

Studying Framing Effects on Political Preferences:
Existing Research and Lingering Questions

Ethan Busby, D.J. Flynn

and

James N. Druckman

Few concepts in the study of political communication have attracted as much attention as framing. A common focus is on “emphasis framing,” whereby a political actor (e.g., candidate, interest group, media outlet, opinion leader) highlights a subset of potentially relevant considerations about a candidate, issue, or event (Druckman 2001). A “consideration” is defined as a reason for favoring one side of an issue over another (Zaller, 1992). Advocates and other potential news sources often express such considerations in terms of valence (e.g., positive or negative terms that express the degree of success or failure associated with a policy proposal). In news framing analysis, however, these views are rarely expressed as strictly logical equivalents of the “sides” of an issue, such as is found the prospect theory’s terminology of gains and losses (D’Angelo, 2017; de Vreese & Lecheler, 2012). Rather, such considerations urge the audience to evaluate the issue based on “unspecified complements” (Levin, Schneider, & Gaeth (1998, p. 158) that audiences typically read or hear about when the news media present such frames to audiences (Nelson & Willey, 2001, p. 247).

A classic example involves a debate over whether to permit a hate group (e.g., Ku Klux Klan) to hold a public rally. Supporters of the rally might frame the issue as a question of free speech. This causes citizens to weigh constitutional rights heavily when forming their opinions and to support the group’s right to demonstrate. On the other hand, opponents of the rally might

frame the issue as one of public safety, leading citizens to focus on maintaining social order when forming opinions and to oppose the rally (Nelson, Clawson, and Oxley 1997).

The study of framing has played a role in political communication research since at least the 1950s when Berelson et al. (1954, chapter 12) described how Truman's victory reflected, in part, a re-framing of vote choice so as to focus on socioeconomic rather than international issues. Over the past quarter century, researchers have investigated framing in numerous settings, including policy opinions (e.g., favor/oppose a policy), candidate evaluation, and attributions of credit or blame for policy outcomes (among others) (see Klar, Robison, & Druckman 2013). A common thread in framing research throughout these domains is that frames have effects on the individual level; that is, exposure to frames—in news coverage and other forms of (mediated) discourse—play a substantial role in how individuals form *preferences*. Thus, a framing effect occurs when exposure to a frame—in news or other political discourse—causes individuals to place greater weight on highlighted considerations as they form and possibly revise preferences over time.

Despite all of the empirical inquiry, our understanding of how and when frames influence preferences in realistic political settings remains limited. Accordingly, this chapter identifies a series of lingering questions about framing effects and discusses recent studies that address these questions. It is organized into two main sections. The first section begins by looking at how frames contained in communications impact the frames people use to form preferences. After that, it addresses the fundamental—and largely unanswered—question of why certain frames have larger effects than others. Finally, it discusses individual and contextual moderators of framing effects, pointing out how framing effects demonstrated in experimental laboratories are likely less robust in other settings.

The second main section brings the conceptual components of preferences together by detailing the expectancy value model, a common psychological model of framing effects that connects opinions and evaluations with beliefs and attitudes. The section describes how existing research should be understood in light of this model. We conclude by highlighting a number of conceptual and methodological challenges for framing researchers, elaborating on these challenges and suggesting fruitful paths forward.

What Is A Framing Effect?

In framing research, a common starting point is to draw a distinction between two different notions of framing: *frames in communication* and *frames in thought* (Scheufele 1999, Druckman 2001). Frames in communication refer to the way a speaker uses words, images, elements of an event to relay information. This kind of frame is a product of the individual communicating information and reflects the ideas and goals of that individual. In other words, “a communicator...associates certain pieces of information and...omits potentially topic-relevant information in an effort to define the topic and purvey a set of judgments about it” (D’Angelo, 2017, p. 635). Frames in communication deal with the information conveyed within different kinds of messages, such as news stories and campaign appeals. For example, a news story that emphasizes the role of the economy in a political campaign uses an “economy frame,” indicating that economic considerations are important in thinking about the election.

Frames in thought, in contrast, refer to how individuals *perceive* a situation. This kind of frame does not refer to an attribute of a specific communication; rather, it “reveals what an individual sees as relevant to understanding a situation” (Druckman 2001, p. 228). Frames in thought, in turn, are a basis for the preferences that a person subsequently forms about the topic—an issue, person, or event—covered in the news story or other mediated communication.

Individuals who evaluate candidates according to economic issues, for example, can be said to be in an economic frame of mind.

The frames in communication versus thought distinction is critical for understanding framing effects on the individual level. As noted, a framing effect occurs when an emphasis causes individuals to place greater weight on highlighted consideration in the course of forming preferences. In the following subsections, we discuss several examples of these kinds of framing effects. As will become clear, researchers typically consider frames in communication that originate in news or media coverage (Chong & Druckman, 2011) and focus on how such frames influence individuals' preferences.

Framing Effects Across Domains

As mentioned, over the past several decades, researchers have documented framing effects in numerous policy-oriented domains. We look at framing effects in three such areas to show how framing effects work in various political contexts. In each case, researchers identify commonly used frames in communication (e.g., by media outlet) and explore how such frames shape opinions.

A first example concerns election framing: in this case, the relevant object is an attitude toward a candidate. When evaluating a candidate, voters typically consider a range of evaluative dimensions, including (but not limited to) favoring or opposing a candidate's specific policy stances and liking or disliking particular personality characteristics (Druckman & Jacobs, 2015). The multidimensional nature of candidate evaluation opens the door to framing, and the news media and candidates frequently present a number of different frames in communication.

Druckman et al. (2010) looked at how frames focusing on two dimensions—issue positions and candidate images (e.g., honesty, empathy)—affect evaluations and vote choices in

a congressional primary election. Specifically, they investigated attitudes toward two candidates running in a Republican primary election for Congress in Massachusetts: Tom Tierney and Jim Ogonowski. The authors randomly assigned participants to read one of two versions of a newspaper article which contained passages conveying two common political frames of reference: one passage framed the election as being about issues and the other framed it as being about images. The issue frame indicated that, “This election is about the issues such as the war and healthcare—the voters need to determine who will put their preferences into action.” In contrast, the image frame stated, “This election is about the candidates’ personal strengths and weaknesses.” After reading one of the frames, participants watched a debate in which the candidates discussed the relevant issues and some of the images in play. In a post-debate questionnaire, those who had read the issue article based their evaluations (i.e., their assessments of for whom they were more likely to vote) on the candidates’ issue stances (e.g., where they stood on healthcare). Those who read the image article, in contrast, based their evaluations on image perceptions (e.g., which candidate displayed more leadership qualities). Participants in the study also favored Tierney on the issues and Ogonowski on images; thus, the frames generated distinct candidate preferences, with the issue frame leading individuals to favor Tierney and the image frame causing individuals to favor Ogonowski (Druckman et al., 2010).

A second example of framing effects concerns the framing of particular policies. Work in this area has explored numerous topics, such as abortion (McCaffrey & Keys, 2000; Ball-Rokeach et al. 1990), gun control (Haider-Markel & Joslyn, 2001), climate change (Spence & Pidgeon, 2010), welfare (Nelson & Oxley, 1999; Sniderman & Theriault, 2004). Take, for example, research on gay rights. Brewer (2008) exposed individuals either to a media frame emphasizing equality or one highlighting morality. He found that the equality and morality

frames influence individuals' frames in thought, which in turn, altered overall opinions about gay rights: individuals reading an equality (morality) frame became more (less) supportive of these rights (Brewer 2008). Another policy example comes from Sniderman and Theriault (2004), who show that framing spending for the poor as enhancing opportunity leads individuals to support spending, while framing it as increasing taxes leads individuals to oppose spending.

Yet another example of policy framing concerns opinions about concealed handgun laws. Haider-Markel and Joslyn (2001) randomly assigned participants to read a frame emphasizing either individuals' right to protect themselves or the threat such policies may pose to public safety. They find that framing concealed handgun laws as threatening public safety dramatically increased opposition to these laws. The authors also explored how subjects attributed responsibility for gun violence. Specifically, they randomly exposed participants to one of three possible frames: one that only mentioned a recent shooting (i.e., control group), one that attributed the shooting to weak gun control laws, and one that attributed the shooting to violence in media. The frames had the expected result, increasing participants' blame for the cause mentioned in each frame (i.e., laws or the media).

This latter study—focusing on how frames affect attributions—introduces a third domain in which framing effects apply: for causing (“causal responsibility”) or addressing (“treatment responsibility”) a problem (Iyengar 1991; see, e.g., Malhotra and Kuo 2008). A classic example of attribution framing comes from Iyengar (1991), who differentiates *episodic* and *thematic* frames. The former focuses on individual stories, while the latter emphasizes general patterns in society or the economy. In a series of studies of attribution framing effects, Iyengar (1991) manipulated a network television broadcast to include either a thematic or episodic frame for poverty. Thematic frames discussed recent nationwide increases in poverty, reductions in social

welfare programs, and the relationship between unemployment and the deficit. By contrast, episodic frames focused on particular cases of unemployment, describing a Midwestern family unable to pay its winter heating bills, homeless individuals in New York and San Diego, and an unemployed auto worker in Ohio. Iyengar (1991) observed robust framing effects on perceived causal responsibility for poverty. He explained, “Individualistic attributions for poverty [i.e., blaming individuals for living in poverty] were more than twice as prominent under conditions of episodic framing. Conversely, the frequency of societal causal attributions [i.e., blaming societal forces for poverty] was substantially higher following exposure to thematic framing of poverty” (p. 54).

Some studies consider how attribution frames affect broader opinions. For example, in their study of how partisan conflict affects evaluations of the U.S. Congress, Flynn and Harbridge (2016) manipulated the causal explanation provided for legislative gridlock. Specifically, they randomly assigned participants to one of two attributions: one frame attributed gridlock to ideological differences between Democrats and Republicans, and the other attributed it to strategic partisan fighting (i.e., preventing a victory by the opposing party). The authors then measured participants’ approval of how Congress is handling policymaking. They report that the “ideological differences” frame resulted in higher approval than the “partisan fighting” frame, suggesting that individuals were more understanding of gridlock arising from ideological differences than from strategic partisan conflict.

What Makes a Frame in Communication Strong?¹

¹ This discussion is drawn from Druckman and Lupia (2016)

The framing effect studies just reviewed focus on reactions to a single frame in isolation. Yet, in many contexts, such as elections and policy debates, political elites compete with one another by offering different frames with the hope of moving citizens in their preferred direction. For example, in a debate about whether to permit a hate group to hold a rally, supporters emphasize free speech while opponents focus on public safety. Which frames win this competition?

In one of the first studies of competitive framing, Sniderman and Theriault (2004) examined what happens when individuals receive competing frames at the same point in time. Focusing again on support for a hate group rally, the authors randomly assigned individuals to a free speech frame, a public safety frame, or *both frames* (i.e., competing with one another). As expected, they find that exposure to only a free speech frame or only a public safety frame pushed individuals' opinions in opposing directions (e.g., free speech recipients favored the right to rally while public safety recipients opposed it). However, the group that received both frames was not moved by either and, instead, based their opinions on their prior values. Individuals who generally valued free speech (public safety) expressed support (opposition) for the rally. Thus, the frames cancelled out, and people returned to their basic values when forming opinions.

Yet, competing frames do not always cancel out. Some frames are “stronger” than others, and stronger frames generally win in competitive settings. Chong and Druckman (2007b) characterize strong frames as possessing three properties: availability (e.g., do people connect a value such as civil liberties to a hate group rally?), accessibility (e.g., do civil liberties come to mind?), and applicability/appropriateness (e.g., is the civil liberties frame judged as compelling?).

To illustrate how one of these three properties enhances frame strength, consider Druckman's (2010) study of frames regarding public casino funding. He pre-tested framed strength by asking individuals to rate the effectiveness of various frames (i.e., increased “effectiveness” indicates greater applicability). He found that individuals viewed frames accentuating economic security (e.g., benefits from the casino) and social order (e.g., avoiding addiction and debt) as strong frames for and against the casino, respectively. In contrast, respondents rated morality (of gambling) and entertainment (from gambling) low in terms of strength, and thus they constitute respectively weak con and pro frames. For the experimental portion of the study, Druckman randomly assigned a distinct group of respondents to various combinations of these frames. He found that strong frames in isolation move opinions, weak frames in isolation do not move opinions, and most importantly, when presented together, only the strong frames influence opinions. For example, participants exposed to a strong economic frame were 41 percent more likely to support the casino (relative to a control group that received no frames), even when they also received weak frames pointing in the opposite direction. These findings suggest that some frames are more effective due to their applicability to the issue at hand.

It seems clear that frame strength matters; yet, an enduring question in framing research is precisely which properties of frames promote strength. Even the large literature on persuasion offers little insight. As O’Keefe (2016) points out, decades of research on the topic has failed to identify factors that consistently result in higher perceived strength. Nonetheless, several recent studies offer some insights. In what follows, we focus on four factors that seem to promote strength: source, episodic focus, emotion, and identity threat.

First, individuals often perceive frames from credible sources (as opposed to non-credible sources) as more applicable (Druckman, 2001; see also, Lupia & McCubbins, 1998). Chong and Druckman (2007a) study source effects with an experiment akin to Sniderman and Theriault's hate group rally study, but with sources added to the frames. The randomly assigned frames—a free speech frame, a public safety frame, or both—were attributed to either a credible source (a major local newspaper) or a non-credible source (a high school newspaper). Findings showed that when presented with competing frames of this kind, the more credible source's frame had a much larger effect on attitudes. A free speech frame from the credible source, for example, did not cancel out a public safety frame from a non-credible source, but rather the former moved opinions by causing people to become more supportive of the right rally. The stronger frame—defined here as one coming from a credible source—won the battle between frames.

A second source of frame strength concerns the episodic or thematic nature of frames. As mentioned, episodic frames deal with personal accounts, case studies, and human interest stories. Such messages reference individuals' concrete experiences. Thematic frames, on the other hand, reference general patterns in society (e.g., summary statistics). Aarøe (2011) explores the relative strength of episodic versus thematic frames on the issue of immigration and marriage law in Denmark.² Aarøe's experiment varied two aspects of the frames: support/opposition to the law and the episodic/thematic nature of the frame. For example, episodic frames in support of the law described how an immigrant woman was protected from an unwanted arranged marriage by the law. The thematic version referenced patterns in overall marriage, rather than any particular individual's experience. She discovered an interesting combination of frame type and emotional response: the episodic frames generated more

² The issue under study was Denmark's "24-year rule", which requires Danish citizens who marry noncitizens to live outside of Denmark until both spouses are 24 years old. This law has been the subject of considerable controversy in Denmark and the European Union.

emotional responses from participants and were more persuasive among individuals who experienced higher amounts of emotion. Thematic frames, on the other hand, were only more effective than episodic frames among subjects who reported no or low levels of emotions in response to the frames. As a whole, then, this research suggests an interaction between the emphasis of a frame and emotional responses: episodic frames can be stronger than thematic frames, contingent on the amount of emotion invoked by the issue at hand.

This discussion introduces a third determinant of frame strength: emotion. Arceneaux (2012) shed light on the role of emotion vis-à-vis gain and loss framing. In a study of support for gay-straight alliance clubs in high schools, he manipulated both the frames subjects encountered and their emotional states (prior to receiving the frames). When anxiety was induced, subjects preferred arguments that focused on averting losses, regardless of whether the frames emphasized free speech or traditional family values. This research suggests that the strength of a frame depends partly on the extent to which its content matches the emotions being experienced by the frame receivers.

A final factor that can promote frame strength is identity threat. Klar (2013) studied two identities—being a parent and being a Democrat—and three issues—social spending versus reducing the deficit, anti-terrorism spending, and sex offender sentencing. Importantly, these are topics on which Democratic parents often experience ambivalence. For example, parents are more likely than non-parents to support deficit reduction, increased anti-terrorism spending, and harsher sentences for sex offenders. These positions contrast with common Democratic preferences. Klar exposed a sample of Democratic parents to receive a mix of frames linking the issues to each identity (i.e., Democratic or parental). The experiment varied whether subjects received a frame that merely mentions the identity, a frame accentuating the political relevance

of the identity, or a frame highlighting a threat to the identity. She found that the threat appeal had the largest effects on expressed preferences. In regard to strength, frames that threaten individuals' identities are more likely to be persuasive and win out in competitive settings.

In sum, understanding the determinants of frame strength is critical if scholars are to isolate which arguments will prevail in competitive political settings (see also, Buamgartner, De Boef, & Boydstun, 2008; Druckman & Bolsen, 2011). Extant research identifies some factors that contribute to frame strength, but clearly more work is needed.

When Do Frames Matter?

The success of a given frame depends not only on its strength but also on various individual and contextual variables. We review research on five factors that may condition framing effects: prior attitudes, cues, deliberation, media choice, and time.

First, framing effects depend on the strength of individuals' prior attitudes (i.e., the pre-frame attitude). Strong attitudes are defined as those that endure and impact cognition and behavior (Krosnick & Petty, 1995). The stronger an individual's prior attitude, the less likely the individual will be influenced by a frame. As Druckman and Leeper (2012) explain, "When an individual possesses a strong opinion and encounters a potentially persuasive stimulus [e.g., frame]...the individual will reject the stimulus and cling to the extant opinion. This happens because individuals with strong attitudes tend to engage in motivated reasoning" (p. 54). Motivated reasoning occurs when individuals view evidence (e.g., new frames) consistent with prior opinions as stronger or more effective and counter-argue evidence inconsistent with prior opinions (Kunda, 1990). Stronger attitudes increase the likelihood of motivated reasoning (Taber & Lodge, 2006).

To understand how this process works, consider Chong and Druckman's (2013) over-time experiment focusing on the Patriot Act. At an initial time 1 (t_1) session, the researchers randomly exposed individuals to one of two frames: a pro-frame focused on the threat of terrorism or a con-frame focused on civil liberties. They also induced some individuals to form strong attitudes in response to the initial frames (and others to form weak attitudes).³ Thus, at the end of t_1 , as in the prototypical framing experiment, those exposed to the pro (con) frame become more (less) supportive of the Patriot Act. The important addition is that some held their attitudes more strongly than others. At a later time period (t_2), some individuals were exposed to the opposite frame from what they received at t_1 (e.g., those who received the pro terrorism frame received the con civil liberties frame). The study found that individuals with weak t_1 attitudes moved in the direction of the t_2 frame (e.g., exposure to the con frame generated decreased support). By contrast, individuals with strong t_1 attitudes rejected the counter frame at t_2 , as they engaged in motivated reasoning. In short, a strong prior attitude prevents a t_2 framing effect.

The moderating role of attitude strength has important implications for how framing studies are executed. Druckman and Leeper (2012) point out that when designing experiments, scholars often choose to focus on issues on which individuals have weak prior opinions (see, e.g., Chong & Druckman 2010, p. 667). This practice could lead to misunderstandings about the robustness of framing effects across issues. Put differently, published work likely overstates the robustness of framing effects because it focuses overwhelmingly on issues on which prior opinions are weak—and therefore more easily framed.

Second, framing effects are less likely when individuals use cues to form opinions. A cue is “a piece of information that allows individuals to make inferences without drawing on more

³ Those in the strong attitude condition were asked to think carefully about what the frame did to their thoughts, and were told they would be queried later about their attitudes. Those in the weak attitude condition were distracted when reading the frame and told to focus on the grammatical structure of the sentences in the frame.

detailed knowledge” (Druckman et al., 2010, p. 137). Reliance on a simple cue (e.g., an endorsement) can sometimes overwhelm a frame. For example, when individuals follow a party cue (e.g., their party endorses allowing a hate group rally), individuals may just follow the cue/endorsement and ignore any frames on the topic (e.g., about free speech of public safety) (see Druckman et al., 2010, for a detailed discussion).

Even when people consider frames and cues jointly, cues can still shape how framing effects operate. For example, Slothuus and de Vreese (2010) studied how party cues moderate framing effects in two experiments focused on welfare and trade policy. In both studies, the researchers randomized the direction of the frames (i.e., pro or con) *and* the cue provided (i.e. frames are attributed to one of the two major parties). The effect of party cues is striking: participants’ opinions moved in the direction of the frames, *but only when the frame was attributed to one’s own party*. By contrast, when frames were attributed to the opposing party, individuals ignored them altogether. As Slothuus and de Vreese (2010) explain, “These results suggest that citizens act as motivated reasoners when responding to party frames. Thus, when judging applicability of frames explicitly sponsored by a partisan source, people tend to use their partisanship as a filter biasing their assessment of the frame” (see also, Druckman, Peterson, & Slothuus, 2013). Thus, framing effects are less likely when individuals follow cues—as opposed to engaging in more thorough deliberation—to form opinions.

Third, framing effects can vary depending on social networks (e.g., inter-personal discussions). In particular, social networks can both introduce new frames and moderate the effects of frames originated elsewhere (e.g., from elites). Walsh (2004) studies the influence of interpersonal discussion on people’s understanding of frames used in local media coverage. She content-analyzed local newspaper coverage of several political issues and observed discussion of

these issues among a group of senior citizens (see Walsh, 2004, p. 128). She notes that although initial media frames influenced the course of discussion, people were able to “transform and even circumvent [elite] frames” through interpersonal discussion (16). For example, one issue concerned the decision of a local automobile manufacturer to begin offering benefits to same-sex partners of its employees. While the media framed the issue in terms of the company’s motivations, corporate influence on social norms, and equality of opportunity, discussion participants largely eschewed these frames in terms of an alternative frame: feasibility. This study suggests that citizens are not passive receivers of frames; rather, deliberation can seriously limit the ability of elites to frame political issues (see Calvert & Warren, 2014, for further discussion).

Druckman and Nelson (2003) employ an experiment to study the influence of deliberation on framing effects. In an experiment on campaign finance, they randomly assigned their pro- or con-frame subjects to discussion networks. Subjects first read a news story containing a randomly assigned frame—a pro-frame focused on special interests or a con-frame focused on free speech—and were then invited to discuss campaign finance with three or four peers. Some discussion groups contained only individuals who had read the same frame (“homogeneous groups”), while others contained some individuals who had read each frame (“heterogeneous groups”). At the end of the study, subjects were asked about the extent to which they supported campaign finance reform. The influence of the post-frame discussions was dramatic: among subjects in heterogeneous discussion groups, framing effects occurred as expected (e.g., the initial pro-frames make people more supportive). However, among participants in homogeneous discussion groups, framing effects dissipated entirely. This is true regardless of the frame to which subjects were initially assigned: homogeneous discussion

networks eliminated the effect of both the pro- and con-frames on overall support. These findings cohere with a large body of research on deliberation, which suggests that conversations among diverse opinion groups tend to result in more moderate attitudes (e.g., Mutz, 2006; Huckfeldt, Johnson, & Sprague, 2004; see also, Druckman, 2004; Klar 2014). In sum, this research suggests that social networks can serve as a source of frames or as a limit to framing effects.

A fourth factor that influences the robustness of framing effects is the degree of choice in the media environment (see Prior, 2007). As Arceneaux and Johnson (2010) point out, today's media consumers "have agency over what they watch, and they exercise this agency when given a choice. More important, the act of choosing has implications for the extent to which the media influence people" (p. 10). In particular, framing effects are less likely if citizens can selectively avoid certain types of messages: many citizens will avoid or counter-argue frames that contradict their existing attitudes (e.g., Stroud, 2011, Taber & Lodge, 2006), and others will eschew politically relevant media (e.g., frames) altogether (Prior, 2007).

Arceneaux and Johnson (2013) provide experimental evidence on how media choice limits the breadth of framing effects. They employ a unique design in which participants were asked their preference for news or entertainment programming *before* being randomized into experimental groups. This allowed the researchers to examine the effects of media frames among groups that are more or less likely to be exposed to them in the real world ("news-seekers" and "entertainment-seekers," respectively). After measuring content preferences, they randomly assigned participants to watch one of two news programs about federal tax policy (or a control group, which watched a non-political program). Specifically, one treatment group watched a program employing pro-Democratic frames (e.g., "rich people are not paying their fair

share”), while another watched a program employing pro-Republican frames (e.g., “not enough people paying federal taxes”).

The researchers then asked participants to rank-order the importance of the six frames featured in the programs. As a dependent variable, they calculated the probability that participants in each group rank an attitude-consistent frame (e.g., a pro-Democratic frame for a liberal participant) as the most important one in thinking about tax policy. Arceneaux and Johnson (2013) found that *among news-seekers*, frames had no discernible effect on the problem definitions. Put differently, media frames fail to affect the way in which news-seekers think about the issue of federal taxes. By contrast, *among entertainment-seekers*, the researchers find no effects for pro-attitudinal frames and modest effects for counter-attitudinal frames. To summarize, media frames had no effect among the group most likely to encounter them in the real world. The modest framing effects the researchers uncover are limited to entertainment-seekers, who are unlikely to encounter these frames outside the experimental context. A key implication is that citizens’ ability to choose their media content represents a serious obstacle to widespread framing effects.

Druckman, Fein, and Leeper (2012) provide further evidence of the influence of media choice on framing effects with an over-time experiment on healthcare policy. At an initial time period, they randomized whether participants are exposed to pro- or con-frames regarding health care reform (the pro-frame focus on reducing inequality while the con-frame focus on the high costs of reform). In subsequent time periods, some subjects were allowed to select their frames, while others were given frames chosen by the experimenter (captive audiences). Druckman, Fein, and Leeper (2012) found that over-time framing dynamics differed greatly depending on whether participants were allowed to choose their frames. In the over-time captive exposure

conditions, framing effects were observed as expected, with individuals' attitudes reflecting the *most recently* encountered frame. This is akin to the recency effects Chong and Druckman (2010) observe among those with weak attitudes. By contrast, in the choice conditions, the researchers observed a primacy effect: the earliest encountered frame shaped opinions, as participants selectively avoid subsequent frames that are inconsistent with prior opinions. Put differently, when given choice over-time, individuals opted for frames that were consistent with their initial opinions (that had been shaped by the *first* frame received); this means any contrary frames are ignored and thus ineffectual. The result is a primacy effect from the first frame. Without choice, later frames predominated, meaning there was a recency effect. The researchers explain, “[t]hese results imply that the captive audience constraint present in nearly all extant experiments has potentially generated a misleading or at least incomplete portrait of framing effects. In our case, the relaxation of this assumption shifted the over-time influence from decay to stability and recency to *primacy effects*. This suggests that using captive subjects...changes the very nature of [framing] effects” (Druckman, Fein, & Leeper 2012, p. 439; emphasis in original).

A fifth factor that moderates framing effects is time—or how long it has been since the individual first encountered the frame. Typically, studying the duration of framing effects involves exposing an individual to a frame, recording an immediate opinion, and then re-measuring that same opinion at a future point in time. Some studies suggest that after initial exposure, framing effects generally dissipate with time (e.g., Chong & Druckman, 2010; Lecheler & de Vreese, 2011, 2013). However, there are conditions under which framing effects are more likely to endure. One such factor is the repetition of frames. Repeated exposure to or use of a consideration may increase accessibility—and thus promote continued framing effects

(Moons et al., 2009; Chong & Druckman 2013; Lecheler & de Vreese 2016). Additionally, framing effects are more likely to endure when people are induced to form stronger, more effortful opinions upon initial exposure to the frame (Chong & Druckman, 2010; Matthes & Schemer, 2012).

There are also frame-level factors that are known to promote endurance. For example, frames emphasizing losses or cons (“negative frames”) tend to have longer-lasting effects than frames that emphasize gains or successes (“positive frames”) (Lecheler & de Vreese, 2016, Ledgerwood & Boydstun, 2014). Additionally, the duration of framing effects depends on characteristics of the recipient. For example, one study finds that although initial framing effects do not depend on political knowledge, individuals with moderate amounts of political knowledge experience the most persistent framing effects days and weeks after exposure. The authors explain that these individuals are best positioned to incorporate frames into long-term memory (Lechler & de Vreese, 2011). To be sure, there is still ongoing debate about frame duration, and existing research is limited in the types of frames and time periods that studies employ. As Lecheler and de Vreese 2016) state, “the literature on over-time experimental designs in framing research is in its infancy” (p. 4).

As discussed, frames are not encountered in a vacuum; rather, framing effects depend on a number of individual and contextual factors. To the extent that framing experiments fail to incorporate these realities, we are likely to misunderstand—and to overstate—the robustness of framing effects in realistic communicative scenarios.

The Psychology of Framing Effects

In this section, we turn to a discussion of a commonly employed psychological model of how framing effects work – the expectancy value model (Ajzen & Fishbein, 1980; Fishbein,

1967; Fishbein & Ajzen, 1974; Nelson, Oxley, & Clawson 1997) – which has been the implicit model underlying our discussion so far. According to this model, an individual's attitude toward a specific object (e.g., candidate, issue, etc.) reflects the weighted sum of a set of beliefs about that object.⁴ Formally, an attitude can be described with this equation:

$$Attitude = \sum v_i * w_i$$

In this formula, v_i refers to the evaluation of the object on dimension i , and w_i refers to the salience weight connected to that dimension ($\sum w_i = 1$). For instance, someone's attitude on the development of a new industrial site would consist of a combination of different evaluations on the dimensions that are salient to that individual (i.e., dimensions on which $w_i > 0$). This person may think that the industrial site will damage existing green spaces ($i=1$) but also provide an economic boost through job creation in the area ($i=2$). Assuming the individual values both environmental protection and economic growth, v_1 would be negative (i.e., negative evaluation on the dimension of green space) and v_2 would be positive (i.e., positive evaluations on job creation). The overall attitude, then, would depend on which dimension is more salient, or has a larger weight (w_i): green space or economics (Nelson & Oxley, 1999).

According to this model, a framing effect occurs when a frame in communication leads to a change in the salience of a given consideration i (w_i), thereby influencing an individual's *frame in thought* (for applications of this model, see Chong & Druckman 2007b; Nelson, Clawson, & Oxley, 1997; Nelson, Oxley, & Clawson 1997; Nelson & Oxley 1999; Wood, 2000; Klar, Robison, & Druckman, 2013).⁵ Importantly, the expectancy value model does not presume

⁴ The expectancy value model is also referred to as the summative model (O'Keefe, 2016).

⁵ Changes in salience result from one of three processes: changes in availability, accessibility, and/or applicability. We discussed each of these processes briefly in the previous section of the chapter (but see Chong & Druckman, (2007b) for more detail.

individuals consider a wide range of dimensions when forming attitudes; rather, in most cases, individuals rely on a highly constrained subset of possible evaluative dimensions (see Druckman & Lupia, 2016).⁶

Many studies, including those referenced in the previous section, show that frames in communication influence overall opinions of issues, candidates, and political decisions. However, the expectancy value model suggests that these changes can occur through different mechanisms, not all of which involve changing frames in thought. For instance, instead of changing the *salience* of existing considerations (and therefore frames in thought), frames in communication could change the *content* of individuals' beliefs (i.e., introduce new considerations).

How can researchers convincingly demonstrate that attitude change results from a framing effect, as we have defined it? A useful example comes from Nelson and Oxley (1999), who investigated attitudes towards developing land for the construction of a new hotel. The authors randomly assigned subjects to read an article using either an economic benefits (pro) frame, or an environmental risks (con) frame. After reading the article, subjects were asked to (a) rank the *salience* (or importance) of various beliefs when they thought about the development (e.g., how important was “the environmental impact of the property development in the area?”, how important was “the economic impact of the development on the area?”); (b) *evaluate* whether the project would have negative or positive benefits for the environment and the economy, respectively; and (c) report their *overall* opposition or support for the project.

Nelson and Oxley's approach is appealing because, in addition to documenting overall opinion change resulting from exposure to various frames, they present direct evidence that

⁶ At the extreme, people consider only a single dimension and assign that dimension a weight of 1 (all other considerations are therefore weighted at 0); for example, one may only think/care about free speech when it comes to a right of a hate group to rally.

frames changed the salience of the considerations invoked in the frames. In other words, individuals exposed to the economic benefits (environmental risks) frame ranked the economy (environment) as more important than individuals exposed to the other frame. They also report that the frames had no influence on the *content* or *evaluations* of beliefs about the environmental or economic consequences. Unfortunately, Nelson and Oxley's clear demonstration of a causal process represents an exception to the norm in framing studies. Many do not explore the psychological processes at work, discussing only change in overall opinions (e.g., Chong & Druckman, 2010; Haider-Markel & Joslyn, 2001; Sniderman & Theriault, 2004).

Other studies that directly measure changes in salience resulting from frames offer mixed support for the model presented here. For instance, Slothuus (2008) studies framing effects on support for cutting social welfare. He measured salience, evaluations (or belief content), and overall attitudes. Slothuus reports that observed effects from frames in communication do not work exclusively through changes in salience. Instead, at least for some individuals (e.g., those with moderate political knowledge or those with weak values), frames affect both salience *and* belief content (see also, Druckman & Nelson, 2003).

Another example of contrary findings comes from Leeper and Slothuus (2017), who use a series of experiments to study the framing of various issues, including hate group rallies, healthcare policy, the DREAM Act, the Patriot Act, and offshore drilling. These experiments are designed to distinguish between changes in belief content and salience, using randomly assigned treatment conditions to examine belief content and salience independently. The authors find consistent effects from changes in belief content, and only inconsistent, conditional effects from changes in salience. When framing effects, as we have defined them, do occur, they are much smaller than parallel effects due to changes in belief content.

These varied findings suggest that the field has yet to adequately isolate the psychological process(es) that generate “framing effects,” and the conditions under which one process dominates. Thus, it is possible that studies that only measure overall opinions are not documenting framing effects at all.

Mixed findings aside, clearly documenting salience changes from a communication poses serious methodological challenges. The problem stems from the fact that, if a communication affects overall opinion via multiple processes (e.g., changes in salience *and* evaluative content), then the statistical method used by Nelson and Oxley and others is biased (Bullock & Ha, 2011; Imai & Yamamoto, 2013). Careful experimental design and analysis can help to address some of these problems, but studies that simply assume frames in communications influence overall opinions through salience (i.e., frames in thought) will likely lead to unjustified conclusions. It is beyond the purview of this chapter to dive deeply into these methodological concerns, but a number of researchers have challenged the techniques researchers have used to explore the processes behind framing effects.⁷

In addition to methodological issues, framing studies sometimes suffer from significant conceptual ambiguity. For example, use of the term “priming” has created some confusion. In general, the concept of priming refers to changes in accessibility and has a long history in the social sciences (Molden, 2014). However, research on framing effects sometimes uses the term “media priming” to reference the way frames in communication influence frames in thought (i.e., through any of the three processes discussed above). We believe, *as used in the media and political communication context*, the terms priming and framing are the same. Additionally, the use of the term “persuasion” can also be problematic, as it can refer to a change in opinions

⁷ Interested readers should see Imai, Keele, and Tingley (2010); Bullock and Ha (2011); Imai and Yamamoto (2013); and Imai, Tingley, and Yamamoto (2013).

resulting from any number of processes.⁸ To avoid these issues, we recommend that framing studies focus on changes in considerations that drive ultimate preferences.

We are hardly the first to highlight these conceptual problems. For instance, one prominent scholar states, “the boundaries between framing and other forms of media or elite influence on public opinion have become blurred. Framing is often indistinguishable from [other concepts]... more attention—both at the conceptual and operational levels—to distinguishing between framing and other contextual, short-term influence on public opinion [is needed]” (Iyengar, 2011, p. 190; see also, Cacciotare, Scheufele, & Iyengar, 2016). This state of confusion has led some to argue that researchers should eschew emphasis framing and focus instead on other types of frames in communication, such as *equivalency frames* and *visual frames* (Scheufele & Iyengar 2014; Cacciotare, Scheufele, & Iyengar, 2016). While these two forms of framing are no doubt important, we disagree with the call to restrict framing research to these subjects.

Equivalency frames entail different—but logically equivalent—characterizations of an issue or event (Druckman, 2001). As we noted in the introduction, framing analysis in political communication research, particularly work on news framing analysis, veers away from the strictly logical equivalents as stated in prospect theory’s discussion of decision-making via gain vs. loss frames (Kahneman & Tversky, 1979, 1984); rather, it mainly deals with “attribute” equivalency frames that sources use to articulate policy stands in terms of complements (see Levin et al., 1998, for a full explanation of the types of valence frames). For example, research participants could be asked to choose between two employment policies, stated in different but mathematically equivalent ways (Druckman, 2004). For some participants, the frame describes

⁸ For example, one widely cited definition of persuasion is “human communication designed to influence others by modifying their beliefs, values, or attitudes” (Simons, 1976, p. 21). This definition is sufficiently broad to envelope framing (as we have defined it), changes in belief content, changes in belief importance, and still other processes.

the percent of the population the policies would employ (90 and 95 percent employment); the other version discusses the percent of the population that would remain *unemployed* (10 and 5 percent, respectively). This difference in attribute valence framing leads to dramatic changes in policy choices; however, it does resonate with work on risk and decision-making in that equivalency framing effects of this sort are typically assumed to result from long-standing biases in human decision-making (e.g., loss aversion; see Arceneaux 2012), rather than from increases in the salience of certain considerations over others.

Scholars have also suggested that framing researchers should devote greater attention to non-verbal frames, such as facial similarity and skin tone (Scheufele & Iyengar 2014). For example, Bailenson, Iyengar, and Yee (2008) use editing technology to manipulate the degree of similarity between politicians and voters, holding constant the information provided about the politicians. Visual framing effects can result from a number of psychological biases, such as a preference for visually “similar” others.

Equivalence and visual frames are appealing insofar as they permit a high degree of experimental control—that is, they allow researchers to vary the manner in which a stimulus is presented, holding constant the informational or persuasive content of messages (Scheufele and Iyengar 2014; Caciattore, Scheufele, & Iyengar, 2016). The result, these scholars argue, is a cleaner test of framing effects. Leeper and Slothuus (2017) make a similar point in their critique of the paradigmatic framing experiment, noting “[the] need to independently evaluate the impact on opinions of mere emphasis on an issue dimension (i.e., framing) by separating it experimentally from the impact of policy information or argumentation.”

We agree that documenting opinion change following exposure to emphasis frames is insufficient to establish the presence of a “framing effect.” Studies that claim to do so invite

conceptual ambiguity of the sort noted by Scheufele and Iyengar (2014) and others. However, as noted, not all equivalency frames are created equal; thus, the way forward is not to restrict our focus to the effects of one type of equivalency frame or to visual frames *per se*. Indeed (and also noted in the introduction) emphasis framing is the norm in elite discourse (Leeper & Slothuus 2015). As Sniderman and Theriault (2004) argue, “it is difficult to satisfy this requirement of interchangeability of alternatives [imposed by equivalency and visual framing studies] outside a narrow range of choices” (p. 135). Put differently, restricting scholarly focus to equivalency frames means overlooking the types of frames that typically appear in realistic political settings (e.g., media, policy debates).

Our recommendation is to study frames in communication on their own, without making claims about frames in thought *per se*. This approach would look for differences among emphasis, equivalency, and non-verbal media frames without the need to explore distinct psychological mechanisms (which can be studied as part of a distinct research agenda).

With these perspectives in mind, researchers could still look for changes in overall opinion from frames in communication. This effect could be labeled a framing effect, but in a way that does not reference any change in frames in thought (e.g., salience changes). Frames in communication frequently affect opinions, but the mechanisms behind these effects remain unclear. For instance, such effects may operate through frames in mind and belief importance, changing the content of individuals’ beliefs, or other processes. Put simply, a focus on frames in communication would allow *all* of these possibilities. Scholars who are interested in frames of thought should document the distinct psychological processes at work. Without this level of analysis, these studies cannot establish that the effects of a communication occur via changes in salience.

As Brewer and Gross (2010) argued in the first volume of *Doing News Framing Analysis*, we urge researchers to employ careful research design when studying framing. The moderators we have discussed, including the passage of time and competing frames, suggest that framing effects can be overstated when these moderators are not considered. Indeed, the very context in which framing experiments are conducted may influence the perceived effectiveness of frames (Brewer & Gross, 2010). Along these lines, we agree with calls to diversify the methods used to study frames, including increased reliance on non-laboratory experiments, content analyses, and qualitative interviews. Such methodological diversity could significantly improve the generalizability of framing findings—both by documenting framing effects in various settings and by overcoming the limitations of a single method (e.g., laboratory experiments).

We also recommend that framing researchers exercise caution when making normative claims about what their research says about attitudes, democratic competence, and the influence of the media (see Druckman, 2001). Given the moderators discussed above, the overall influence of framing in preference formation remains unclear. For instance, the passage of time, individuals' media choices, conversations between people, and competition all influence the overall effect of a frame. Scholars should consider these realities carefully before making sweeping conclusions about the normative implications of framing.

Conclusion

This chapter focused on framing effects on political preferences, and it emphasized several key points. The first is that framing effects occur when frames contained in political communications affect frames in thought,. Working from this broad definition, researchers have demonstrated framing effects in an array of contexts (e.g., campaigns, policy debates). However,

as discussed, there are serious questions about the robustness of these framing effects in realistic political settings. In particular, research in five areas—including attitude strength, cues, social networks, media choice, and frame timing—suggests that frames may be less consequential in the real world than in surveys and experimental laboratories.

A second key point concerns the psychology of framing effects, which is nicely captured by the expectancy value model of attitude formation. According to this model, attitudes are the sum of various considerations and the salience attached to those considerations. Framing effects, then, occur when frames in communication change frames in thought by altering the salience (w_i) of particular considerations. In order to convincingly document a framing effect, scholars need to present evidence that their treatments caused a change in overall opinions via a change in salience, and not other processes (e.g., changes in belief content).

Importantly, there are likely countless factors that determine the effects of frames in addition to those discussed in this chapter. For example, research to date has paid scant attention to changing trends across media. Almost two decades ago, Price and Tewksbury (1997) discussed framing in the context of journalistic norms. However, these norms have clearly changed and differ across different types of media. Existing research on framing has barely explored how varying norms affect the presentation of frames and how that presentation influences attitudes.

To summarize, doing news framing analysis entails investigating and understanding framing effects on political preferences within realistic settings. Such framing effects operate via a specific psychological process, and are strongly mitigated by a number of individual and contextual factors. We urge framing researchers to take all of these points seriously, as

overlooking them can lead to conflicting and unclear conclusions about how framing operates in realistic communicative contexts.

References

- Aarøe, L. (2011). Investigating frame strength: The case of episodic and thematic frames. *Political Communication* 28(2), 207-226.
- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ: Prentice-Hall.
- Arceneaux, K (2012). Cognitive biases and the strength of political arguments. *American Journal of Political Science* 56(2), 271–285.
- Arceneaux, K., & Johnson, M. (2013). *Changing minds or changing channels? Partisan news in an age of choice*. Chicago: University of Chicago Press.
- Bailenson, J. N., Iyengar, S., & Yee, N. (2008). Facial similarity between voters and candidates causes influence. *Public Opinion Quarterly* 72(4), 935-61.
- Ball-Rokeach, S. J., Power, G. J., Guthrie, K. K., & Waring, H. R. (1990). Value-framing abortion in the United States: An application of media system dependency theory. *International Journal of Public Opinion Research* 2(3), 249–73.
- Berelson, B. R., Lazarsfeld, P. F., & McPhee, W. N. (1954). *Voting: A study of opinion formation in a presidential campaign*. Chicago: University of Chicago Press.
- Brewer, P. R (2008). *Value war: public opinion and the politics of gay rights*. Lanham, MD: Rowman & Littlefield.
- Brewer, P. R., & Gross, K. (2010). Studying the effects of issue framing on public opinion about policy issues: Does what we see depend on how we look? In P. D'Angelo & J. A. Kuypers (Eds.), *Doing news framing analysis: Empirical and theoretical perspectives* (pp. 159-186). New York: Routledge.
- Baumgartner, F. R., DeBoef, S. & Boydston, A. E. (2008). *The decline of the death penalty and*

- the discovery of innocence*. New York: Cambridge University Press.
- Bullock, J. G., & Ha, S. E. (2011). Mediation analysis is harder than it looks. In Eds. J. N. Druckman, D. P. Green, J. H. Kuklinski, & A. Lupia (Eds.), *Cambridge handbook of experimental political science* (pp. 508-521). New York: Cambridge University Press.
- Cacciatore, M. A., Sheufele, D. A., & Iyengar, S. 2016. The end of framing as we know it...and the future of media effects. *Mass Communication and Society* 19(1),17-23.
- Calvert, A. & Warren, M. E. (2014). Deliberative democracy and framing effects: Why frames are a problem and how deliberative minipublics might overcome them. In K. Grönlund, A. Bächtiger, & M. Setälä. Colchester (Eds.), *Deliberative minipublics* (pp. 203-224), UK: ECPR Press.
- Chong, D., & Druckman, J. N. (2007a). Framing public opinion in competitive democracies. *American Political Science Review* 101(4), 637–655.
- Chong, D., & Druckman, J. N. (2007b). Framing theory. *Annual Review of Political Science* 10(1), 103–126.
- Chong, D., & Druckman, J. N. (2010). Dynamic public opinion: Communication effects over time. *American Political Science Review* 104(4), 663–680.
- Chong, D., & Druckman, J. N. (2011). Identifying frames in political news. In E. Bucy & R. L. Holbert (Eds.), *The sourcebook for political communication research: Methods, measures, and analytical techniques* (pp. 238-267) . New York: Routledge.
- Chong, D., & Druckman, J. N. (2013). Counter-framing effects. *Journal of Politics* 75(1), 1-16.
- Cramer Walsh, K. (2004). *Talking about politics: Informal groups and social identity in American life*. Chicago: University of Chicago Press.

- D'Angelo, P. (2017). Framing: Media frames. In P. Rössler (Ed.), *The international encyclopedia of media effects* (pp. 634-644). Hoboken, NJ: Wiley-Blackwell.
doi:10.1002/9781118783764.wbieme0048
- de Vreese, C. H., & Lecheler, S. (2012). News framing research: An overview and new developments. In H. A. Semetko & M. Scammell (Eds.), *The SAGE handbook of political communication* (pp. 292-306). London: Sage.
- Druckman, J. N. (2001). The implications of framing effects for citizen competence. *Political Behavior* 23(3), 225-256.
- Druckman, J. N. (2004). Political preference formation: Competition, deliberation, and the (ir)relevance of framing effects. *American Political Science Review* 98(4), 671-686.
- Druckman, J. N. (2011). What's it all about?: Framing in political science. In G. Keren (Ed.), *Perspectives on framing* (pp. 279-302). New York: Psychology Press/Taylor & Francis.
- Druckman, J. N., & Bolsen, T. (2011). Framing, motivated reasoning, and opinions about emergent technologies. *Journal of Communication* 61: 659-688.
- Druckman, J. N. & Jacobs, L. R. (2015). *Who governs? Presidents, public opinion, and manipulation*. Chicago: University of Chicago Press.
- Druckman, J. N. & Leeper, T. J. (2012). Is public opinion stable? Resolving the micro/macro disconnect in studies of public opinion. *Daedalus* 141(4), 50-68.
- Druckman, J. N. & Lupia, A. (2016). Preference change in competitive political environments. *Annual Review of Political Science*. 19, 13-21.
- Druckman, J. N. & Nelson, K. R. (2003). Framing and deliberation: How citizens' conversations limit elite influence. *American Journal of Political Science* 47(4), 728-744.
- Druckman, J. N., Hennessy, C. L., St. Charles, K., & Weber, J. (2010). Competing rhetoric over time: Frames versus cues. *Journal of Politics* 72(1), 136-148.

- Druckman J. N., Fein, J., & Leeper, T.J. (2012). A source of bias in public opinion stability. *American Political Science Review* 106(2), 430–455.
- Druckman J. N., Peterson, E., & Slothuus, R. (2013). How elite partisan polarization affects public opinion formation. *American Political Science Review* 107(1), 57-79.
- Fishbein, M. E. (1967). A behavior theory approach to the relations between beliefs about an object and the attitude toward an object. In M.E. Fishbein (Ed.), *Readings in attitude theory and measurement* (pp.389-400). New York: Wiley.
- Fishbein, M. E. & Ajzen, I. (1974). Attitudes towards objects as predictors of single and multiple behavioral criteria. *Psychological Review* 81(1), 59–74.
- Flynn, D.J. & Harbridge, L. (2016). How partisan conflict in Congress affects public opinion: Strategies, outcomes, and issue differences. *American Politics Research*, 44(5), 875-902.
- Haider-Markel, D. P. & Joslyn, M. R. (2001). Gun policy, opinion, tragedy, and blame attribution: The conditional influence of issue frames. *Journal of Politics* 63(2), 520-543.
- Huckfeldt, R., Johnson, P.E., & Sprague, J. (2004). *Political disagreement: The survival of diverse opinions within communication networks*. New York: Cambridge University Press.
- Imai, K. & Yamamoto, T. (2013). Identification and sensitivity analysis for multiple causal mechanisms: Revisiting evidence from framing experiments. *Political Analysis* 21(2), 141-171.
- Imai, K., Keele, L., & Tingley, D. (2010). A general approach to causal mediation analysis. *Psychological Methods* 15(4), 309-334.
- Imai, K., Tingley, D., & Yamamoto, T. (2013). Experimental designs for identifying causal mechanisms. *Journal of the Royal Statistical Society* 176(1), 5-51.
- Iyengar, S. (1991). *Is anyone responsible? How television frames political issues*. Chicago: University of Chicago Press.
- Iyengar, S. (2010). Framing research: The next steps. In B. F. Schaffner & P. J. Sellers (Eds.), *Winning with words: The origins and impact of framing* (pp. 185-191). New York: Routledge.

- Iyengar, S. & Kinder, D.R. (1987). *News that matters: Television and American opinion*. Chicago: University of Chicago Press.
- Kahneman, D., & Tversky, A. (1979). Prospect theory: Analysis of decision under risk. *Econometrica* 47(2), 263-291.
- Kahneman, D., & Tversky, A. (1984). Choices, values, and frames. *American Psychologist* 39(4), 341-350.
- Klar, S. (2013). The influence of competing identity primes on political preferences. *Journal of Politics* 75(4), 1108–1124.
- Klar, S. (2014). Partisanship in a social setting. *American Journal of Political Science* 58(3), 687–704.
- Klar, S., Robison, J., & Druckman, J. N. (2013). Political dynamics of framing. In *New directions in media and politics*, ed. T. N. Ridout, 173-192. New York: Routledge.
- Krosnick, J. A. & R. E. Petty (1995). Attitude strength: An overview. In R. E. Petty & J. A. Krosnick (Eds.), *Attitude strength: Antecedents and consequences* (pp. 1-24). Mahwah, NJ: Lawrence Erlbaum Associates.
- Kunda, Z. (1990). The case for motivated reasoning. *Psychological Bulletin* 108(3), 480-498.
- Lecheler, S., & de Vreese, C. H. (2011). Getting real: The duration of framing effects. *Journal of Communication* 61(5), 959–83.
- Lecheler, S., & de Vreese, C. H. (2013). What a difference a day makes? The effects of repetitive and competitive news framing over time. *Communication Research* 40(2), 147–75.
- Lecheler, S., & C. H. de Vreese (2016). How long do news framing effects last? A systematic review of longitudinal studies. *Annals of the International Communication Association* 40(1), 3-30.
- Ledgerwood, A., & Boydstun, A. E. (2014). Sticky prospects: Loss frames are cognitively

- stickier than gain frames. *Journal of Experimental Psychology: General* 143(1), 376.
- Leeper, T. J., & Slothuus, R. (2017). Can citizens be framed? How information, not emphasis, changes opinions." Unpublished paper.
- Levin, I. P., Schneider, S. L., & Gaeth, G. J. (1998). All frames are not created equal: A typology and critical analysis of framing effects. *Organizational Behavior and Human Decision Processes* 76, 149-188.
- Malhotra, N., & Kuo, A. G. (2008). Attributing blame: The public's response to Hurricane Katrina." *Journal of Politics* 70(1), 120-135.
- Matthes, J., & Schemer, C. (2012). Diachronic framing effects in competitive opinion environments. *Political Communication* 29(3), 319–39.
- McCaffrey, D., & Keys, J. (2000). Competitive framing processes in the abortion debate: Polarization-vilification, frame saving, and frame debunking. *Sociological Quarterly* 41(1), 41–61.
- Molden, D. C. (2014). Understanding priming effects in social psychology: What is ‘social priming’ and how does it occur? *Social Cognition* 32, 1-11.
- Moons, W. G., Mackie, D. M., & Garcia-Marques, T. (2009). The impact of repetition-induced familiarity on agreement with weak and strong arguments. *Journal of Personality and Social Psychology* 96(1), 32.
- Mutz, D. C. (2006). *Hearing the other side: Deliberative versus participatory democracy*. New York: Cambridge University Press.
- Nelson, T. E., & Oxley, Z. M. (1999). Issue framing effects and belief importance and opinion. *Journal of Politics* 61(4), 1040-1067.
- Nelson, T. E., Clawson, R. A., & Oxley, Z. M. (1997). Media framing of a civil liberties conflict and its effect on tolerance. *American Political Science Review* 91(3), 567–583.

- Nelson, T. E., Oxley, Z. M., & Clawson, R. A. (1997). Toward a psychology of framing effects. *Political Behavior* 19(3), 221–246.
- O’Keefe, D. J. (2016). *Persuasion: Theory and research* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Price, V., & Tewksbury, D. (1997). News values and public opinion: A theoretical account of media priming and framing. In G. A. Barnett & F. J. Boster (Eds.), *Progress in communications sciences* (pp. 173-212). Greenwich, CT: Ablex Publishing.
- Prior, M. (2007). *Post-broadcast democracy: How media choice increases inequality in political involvement and polarizes elections*. New York: Cambridge University Press.
- Scheufele, D. A. (1999). Framing as a theory of media effects. *Journal of Communication* 49(1), 103-122.
- Scheufele, D. A., & Iyengar S. (2014). The state of framing research: A call for new directions. In K. Kenski & K. Hall-Jamieson (Eds.), *The Oxford handbook of political communication theories*. New York: Oxford University Press.
- Simons, H. W. (1976). *Persuasion: Understanding, practice, and analysis*. Reading, MA: Addison-Wesley Publishing Co.
- Slothuus, R. (2008). More than weighting cognitive importance: A dual process model of issue framing effects. *Political Psychology* 29(1), 1-28.
- Slothuus, R. & de Vreese, C. H. (2010). Political parties, motivated reasoning, and issue framing effects. *Journal of Politics* 72(3), 630-645.
- Sniderman, P. M., & Theriault, S. M. (2004). The structure of political argument and the logic of issue framing. In W. E. Saris & P. M. Sniderman (Eds.), *Studies in public opinion* (pp. 133-165). Princeton, NJ: Princeton University Press.

- Spence, A., & Pidgeon, N. (2010). Framing and communicating climate change: The effects of distance and outcome frame manipulations. *Global Environmental Change* 20(4), 656-667.
- Stroud, N. J. (2011). *Niche news: The politics of news choice*. New York: Oxford University Press.
- Taber, C. S., & Lodge, M. (2006). Motivated skepticism in the evaluation of political beliefs. *American Journal of Political Science* 50(3), 755–769.
- Wood, W. (2000). Attitude change: Persuasion and social influence. *Annual Review of Psychology* 51(1), 539–570.
- Zaller, J. (1992). *The nature and origins of mass opinion*. New York: Cambridge University Press.