point. In a postassessment battery, participants were asked whether Davis was or was not accused of involvement in a scandal during the campaign. Of those participants in the early without repetition condition, 72% recalled that Davis had experienced allegations of scandal. This percentage increases substantially for participants in both the early with repetition and late conditions to 91% and 89% respectively. Thus, most individuals who were reminded of the candidate's involvement in a scandal did incorporate this information into their memories, but this information eventually failed to further affect candidate evaluations.

However, the nature of the scandal coverage may influence whether voters are likely to reach such a saturation threshold. Recall that in this first panel experiment that the candidate never

admitted to wrongdoing, a political move that is often employed on the campaign trail, and although the repeated coverage reminded participants of the scandalous allegations, no new developments were reported, and the bulk of information concerned the candidate's policy stances while attention to the accusations of scandal were more peripheral. It is possible that ongoing scandal coverage could continue to impact candidate evaluations as posited by the *Intensification Hypothesis* under conditions where information about scandal is more prominent and new facts continue to be revealed. To further investigate this possibility, I designed a second panel experiment.

#### Reassessing Repetition of Scandal Effects with a Modified Panel Experiment

The design features of the second panel experiment primarily remain the same as the first one with two important modifications. First, instead of a 10-week study, a four-wave design was employed where each wave was separated by five days for a total duration time of just over two weeks. However, the same order of policy and scandal information for each of the three respective experimental conditions from the earlier experiment was distributed but over a shorter period of time. Second, for participants in the *early with repetition* condition, an entire two-paragraph article devoted to new details about the scandal was released in each of the four waves. Given the nature of the scandal coverage simulated by this second design, individuals should be less likely to reach the saturation threshold previously observed. New information was continuously released, and information about the scandal was a prominent part of the information environment. Due to the similarities between the first panel experiment and the second, discussion of the design and procedures that follows will focus on the differences between the two designs.

#### **Participants**

An adult sample of 473 participants was recruited via Mechanical Turk, an online platform where individuals agree to complete tasks for pay. Berinsky, Huber, and Lenz (2012) show that subject pools recruited via Mechanical Turk offer experimental researchers a reliable and often much more representative alternative to other convenience samples. Fifty-one percent of participants were male, and 81% were White. Participants were overrepresented by Democrats with 48% self-identifying as Democrats, 19% as Republicans, and 33% as Independents. The distribution with respect to ideology was similar, with 52% indicating they were liberal, 24% conservative, and 24% moderate. The retention rate was 62%, where 295 of the 473 original participants completed all four waves.

#### Design

Participants were randomly assigned to one of three conditions, an *early without repetition* condition, an *early with repetition* condition, and a *late* condition where the timing and the frequency of scandal information varied according to the logic of the first panel experiment. All of the scandal information involved allegations of sexual misconduct but contrary to the first design, here there was an eventual admission of guilt by the candidate. During the first wave, participants completed the same demographic battery and issue inventory previously described. Participants were then asked to read the article introducing Fred Davis and to offer their initial impression of him using the 10-point candidate evaluation item. At the conclusion of the first wave, participants read information that corresponded with the experimental condition to which they were assigned, information about scandal for those in the two early conditions and issue information for those in the *late* condition.

<sup>11</sup> Thanks to an anonymous reviewer for raising this point.

Once again six brief two-paragraph news articles that discussed four distinct issues were released to participants. Given the shorter time frame, participants received two policy-related articles during three consecutive waves, beginning in the first wave for participants in the *late* condition and beginning in the second wave for participants in both of the early conditions. The first and last pair of issue articles that participants encountered involved Davis' support of defense spending<sup>12</sup> and his opposition to universal health care (wave two and four for the early conditions; wave one and three for the late condition). The middle issue-information pair involved Davis' support for expanding employment discrimination protection to include sexual orientation along with his support of tax cuts (wave three for the early conditions and wave two for the late condition).

The critical experimental manipulation involved when and how frequently participants received content involving the candidate's sexual indiscretions. In wave one, participants in the two early conditions were asked to read an article that raised allegations of involvement with a sex scandal where the candidate was unavailable for comment. This was the same article used as the first piece of scandal information in the earlier panel experiment. Participants in the late condition did not receive this piece of information until the fourth wave. As for participants in the early with repetition condition, they began each of the three later waves by reading a brief two-paragraph article that contained new details concerning the candidate's connection to the scandal before reading the issue-related articles. For a comparison of the articles containing the repetition of sex scandal information used in the first and second panel experiments, see the appendix. In the second wave, the scandal-related article covered a press conference where the candidate denies any unethical content. This was the same article used as the second piece of scandal information in the first experiment. During the third wave, participants read that Davis admits to the affair and apologizes to his constituents. Finally in the fourth wave, the scandal article mentions that a sex tape is scheduled to be revealed. Participants in the early with repetition condition encountered an information environment where scandal information was persistently available and information always contained new details. Under this scenario, individuals should be less likely to reach the saturation threshold observed when the scandal coverage persisted for weeks but was not as prominent and failed to reveal new information.

To further investigate how the repetition of scandal information affected candidate evaluations under these new conditions, we can once again compare how individuals processed information across the three timing conditions, using a three-wave panel model that corresponds with the three waves when individuals received policy information (waves two through four for the early conditions; waves one through three for the late conditions). Construction of the dependent and independent variables remains much the same as before. The dependent variable Candidate Evaluation, is measured during each of the three waves with the 10-point candidate evaluation question. I once again constructed three variables to capture the three subsequent mentions of scandal. First Scandal Repetition, is coded 1 during the second wave if the participant was in the early with repetition condition, with values of 0 otherwise. Second Scandal Repetition, and Third Scandal Repetition, are similarly coded to capture whether the participant was in the early with repetition condition and received a second piece of scandal information in wave three and a third piece of scandal information in wave four respectively. Prior Scandal is once again coded 1 if the participant was in either the early without repetition or early with repetition condition and thus had previously learned of the scandal allegations surrounding the candidate or 0 if the participant was in the late condition and had not yet received any scandal information.

Given that participants received two pieces of policy information during each of the three analyzed waves, it was necessary to modify the construction of the two issue variables. To capture

<sup>12</sup> To maintain the realism of the content of the issue articles, it was necessary to replace the article involving Iraq troop withdrawal

the transient effects of issue information, the variable  $Issue_t$  is an average of the extent to which participants agreed with Davis' positions on the two issues discussed during the current wave. For each issue, the coding was -1 (strongly disagree with Davis's issue stance), -.5 (disagree), .5 (agree) and 1 (strongly agree). The measures from each of the two issues discussed in each wave were then averaged to construct the  $Issue_t$  variable. Thus a score of -1 would correspond with strongly disagreeing with both of Davis' issue stances and a score of 1 would correspond with strongly agreeing with both of Davis' issue stances from the given wave. To capture the effects of prior exposure to issue information, the variable Issue  $Tally_t$  is once again simply the average of all past weeks' values and the current week's value for a given respondent on the variable  $Issue_t$ . Partisanship, once again, is measured using a conventional 7-point scale (1 = strong Democrat to 7 = strong Republican).

#### The Effects of Repetition in the Face of New Scandal Information

The coefficient estimates from the random-effects model are reported in Table 3. Once again, the largest coefficient is associated with the variable designed to capture the effects of the current wave's policy information, *Issue<sub>t</sub>*, and the variable *Partisanship* exerts a strong effect on candidate evaluations. A notable difference between the two sets of results involves the variable *Issue Tally<sub>t</sub>* designed to capture the enduring effects of past exposure to issue information. In this second model, *Issue Tally<sub>t</sub>* is now significant and exerts a large effect on candidate evaluations. This finding may be attributable to the fact that in the second panel experiment only 10 days separated the first and last waves of policy information. Thus, it is not surprising that the effects of issue information persisted over this shorter time period. Another notable difference involves the *Prior Scandal* variable which is now insignificant indicating that effects of encountering information about scandal in wave one appear to decay quite rapidly. Once again this difference may be attributed to a difference in design. Recall that in the first panel experiment, participants in the two early conditions received two weeks of scandal information before receiving issue information. In the second panel experiment, participants in the two early conditions received the first piece of scandal information, and in the next wave,

**Table 3.** Reassessing the Effects of Scandal on Candidate Evaluation

Variable	Coefficient	Standard Error
First Scandal Repetition,	69**	.24
Second Scandal Repetition <sub>t</sub>	-1.10***	.25
Third Scandal Repetition,	-1.08***	.25
Prior Scandal	.02	.22
Issue,	1.77***	.17
Issue Tally <sub>t</sub>	.92**	.31
Partisanship	.35***	.06
Constant	5.05***	.28

Dependent Variable: Candidate Evaluation,

Observations = 885

Number of Respondents = 295

Wald  $\chi^2 = 585.92$ 

 $R^2$  within = .40,  $R^2$  between = .40,  $R^2$  overall = .40

<sup>\*\*</sup>Indicates random effects coefficient estimate significant at .01 level

<sup>\*\*\*</sup>Indicates random effects coefficient estimate significant at .001

the first set of issue-related articles was released. This suggests that perhaps a single encounter with information about allegations of scandal is not substantial enough to produce an enduring effect on candidate evaluations.

The results of interest regarding whether repetition of scandal information continues to influence candidate evaluations tell a much different story than before. Here, the three scandal repetition variables are each significant, and the results support the Intensification Hypothesis rather than the Saturation Hypothesis. The significant coefficient operating on the variable First Scandal Repetition<sub>1</sub> indicates that in the second wave when participants are first reminded of Davis' involvement in a scandal, evaluations drop by seven-tenths of a point on the 10-point scale. Recall that at this point Davis still maintains he has committed no wrongdoing. Even larger effects are associated with the second and third repetitions as Davis admits to having an affair, and a sex tape is discussed, respectively. In these later waves, candidate evaluations dropped by roughly 1 point on the 10-point scale. As with many political phenomena, the manner in which repeated exposure to scandal information influences candidate evaluations depends on context. The evidence presented by these two panel experiments suggests that the nature of the scandal coverage matters. Under some situations when new details pertaining to the scandal fail to emerge but the media continue to mention the candidate's indiscretions, individuals may reach a saturation threshold where additional discussion fails to lower candidate evaluations. Conversely, when the constant barrage of media coverage continues to reveal new scandal-related developments voters' assessments may continue to diminish as suggested by the Intensification Hypothesis. These results, although suggestive of the power of new scandal information, should be interpreted cautiously. The modified panel experiment took place over a shorter period of time, just over two weeks compared to the 10 weeks of the original panel experiment. Thus, we are unable to conclusively attribute the extended effects solely to the presence of new scandal information because there was also less time for those effects to decay. Additional research needs to be conducted to further understand the contextual factors that influence when the *Intensification Hypothesis* or the *Saturation Hypothesis* holds not only in the case of information about scandals but also with respect to other types of political information.

#### Discussion

Scandals are essentially a permanent feature of the political landscape, and during any campaign, a large portion of news coverage is devoted to stories that directly or indirectly implicate the candidates' character. Understanding how voters respond after learning of candidate misconduct is important to complement our general models of information processing. The current study represents the first effort to explore how the timing and repetition of scandal information influences candidate evaluations. The key findings provide insights into the two central questions that drove this study: Does timing matter, and does repetition extend the lifespan of the effects of scandal? First, timing matters. The initial effects of scandal are attenuated, and those effects decay at a faster rate when scandal information is released later as opposed to earlier in the campaign. Learning about the candidate's involvement in a scandal, where his character is called into question, matters less when voters have even a limited stockpile of issue-based information about the candidate as is the case later in the campaign. However, the negative effects of late-breaking scandals may be more apparent at the campaign's conclusion. Lastly, the nature of scandal coverage appears to influence how voters process scandal information that is repeated throughout a campaign. When ongoing scandal coverage fails to reveal new details, voters may eventually tune out repeated references to the candidate's misconduct.

These results present potentially counterintuitive implications for campaigns and elections. Needless to say, all candidates ideally want to avoid having scandal information in the news. But if the release of incriminating information is unavoidable, under certain circumstances candidates may

not need to be overly concerned about ongoing media attention to a scandal particularly if voters are provided with complete information from the beginning. When the prominence of scandal coverage diminishes, the mere presence of reminders of the candidate's wrongdoings may be widely dismissed by Election Day. Additionally, if candidates are able to survive the initial effects of being implicated in a scandal, it may be better to have the scandal break early in the election cycle.

The findings from this study highlight the importance of considering timing, decay rates, and saturation thresholds with respect to how voters process information. The current study assesses these temporal dynamics as they pertain to information that implicates a candidate's character. Information about scandal should be more likely than other types of political information to remain accessible in people's minds. Consequently, such information provides a tough test case for timing effects, decay rates, and saturation thresholds. Yet the evidence shows that timing matters, that scandal effects tend to decay quite rapidly, particularly when released later in a campaign, and that under certain circumstances information about scandal may eventually fail to affect candidate evaluations. The mere presence of political information does not automatically mean that voters will adjust their assessments. In fact, voters may eventually regard some information as inconsequential. An important take-away from this study is that the temporal dynamics of information exposure must be taken into account in order to have a more comprehensive understanding of how voters navigate the political environment.

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#### REFERENCES

- Anderson, N. H., & Hubert, S. (1963). Effects of concomitant verbal recall on order effects in personality impression formation. *Journal of Personality and Social Psychology*, 2, 379–391.
- Baumeister, R. F., Bratslavsky, E., Finkenauer, C., & Vohs, K. D. (2001). Bad is stronger than good. *Review of General Psychology*, 5(4), 323–370.
- Berinsky, A. J., Huber, G. A., & Lenz, G. S. (2012). Evaluating online labor markets for experimental research: Amazon .com's Mechanical Turk. *Political Analysis*, 20(3), 351–368.
- Campbell, A., Converse, P. E., Miller, W. E., & Stokes, D. E. (1960). The American voter. New York, NY: John Wiley & Sons.
- Canache, D., Mondak, J. J., & Cabrera, E. (2000). Voters and the personal vote: A counterfactual simulation. *Political Research Quarterly*, 53(3), 663–676.
- Chong, D. (1993). How people think, reason, and feel about rights and liberties. *American Journal of Political Science*, 37(3), 867–899.
- Converse, P. E., & Markus, G. B. (1979). Plus ça change. . . . : The new CPS Election Study Panel. *American Political Science Review*, 73, 32–49.
- Dreben, E. K., Fiske, S. T., & Hastie, R. (1979). The independence of evaluative and item information: Impression and recall order effects in behavior-based impression formation. *Journal of Personality and Social Psychology*, 37, 1758–68.

- Druckman, J. N., & Kam, C. D. (2011). Students as experimental participants: A defense of the "Narrow Data Base." In J. N. Druckman, D. P. Green, J. H. Kuklinski, & A. Lupia (Eds.), *Cambridge handbook of experimental political science* (pp. 41–57). Cambridge, UK: Cambridge University Press.
- Fischle, M. (2000). Mass response to the Lewinsky scandal: Motivated reasoning or Bayesian updating? *Political Psychology*, 21(1), 135–159.
- Gerber, A. S., Gimpel, J. G., Green, D. P., & Shaw, D. R. (2011). How large and long-lasting are the persuasive effects of televised campaign ads? Results from a randomized field experiment. *American Political Science Review*, 105(1), 135–150.
- Groseclose, T., & Krehbiel, K. (1994). Golden parachutes, rubber checks, and strategic retirements from the 102d House. American Journal of Political Science, 38(1), 75–99.
- Hastie, R., & Park, B. (1986). The relationship between memory and judgment depends on whether the task is memory-based or on-line. *Psychological Review*, *93*, 258–68.
- Hendry, D. J., Jackson, R. A., & Mondak, J. J. (2008). Abramoff, email, and the mistreated mistress: Scandal and character in the 2006 elections. In J. J. Mondak & D.-G. Mitchell (Eds.), Fault lines: Why the Republicans lost Congress (pp. 84–110). New York: Routledge.
- Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences*, 33(2–3), 61–83.
- Hill, S. J., Lo, J., Vavreck, L., & Zaller, J. (2007). The duration of advertising effects in political campaigns. Presented at the annual meeting of the American Political Science Association, Chicago, IL.
- Hill, S. J., Lo, J., Vavreck, L., & Zaller, J. (2008). The duration of advertising effects in the 2000 presidential campaign. Presented at the annual meeting of the American Political Science Association, Boston, MA.
- Jacobson, G. C., & Dimock, M. A. (1994). Checking out: The effects of bank overdrafts on the 1992 House elections. American Journal of Political Science, 38(3), 601–624.
- Krasno, J. S., & Green, D. P. (1988). Preempting quality challengers in House elections. Journal of Politics, 50, 920-936.
- Lichtenstein, M., & Srull, T. K. (1987). Processing objectives as a determinant of the relationship between recall and judgment. *Journal of Experimental Social Psychology*, 23, 93–118.
- Lodge, M., McGraw, K. M., & Stroh, P. (1989). An impression-driven model of candidate evaluation. American Political Science Review, 83, 399–419.
- Lodge, M., Steenbergen, M. R., & Brau, S. (1995). The responsive voter: Campaign information and the dynamics of candidate evaluation. American Political Science Review, 89, 309–326.
- McGraw, K. M., Lodge, M., & Stroh, P. (1990). On-line processing in candidate evaluation: The effects of issue order, issue importance, and sophistication. *Political Behavior*, 12(1), 41–58.
- Miller, B. (2010). The effects of scandalous information on recall of policy-related information. *Political Psychology, 31*(6), 887–914.
- Mitchell, D.-G. (2008). It's about time: The dynamics of information processing in political campaigns (Ph.D. dissertation). University of Illinois at Urbana-Champaign, Urbana-Champaign, IL.
- Mitchell, D.-G. (2012). It's about time: The lifespan of information effects in a multiweek campaign. *American Journal of Political Science*, 56(2), 271–518.
- Mitchell, D.-G. (2013). In search of enduring information effects: Evidence from a panel experiment. *Electoral Studies*, 32(1), 101–112.
- Mitchell, D.-G., & Mondak, J. J. (2008). The context for defeat. In J. J. Mondak & D.-G. Mitchell (Eds.), *Fault lines: Why the Republicans lost Congress* (pp. 1–21). New York: Routledge.
- Mondak, J. J. (1995). Competence, integrity, and the electoral success of congressional incumbents. *Journal of Politics*, 57(November), 1043–1069.
- Mondak, J. J., & Huckfeldt, R. (2006). The accessibility and utility of candidate character in electoral decision making. *Electoral Studies*, 25(1), 20–34.
- Owen, D. (2000). Popular politics and the Clinton/Lewinsky affair: The implications for leadership. *Political Psychology*, 21(1), 161–177.
- Pancer, S. M., Brown, S. D., & Widdis Barr, C. (1999). Forming impressions of political leaders: A cross-national comparison. Political Psychology, 20(2), 345–368.
- Peters, J. G., & Welch, S. (1980). The effects of charges of corruption on voting behavior in congressional elections. *American Political Science Review*, 74, 697–708.
- Pratto, F., & John, O. P. (1991). Automatic vigilance: The attention-grabbing power of negative social information. *Journal of Personality and Social Psychology*, 41, 628–641.
- Scarborough, D., Cortese, C., & Scarborough, H. S. (1977). Frequency and repetition effects in lexical memory. *Journal of Experimental Psychology: Human Perception and Performance*, 3(1), 1–17.

Sears, D. O. (1986). College sophomores in the laboratory: Influences of a narrow data base on social psychology's view of human nature. *Journal of Personality and Social Psychology*, 51, 515–530.

- Sonner, M. W., & Wilcox, C. (1999). Forgiving and forgetting: Public support for Bill Clinton during the Lewinsky scandal. *PS: Political Science and Politics*, 32(3), 554–557.
- Stone, W. J., Maisel, L. S., & Maestas, C. D. (2004). Quality counts: Extending the strategic political model of incumbent deterrence. *American Journal of Political Science*, 48(3), 479–495.
- Swearingen, C. D., & Jatkowski, W. (2011). Is timing everything? Retirement and seat maintenance in the U.S. House of Representatives. *Legislative Studies Quarterly*, *36*, 309–330.
- Welch, S., & Hibbing, J. R. (1997). The effects of charges of corruption on voting behavior in congressional elections, 1982–1990. *Journal of Politics*, 59(1), 226–239.
- Zaller, J. R. (1992). The nature and origins of mass opinion. Cambridge, UK: Cambridge University Press.
- Zaller, J. R., & Feldman, S. (1992). A simple theory of the survey response: Answering questions versus revealing preferences. *American Journal of Political Science*, 36(3), 579–616.

#### **Appendix**

#### Articles Containing the Repetition of Sex Scandal Information

Ten-Week Panel Experiment (Articles Distributed in Weeks 5, 7, and 9)

## Davis Wary of Universal Health Care Costs May Outweigh the Benefits of Universal Coverage

The Storm Lake Gazette

STORM LAKE, IOWA - Congressman Fred Davis addressed the Buena Young Professionals Association at their monthly town hall meeting. Davis focused on the controversial issue of universal health care coverage. "We have a responsibility to ensure that every American has access to quality health care. However, the solution is not government mandated universal coverage," proclaimed Davis.

Davis expressed several reasons for his opposition to a universal health care plan. In addition to the increased tax burden that individuals would be asked to bear, Davis argued that universal coverage will lead to the rationing of health care and is a violation of the logic of a free market system.

Davis is currently embroiled in a messy lawsuit, involving alle-gations he sexually assaulted and maintained an affair with a former stripper.

#### Tax Cuts at Top of Davis' Economic Agenda Congressman Davis Supports Scheduled Tax Cut

The Storm Lake Gazette

STORM LAKE, IOWA - Busy on the campaign trail, Congressman Fred Davis attended the Center for Economic Development's annual forum on economic issues on Thursday. Davis outlined his Thursday. Davis outlined his economic plan and the proposals that he would support if re-elected. Davis' comments focused on his support for the scheduled tax cuts to be implemented over the next

"As a small business owner, I know the value of a dollar and I know that in order to spur economic development we need to return those dollars to the hard-working

Americans who earned them in the first place" Davis proclaimed. Davis promised that upon re-election he would seek to make the current tax cuts permanent and would fight any attempts to suspend or delay the current tax relief measures.

It's apparent that Davis is hoping his message will resound with voters and that his pre-election embarrassments that included allegations of an extra-marital affair and sexual assault will not hurt him at the polls.

## Davis Speaks at Buena Vista University Davis Discusses Iraq War and Troop Withdrawal

The Storm Lake Gazette

STORM LAKE IOWA - Congressman Fred Davis (R-5) addressed members of the Buena Vista University Student Government Association. committed to keep our country safe for you and future generations" Davis told stufuture

re-elected, indicated that he would continue to oppose setting a timetable for troop withdrawal from Iraq. Davis expressed concern that establishing firm deadlines for

withdrawal from Iraq would be the detrimental to overall mission and to the safety of the young men and women currently serving in the region. "Success in Iraq requires our full commitment" said Davis.

has been plagued throughout this campaign by moral questions. It's uncertain whether this will have detrimental consequences on Election Day.

#### Four-Wave Panel Experiment (Articles Distributed in Waves 2, 3, and 4)

#### Congressman Fred Davis Addresses Allegations

The Storm Lake Gazette

STORM LAKE, IOWA - Early this morning Congressman Davis (R-5) held a Congressman conference outside his district office to address the criminal charges filed by Nadia Demidova and allegations of an extra-marital affair with the former stripper. Davis began by stating "I would never do anything to violate

confidence my voters have placed in me."

Davis admitted to having met the twenty-four year old but claimed that the accusations of an affair and sexual assault were unfounded. Davis denied any wrongdoing in the matter and has not been charged.

#### Congressman Fred Davis Admits Affair

The Storm Lake Gazette

STORM LAKE, IOWA STORW EARL, 104WA = 111 d surprising turn of events, Congressman Fred Davis (R-5) released a statement today where he admits to having a brief physical relationship with former stripper Demidova. However, Davis continues to maintain that Demidova's accusations sexual assault are unfounded.

Davis' statement concluded with "I regret any disappointment my actions have produced among the loyal constituents of my district who have placed their confidence in me for the past six years." Sources from his campaign told us that Davis is confident that the criminal charges will be dropped shortly.

#### Congressman Fred Davis Sex Tape to be Revealed

The Storm Lake Gazette

STORM Congressman Fred Davis (R-5) remains embroiled in a messy lawsuit, involving allegations he sexually assaulted maintained an affair with former stripper, Nadia Demidova. Demidova is scheduled to hold a press conference tomorrow afternoon where she is reported to reveal incriminating video

tape evidence against Davis.

Davis has admitted to consensual relationship with Demidova but maintains his innocence on the innocence on the criminal charges. Davis may have to appear in court next month. It is still uncertain whether this preelection embarrassment will have detrimental consequences on Election Day.