

The Benefits of Observational Data in the Study of Issue Framing Effects

-Eric Michael French-

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Abstract: In political communication research, a wealth of relevant observational data – consisting of real-world communications, such as social media posts, website comments, and letters to the editor – is virtually ignored, despite its potential to provide meaningful insights into how issue frames influence citizens’ perceptions of political issues. This paper first shows a prevalence of experimental work and a dearth of observational analyses in the literature on framing effects, as published in more than a dozen relevant journals. It then evaluates the potential benefits of observational data concerning citizens’ perceptions of major issues – including, above all, the ability to discern a particular type of framing effects that the more commonly used experimental studies miss.

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Despite the broad recognition of political communication researchers that words, carefully marshaled by leaders, sometimes have a significant effect on the political attitudes of members of the public, research on framing effects relatively infrequently consults the words of either leaders or the public. Much more often, researchers furnish all of the language themselves in survey experiments, which will be shown below to be the method of choice in greater than 80% of the articles on framing effects published in the last few decades.¹ While survey experiments permit the considerable control needed for isolating important variables, and thus serve an important function in the study of potential cause-and-effect relationships, they lend an incomplete, if not inaccurate, view of how political communication affects public opinion in real-world settings. Questioning the conventional reliance on survey experiments and increasing the use of observational data – focused on exactly what leaders and the public, unprompted by researchers, say about political issues – would greatly benefit the study of issue framing effects.

In order to substantiate these claims, the paper proceeds as follows: First, I specify what is meant by framing effects and describe the typical approaches to studying framing effects. Second, I report the results of a literature analysis, in which I have measured the relative frequency in the literature of these different types of studies, finding an overwhelming prevalence of survey experiments. Third, I examine the limitations of survey experiments and argue that, despite the many virtues of these experiments, the framing effects literature's overreliance on them is detrimental. Finally, I offer alternative ideas for studying framing effects through the use of observational data that can help to supplement experimental studies, and perhaps remedy their limitations.

I. Framing Effects Research Designs

This section considers two questions: What are framing effects, and how are they typically studied?

Of particular interest to many who study issue framing are the effects of frames on public opinion. At least three such effects – highly interrelated – are noteworthy. First

¹ In most of these experiments – representing 75% of the total literature in the sample – the researcher controls both the wording of the message to which subjects are exposed and the language of the response options from which the respondents may choose when expressing their opinions.

and foremost, the typical focus of framing effects research is the influence of issue frames on people's *issue positions*: exposure to a particular framing of a policy may lead to greater support for, or opposition to, the policy. Another common focus is the effect of frames on the *considerations* that come to one's mind when thinking about an issue, which may or may not significantly change one's position on the issue. For instance, framing an airport security measure as an invasion of airline passengers' privacy may cause an individual to think about privacy when evaluating this security measure; framing it as a way to enhance passengers' safety aboard the aircraft, on the other hand, may cause safety concerns to trump those of privacy. In the context of airport security, both privacy and safety are relevant considerations, but a particular issue frame may make one of these considerations more prominent in a person's thinking than the other.

What existing research usually misses – largely because the research designs often employed, as reviewed below, are not capable of detecting it – is the effect of issue frames on what people believe to be the *content* of a controversy. Rather than (or perhaps in addition to) affecting which side of an issue a person takes, or which considerations are used when doing so, framing may influence what the person thinks the two sides of the issue *are*. According to Schaffner and Atkinson (2010, pg. 121), “While studies of framing effects have demonstrated that frames can influence the public's support or opposition for policies, less attention has been paid to whether frames can also influence the public's beliefs about the *content* of policy proposals.”² Indeed, some frames very likely influence people's understandings of the very parameters of an issue – especially for complicated issues like health care reform, and especially early in an issue's lifecycle, when people do not already think they know what the issue is all about.

This last type of framing effect, common in American politics³ yet greatly understudied, arguably results in public debates that are less than optimal, like much of the public debate over the Affordable Care Act: rather than taking opposing sides on (what they recognize to be) the same issue, supporters and opponents ended up viewing the

² Emphasis added.

³ For instance, witness Politifact's 2010 and 2011 “Lies of Year.” The 2010 award went to the Republicans' framing of the Affordable Care Act as a “government takeover” of the health care industry, and the 2011 award went to the Democrats' framing of Paul Ryan's plan to reform Medicare as an attempt to cut seniors off of health care insurance entirely. Both of these frames – and many others – have the effect of causing those on the different sides of the issue to differ regarding what they think the competing policy proposals involve.

very substance of the policy in fundamentally different (and often irreconcilable) ways, disagreeing not just about whether it was good policy but about what the policy *was* in the first place.⁴ For this reason, the study of democratic politics would benefit from greater attention paid to this type of framing effect. However, the Limitations of Survey Experiments section below will argue – and it is the central argument of this paper – that the predominant type of study in the framing effects literature is not ideal for recognizing the effect of issue frames on how people view the content of a political controversy.

Looking at the literature on framing effects, several types of research designs for uncovering the influence of frames are evident. These could be categorized broadly as observational and experimental⁵; however, a more specific typology will be presented below.

Before beginning to examine the various possibilities, it is vitally important to clarify the usage of the term *observational*, because it is central to this paper's analysis. The key characteristic of an observational study is the *absence of researcher intervention* in the generation of the information that becomes data. In the context of framing effects research, a truly observational study would be one in which no researcher has intervened in the presentation of frames to the individuals being studied⁶ and no researcher has intervened in the generation of people's political attitudes – in other words, those attitudes were revealed entirely outside of a research setting. To further illustrate the latter criterion, contrast survey or polling results with, for example, unobtrusive participant observation of a political discussion. In the former case, respondents provide information circumscribed by a researcher (pollster) in a research setting (interview, phone call, laboratory) – this all constitutes researcher intervention in the expression of

⁴ Many supporters supported the government increasing its regulation of the health insurance industry; meanwhile, many opponents opposed the government nationalizing the health care industry.

⁵ Based largely on the usage of the terms within the framing effects literature, I occasionally offer “experimental” studies, characterized by the manipulation of variables by a researcher, as the opposite of observational studies. Many would consider the random application of treatments to be the hallmark of an experiment, which does not necessarily run counter to a researcher observing, rather than manipulating, the study variables (for instance, consider a quasi-experiment). However, these features of experiments – random assignment of treatments and manipulation of treatments/variables – are overwhelmingly correlated, and the latter is the distinction that matters to my analysis.

⁶ Such is the case in content analyses of media coverage. The researcher who analyzes the coverage did not intervene in any way in the generation of this media coverage.

opinions. In the unobtrusive participant observation, on the other hand, the information about political attitudes exists independently of the researcher, so it could be said that there has been no researcher intervention in the expression of these individuals' opinions – these opinions were merely observed. Further examples of observational public opinion data are discussed in a later section.

All of the research literature examined here is categorized based on the extent to which the researcher merely observes (rather than manipulates) the frames in question and/or studies the effect of these frames on political attitudes through observation (rather than through interaction with the individuals in question). Dividing studies along one dimension based on whether they measure framing observationally, and on another dimension based on whether they measure effects observationally, yields the following combinations⁷:

		Observational Measurement of Framing?	
		N	Y
Observational Measurement of Effects?	N	<ul style="list-style-type: none"> • Survey Experiment 	<ul style="list-style-type: none"> • Content Analysis / Polling Data • Modified Experiment, Type 1
	Y	<ul style="list-style-type: none"> • Modified Experiment, Type 2 	<ul style="list-style-type: none"> • Observational Study

- Survey Experiment – In this design, the researcher presents frames to subjects and uses a survey to measure the effect of these frames on subjects' political attitudes.⁸ This design contains no observational component, as the framing is under the control of the researcher (not merely observed), and the effects are measured in a manner that is under the control of the researcher.⁹

⁷ At risk of being repetitive, a study measures framing observationally when it examines real-world communications to evaluate which frames are employed – and with what frequency – by leaders and/or the news media. A study measures *effects* observationally when it observes expressions of political attitudes without intervening in the process through which these attitudes are expressed.

⁸ This includes experimental manipulations embedded within large-n national surveys/polls, rather than conducted in a laboratory.

⁹ It is important to note that all survey experiments are not methodologically equivalent. Many take unique and creative approaches, especially in an attempt to measure effects as realistically as possible in the context of an experiment (see, for example, Vraga et al. 2010 and Druckman, Fein, and Leeper 2012). And

- Modified Experiment, Type 1 – In a subset of experiments, the researcher presents frames that have been taken directly from observation, either by duplicating frames that emerged from a systematic content analysis of communications or by using these communications themselves as the treatment materials in the experiment. The measurement of effects remains the same as in the standard survey experiment. This design is observational in the measurement of framing¹⁰ but not in the measurement of effects.
- Content Analysis / Polling Data – In another design characterized by observational measurement of framing, the researcher conducts content analysis of issue frames as they actually exist in a particular communication medium, typically newspapers. To measure the effect of these frames, the researcher analyzes survey or polling data in populations that presumably have been exposed to the frames. Although something of a middle-ground, polling data does not qualify as observational based on the definition used here, because a researcher *is* involved at the point of opinion expression¹¹ – it just happens to be a different researcher from the one studying the framing effects. Thus, this design, like the modified experiment described above, is observational in the measurement of framing but not in the measurement of effects.
- Observational Study – A fully observational research design measures framing through content analysis of communications; but, unlike the many other studies that do this, it also measures the *effects* of these frames in a manner that does not involve researcher interaction with those whose political attitudes are being studied.
- Modified Experiment, Type 2 – The final combination (i.e., effects, but not framing, measured observationally) involves researcher intervention in which

experiments differ in the extent to which they consult real-world sources to make their stimulus materials as authentic as possible. However, all are survey experiments according to this particular categorization, for the reasons explained – with the exception of those that use stimulus materials taken *directly* from the results of a media content analysis, in which case they are counted as “modified experiments,” as they study framing observationally.

¹⁰ This is not entirely observational, in the sense that the researcher still controls subjects’ exposure to frames. However, unlike the standard experiment, the researcher has observed the frames as they are in the real world, without affecting the content of the frames.

¹¹ The subject is interacting with a researcher, present in the interview at the request of a researcher, responding to a researcher’s questions, etc.

frames the public consumes but observational measurement of how these frames have affected political attitudes. (Empirically, this appears to be an empty set, as no study uncovered in this search contained such a combination.)

These five types of research designs are not exhaustive, as other designs can and do exist that do not fit squarely with these descriptions. However, the vast majority of studies fit one of the types above; the few that do not are counted among the most-similar type of design, because the precise type of design matters less to my analysis than the extent to which framing effects are measured observationally.¹²

II. The Prevalence of Survey Experiments in the Study of Framing Effects

In order to evaluate the methodological composition of the framing effects literature, I have conducted a systematic search of journal articles reporting findings pertaining to issue framing effects, coding these articles according to the types of data being used. The results, summarized below, indicate that the literature is overwhelmingly populated by survey experiments. Conversely, no article was found that reports framing effects entirely by observation. I first explain the parameters of this literature analysis and then present the findings.

In order to measure the relative frequency of experimental and observational data in the study of issue framing effects, I conducted a search for articles pertaining to framing effects within 16 journals that are most likely to publish this type of work.¹³ The journals included in this search are as follows, along with the number of articles analyzed from each journal (after eliminating irrelevant search results in the manner described below):

- *Journal of Politics* (15)
- *Political Psychology* (13)

¹² A second categorization that will be offered – focusing on the number of observational components in a study – will be more precise in these instances.

¹³ These 16 journals were selected based on a survey conducted by the Political Communication section of APSA in 2012. One of the survey questions asked respondents which three journals they most frequently read, and submit manuscripts to, in the area of political communication. I chose all of the journals that received more than three votes in total.

- *American Journal of Political Science* (12)
- *Political Communication* (12)
- *Political Behavior* (11)
- *International Journal of Public Opinion Research* (8)
- *Journalism & Mass Communication Quarterly* (8)
- *Journal of Communication* (7)
- *American Political Science Review* (6)
- *Communication Research* (5)
- *International Journal of Press/Politics* (5)
- *Public Opinion Quarterly* (4)
- *Political Research Quarterly* (3)
- *European Journal of Communication* (1)
- *New Media & Society* (0)
- *Media, Culture, & Society* (0)

Within each of these journals, for all available dates (typically from the first issue of the journal through the most recent issue), I searched for the following terms:

- “Frame” or “framing” in title or abstract OR
- “Persua*” in title or abstract OR
- “Rhetoric” in title¹⁴

I filtered the several hundred results, keeping only those that report research on the *effects of message content on political attitudes*. More specifically, the following criteria were used to determine whether a particular article qualified for inclusion in the analysis:

- Effects: The article must examine how issue framing – or, more generally, the content of political messages – affects political attitudes. Articles that study issue framing but not the *effects* of this framing were excluded.

¹⁴ I searched for “rhetoric” in the title only, because I consider it only peripherally related, such that I expected searching for the term in the abstract to yield a large number of irrelevant results.

- Message content: Any article examining message content, broadly defined, as an independent variable was included. The only exception is research on the influence of *visual cues*, which was excluded.¹⁵ Research was included if it examines any feature of the message, including its source.¹⁶
- Political attitudes: Articles were excluded if they had nothing to do with any type of *political* issue. And, critically, the dependent variable must involve political *attitudes* (e.g., opinions, perceptions, etc.) – not, for example, behavior (e.g., mobilization) or politically-relevant attributes (e.g., political knowledge, efficacy, etc.).
- Dates: I included articles published between 1987 and 2012.¹⁷

This complete process returned a total of 110 relevant pieces of research¹⁸ distributed across the sample of journals as indicated in the numbers from the above list of journals.

Next, I coded each article according to research design type, using the coding categories described above: Survey Experiment; Modified Experiment, Type 1; Modified Experiment, Type 2; Content Analysis / Polling Data; and Observational Study.

The frequency of each type of study in this sample is as follows:

¹⁵ Research in which *message content* is delivered through video was included.

¹⁶ I also excluded most of the relatively large body of agenda-setting research examining whether or to what extent, but not *how*, a particular message was conveyed. For instance, research on the effect of presidential attention to a particular issue in the State of the Union address would be excluded, because this does not qualify as the variable presentation of a single message, which is the quality shared by the rest of the framing effects research.

¹⁷ While admittedly arbitrary, the cut-off date of 1987 was chosen for several reasons: 1) It makes the resulting time frame roughly a quarter century. 2) Articles on framing effects have been published fairly regularly – and increasingly frequently – since about 1987; prior to 1987, they were infrequent. 3) The earliest piece in this analysis seemed a good place to start: it was written by a seminal figure in the study of framing effects, Shanto Iyengar, and it contained an early example of what has become a standard experimental design. 4) Nearly all journals, with the exception of the *International Journal of Press/Politics* (not available for dates prior to 1996), were available for these dates. Articles were only examined through 2012 because I conducted the search before the release of any 2013 journal editions.

¹⁸ There were 109 articles, but one is counted twice here because it reports results for two distinct types of research design.

Type of Study	Frequency	Percentage of Whole
Survey Experiment	81	73.6%
Modified Experiment, Type 1	9	8.2%
Modified Experiment, Type 2	0	0%
- Total Experimental -	90	81.8%
Content Analysis / Polling Data	20	18.2%
Observational Study	0	0%
- Total Non-Experimental -	20	18.2%

This analysis shows an overwhelming prevalence of survey experiments, with 82% of articles using some manner of survey experiment to measure issue framing effects. Another common research strategy involves content analysis of frames in communication compared with data from large-n surveys or public opinion polls. This type of design accounts for the remaining 18% of the articles examined. The significance of this type of design is that it is virtually the only evidence of observational data uncovered in this search – with the exception of the roughly 8% of studies that combined survey experiments with content analysis of real-world framing (i.e., Modified Experiment, Type 1).

Despite about a quarter of the research designs containing some observational data pertaining to how issues are framed, no observational measurement of framing *effects* was found in any study. In the entire sample, only four examples exist of effects being measured in a manner in which the recording of political attitudes was not fully circumscribed by researchers (in the form of closed-ended survey questions or aggregate public opinion data). In their survey experiments, Brewer and Gross (2005) and Brewer (2002) use open-ended questions to measure responses to frames. Price, Nir, and Cappella (2005) use a unique focus-group experiment – functionally similarly to other framing experiments but without subjects being restricted (in their expression of opinions) to the information the researcher has previously decided to collect. Finally, Huang (2010) uses an open-ended measurement of political attitudes, along with content analysis of the communications to which these subjects were exposed.

Although none of the above is strictly observational data by my definition, all of these approaches to measuring political attitudes do contain observational elements that other studies do not. So it would be worthwhile to introduce a new measure of the extent to which research designs are observational, in order to draw a finer distinction between

these studies and other that are counted in the same categories of my typology. Below are four different observational components that a study might contain, again organized by the measurement of framing and the measurement of effects:

Possible observational components:	Includes any or all of:
Absence of researcher intervention in message <i>content</i> (Framing)	Content analysis of frames Use of observed (as opposed to constructed) message content in experiment
Absence of researcher intervention in <i>exposure</i> to messages (Framing)	Content analysis of frames
Absence of researcher intervention in survey/polling <i>response options</i> (Effects)	Open-ended survey questions Use of focus groups to study political attitudes
Expression of political attitudes not prompted by researcher (Effects)	Observation of political attitudes expressed outside of research setting

Notice that the research design in Huang (2010) contains three observational components: content analysis of communications (thus, it is observational both in that it avoids researcher intervention in message content and in subjects' exposure to messages) and open-ended survey questions. This score of three observational components (out of a possible four) is the highest among all of the 110 research designs analyzed. All other studies in the sample score between zero and two, as shown in Figure 1.

/Figure 1 about here/

Do some journals publish more experiments than others? Information about which journals published which type of work is presented in Table 1 below.

/Table 1 about here/

It is difficult to identify a clear pattern from these results, because the number of articles published per journal is typically small. Still, at least two things are true about the distribution of survey experiments among these journals. First, the two top outlets for framing effects research, *Journal of Politics* and *Political Psychology*, publish almost

exclusively a single type of design. Respectively 93% and 100% of the framing effects publications in these journals are experiments. Only one article on this topic (out of 28) published in these outlets in the past 25 years is *not* a survey experiment. In fact, among the 27 survey experiments, only one is classified here as a Modified Experiment, in that it uses real-world frames as the experimental stimuli. Second, the most prominent journals in political science do seem to have a preference for experimental work, with 88% of the articles (29 of 33) published in the “Big Three” journals¹⁹ containing experiments. While this is not considerably different from the overall average, it shows that these standard-bearers are implicated in the lack of methodological diversity in framing effects publications.

This section has shown that observational data on framing effects is virtually absent in the relevant literature. While my definition of what constitutes “observational” may be somewhat restrictive, the definition helps to make clear the significance of this paper’s findings: In the literature examined here, political attitudes are never measured in real-world settings – they are measured *exclusively* in ways that put them in contact with researchers at the time of opinion expression. This limits external validity in widely-recognized ways, although this limitation is not necessarily a problem. What *is* a problem is that there is not enough work with greater external validity (even if sacrificing some internal validity) to balance these findings. The glut of data – especially from social media – that now exists concerning how people think about politics offers significant promise for supplementing what we have learned from survey experiments about how frames influence people’s political attitudes. The following two sections expand on these points.

III. Limitations of Survey Experiments

Survey experiments, while indispensable for isolating the role of specific variables in the process of framing effects, do have limitations. First, they are able primarily to measure effects that the researcher *knew to look for*. The typical experimental design leaves little room for probing deeply into subjects’ attitudes and how

¹⁹ *American Political Science Review*, *American Journal of Political Science*, and *Journal of Politics*

they change as a result of framing. If framing effects consisted only of changes in issue positions, then it might be insignificant that political attitudes are measured almost exclusively through individuals' responses to closed-ended survey questions. However, on the contrary, political attitude change is much more than merely changes in issue positions, a point sometimes obscured in the framing effects literature, with its reliance primarily on survey experiments. As discussed above, two other types of effects, both causally prior to changes in issue positions, deserve attention.²⁰ Many survey experiments do seek to observe the effect of frames on the first of these – the considerations that one uses in thinking about an issue. However, they very seldom, if ever, examine the second – how framing influences perceptions of the very substance of issues and issue positions.

A closed-ended survey design, as typically employed in a survey experiment, does not easily permit the measurement of how a person conceives of an issue. For instance, if changes in attitudes toward the issue of health care reform were measured in a typical survey, it would be simple to assess whether and to what extent a respondent supports or opposes the Affordable Care Act. It would even be possible to gather useful information about the considerations that are employed in this opinion formation. The survey instrument in a typical experiment breaks down when it comes to delving into the intricacies of people's perceptions of the issue at hand, which are prone to be heavily influenced by issue frames. They are unlikely to gather detailed information about, for example, how an individual would *describe* the Affordable Care Act – very telling information about why one takes a particular position on the issue and the role that political communication has played in this preference formation. An oppositional frame concerning government spending might lead one who received that frame to believe that the Affordable Care Act primarily involves government providing health care coverage to citizens free of cost. A support frame focused on holding insurance companies accountable might lead one to infer that the policy primarily involves government regulation of health insurance. These perceptions about the basic facts of policy issues truly matter in the formation of issue positions; and the framing of issues – especially complicated ones, for which people value simplification – is capable of dramatically

²⁰ To reiterate, these concern the *considerations* that come to one's mind when thinking about an issue and one's perceptions of the *content* of an issue or issue position.

altering these understandings. Survey experiments are not the ideal research design for uncovering these effects.

Limitation #1: Some framing effects may be missed. Changes in issue positions and the considerations used to arrive at these positions are well-studied in the typical survey instrument. Changes concerning how a person *perceives the content* of an issue or issue position are difficult to measure adequately with these instruments.

Second, experimental settings may not be representative of the real-world circumstances under which framing effects occur. It is possible that the effects observed in the lab are entirely unrealistic once real-world conditions are introduced. Several features of experimental framing settings differ from the everyday circumstances in which people are exposed to issue frames: subjects are “artificially sequestered” (Sniderman and Theriault 2004, pg. 141), the communication they receive is selected for them (see Druckman, Fein, and Leeper 2012), and the effect of these communications is typically, though not always, recorded immediately (see again Druckman, Fein, and Leeper 2012). Furthermore, the artificially direct application of stimuli differs markedly from real-world circumstances, in which these stimuli compete with an abundance of “noise.” In the real world, according to Kinder (2007, pg. 158), frames are “characterized by repeated exposure through multiple venues over long periods of time—a whole curriculum of exposure.”

Limitation #2: Experimental settings may not be representative of the real-world circumstances under which framing effects occur.

A third potential shortcoming of survey experiments concerns the researcher-composed frames that are typically presented to subjects, which may not adequately represent the frames that one encounters in the real world (on this, see Kinder 2007, pg. 158-159). It is important to note that this is a problem only for some research questions. For instance, if one truly seeks to isolate the effects of specific frame *attributes* on public opinion, then it is appropriate to manipulate frames carefully to ensure that they represent

these attributes. If, on the other hand, one seeks to study the effect of the framing strategies actually being used in political practice, unrepresentative frames are especially problematic. Because only 10% of the survey experiments analyzed (the Modified Experiment, Type 1 subset) take frames directly from observation, this literature as a whole may not be able to shed adequate light on the effect of real-world framing strategies.

Limitation #3: Experimental stimuli may not represent how leaders and journalists actually frame issues.

IV: The Promise of Observational Data

Observational studies, like experiments, have limitations²¹ (see, for example, Arceneaux 2010). However, there are two general reasons why it is important to supplement survey experiments with observational studies: 1) research findings might differ between the two methods, and 2) they might not. In other words, it is possible that – perhaps due to the factors that cause laboratory settings to be unrepresentative of the everyday circumstances in which framing effects actually occur – the findings of survey experiments are unrealistic. Consequently, it is important that observational analyses act as a check on the findings of experiments. Or, as is more likely, the observational studies might further confirm what has been found in experiments, which would be a boon to the

²¹ One limitation that is especially notable is self-selection: the people who make public their unprompted opinions on political controversies (perhaps via social media posts or letters to the editor – two sources of observational data that provide rich information about people’s perceptions of issues) likely differ systematically from the general public. This is an important consideration, the significance of which must be considered depending on the purpose of the study in question. However, there are at least two reasons why this concern is less problematic than it might at first appear. First, these individuals may constitute a self-selected sample, but they are a *good* one: they are people who we might expect to pay close attention to politics. If we want to learn about the effect of political communication on public opinion, then it makes sense to study people like this, who are most likely to be exposed to these communications in the real world – and, in addition, most likely to influence political outcomes by *voting*. Second, it is worth placing the concern with self-selection in perspective by comparing this type of sample to the existing standard in published research on framing effects. Self-selection among the sample described above is likely no greater than self-selection among experimental participants, typically university students or members of the general public willing and able to visit a university laboratory for an experiment. There is little reason to expect that a wider diversity of people would engage in this behavior than would, for example, write a social media post concerning politics. In contrast to the time and energy (and proximity to a university) required to participate in an experiment, the writer of a social media post needs merely to have something to say and to post it online.

study of issue framing. With three-quarters of research findings relying on the same method, new research approaches of almost any kind would be beneficial in helping framing scholars “triangulate” their findings.

In addition to this general wisdom of diversifying the methods used to study framing effects, the limitations noted in the previous section can be avoided in observational studies, making them the right tool for the job in some cases, independent of how populated the literature is with survey experiments. First, using observational data to measure issue framing effects allows for observing what people think about issues on their own terms, not in response to researchers’ prompts. This makes it more likely that research will uncover effects not previously anticipated. As Chong (1993, pg. 898) concludes from a series of in-depth interviews, in which he allowed subjects to openly think aloud about their views on a set of controversial issues, “it would seem difficult to extrapolate from surveys of opinion to how people would actually behave in real controversies,” partly because in a survey “they are being asked to discuss politics *in our terms rather than theirs*.”²² Amid concern that the public lacks democratic competence, relatively unconventional approaches to studying public opinion have shown that part of the problem may be researchers’ preconceived notions regarding how a person should reason through a controversy (Chong 1993; Lane 1962) or what a person should know about politics (Lupia 2006). In much the same way, observational data – with expressions of political attitudes not prompted by researchers – may help to uncover framing effects that researchers did not anticipate.

The designs highlighted above for their open-ended measurements of respondents’ attitudes (Brewer 2002; Brewer and Gross 2005; Price, Nir, and Cappella 2005; and Huang 2010) allow for deeper assessments of how people think compared to typical, closed-ended surveys of attitudes. This is a vital difference in terms of allowing researchers to assess the effect of frames on people’s perceptions of the *content* of an issue – the type of framing effect that this paper has argued is under-studied due to the prevalence of survey experiments in the framing effects literature. As the above literature analysis shows, fewer than 5% of framing effects research designs in my sample use

²² Emphasis added.

open-ended measurements of opinions; so increasing the use of these, as well as in-depth interviews and focus groups, is the first step in overcoming Limitation #1.

Beyond this, the collection of observational data about political attitudes is a promising avenue for research that avoids Limitations #1 and #2. There is much to be discovered about public opinion observationally – especially given the advent of social media as a rich source of public opinion data that are, critically, unprompted by researchers. Options for exploring public opinion and framing effects observationally include analysis of such data sources as social media posts, comments posted to websites, letters to the editor, caller comments from call-in radio shows, and other open-ended, voluntary expressions of opinion. Using a variety of such sources of data would allow researchers to examine a broad segment of the population – relying, for example, on Facebook and Twitter to capture the views of younger individuals and letters to the editor or comments on call-in programs to capture the views of older ones.

Content analysis of these data would permit one to answer several questions related to framing effects. First, which issue frames do citizens tend to use, and with what frequency? Presumably, the frames used by political leaders and journalists would also appear in citizens' expressions of opinion. To what extent do citizens' framing of issues and leaders' and journalists' framing of issues correspond? Analyzing patterns over time, do frame emergence and dispersion in the news media occur before or after similar patterns in public discourse? Finally, which types of frames seem to resonate with the public? Comparing the prevalence of different frames in the news media vis-à-vis public communication permits one to assess this observationally, rather than experimentally.

Observational Remedy for Limitations #1 and #2: In addition to greater use of open-ended measures of political attitudes in research contexts, greater use of data showing how people think and discuss political issues when unprompted by researchers is important. These data might include the following:

- Social media posts (e.g., Facebook, Twitter, etc.)
- Comments posted to websites (e.g., online political news sites)
- Letters to the editor of local newspapers
- Comments from call-in radio shows

Unlike the studying of the *effects* of frames observationally, as just described, there is a precedent for studying *framing* observationally. The literature analysis above shows that roughly a quarter of articles in the sample used content analysis to measure the framing of issues. Continuation – and, ideally, expansion – of this approach is important for avoiding Limitation #3.

Observational Remedy for Limitation #3: More studies should either 1) use stimulus materials taken directly from real-world communications or 2) conduct content analysis of real-world communications to substantiate that the frames used in the experiment truly exist prominently in actual public discourse.

V. Conclusions

As Kinder (2007, pg. 157) notes, virtually everything we know about framing effects comes from survey experiments. This may be an indication that there is very little variety in the methods used by those who study framing effects, that preferential treatment is given to research reporting the results of survey experiments, or both. Whatever the cause, the lack of methodological diversity in this research area is very limiting. Even conceding that experiments are greatly preferable to observational studies when one's goal is to isolate potential cause-and-effect relationships, a literature populated at a rate of 82% with a particular method is still insufficiently diverse, in the sense that it is asking too many variations of the same question – how *might* differential framing of an issue influence political attitudes? Bringing these important findings out of the laboratory would permit greater focus on another important question – how *does* differential framing of an issue influence political attitudes? On this question, careful analyses of the correspondence of public opinion with the framing of issues by leaders and the news media, which appear in 18% of the studies I analyze, provide a good start. However, other rich sources of observational data – pertaining to how citizens think about and discuss issues in their own words – have yet to make a single appearance in the framing effects research published in the most prominent political science outlets. Greater use of these sources of data would help to shed light on an under-studied framing effect – the effect of issue frames on people's perceptions of the *substance* of the issue at hand.

Figure 1: Frequency of Studies, by Number of Observational Components

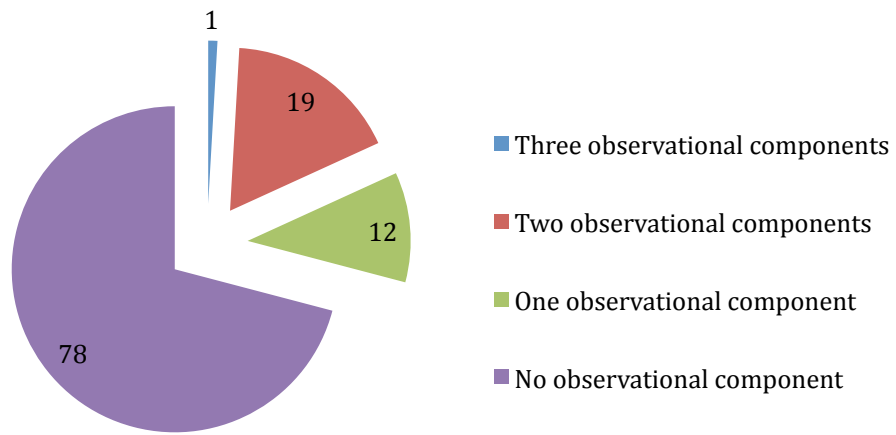


Table 1: Number of Instances of Each Research Design Type, by Outlet

Journal	n	Research Design Type (see below)			% Experiments
		1	2	3	
<i>Journal of Politics</i>	15	14	0	1	93.3
<i>Political Psychology</i>	13	12	1	0	100
<i>American Journal of Political Science</i>	12	9	0	3	75
<i>Political Communication</i>	12	7	1	4	66.7
<i>Political Behavior</i>	11	9	1	1	90.9
<i>International Journal of Public Opinion Research</i>	8	2	0	6	25
<i>Journalism & Mass Communication Quarterly</i>	8	8	0	0	100
<i>Journal of Communication</i>	7	4	1	2	71.4
<i>American Political Science Review</i>	6	4	2	0	100
<i>Communication Research</i>	5	4	0	1	80
<i>International Journal of Press/Politics</i>	5	5	0	0	100
<i>Public Opinion Quarterly</i>	4	2	0	2	50
<i>Political Research Quarterly</i>	3	1	2	0	100
<i>European Journal of Communication</i>	1	0	1	0	100

Research Design Types: 1 = Survey Experiment; 2 = Modified Experiment (Type 1); 3 = Content Analysis / Polling Data

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