Opinion

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Investigating the Framing Effect in Social and Behavioral Science Research: Potential Influences on Behavior, Cognition and Emotion

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The framing effect has far-reaching implications for our understanding of social psychology and intergroup behavior. In recent decades, the effect garnered considerable attention in the fields of psychology, political science, and communication studies. Whether the effect is demonstrated by repetitious news stories[1] or in voting behavior,[2] framing matters. It matters for both theoretical and pragmatic reasons. We will make connections between framing and politics as a way of illustrating the real world applicability of this effect. The practical relevance of the framing effect is why effectively researching it is so crucial. The purpose of this paper is to propose ways of improving framing research practices. To begin, we will define the framing effect and provide some germane examples in order to clarify the concept.

In general, framing occurs when an issue is presented in such a way that certain features of a topic are made more salient than others; that is, one aspect of the situation tends to standout over all other elements.[3] For example, George W. Bush, the 43rd President of the United States, frequently used the words "tax relief" once he got into office.[4] By framing taxes in this way he made salient their burdensome qualities. In effect, Bush argued, that by cutting taxes a heavy boulder would be lifted off the shoulders of citizens. What a relief! With this approach to framing, the burden of taxes was made apparent while any sort of benefits coming from them were ignored. The point is that by highlighting some parts of an issue and ignoring others a new narrative is formed.

In the context of social and behavioral science research, a frame is "a central organizing idea or storyline that provides meaning to an unfolding strip of events weaving a connection among them. The frame suggests what the controversy is about, the essence of the issue".[5] Simply put, framing creates a storyline by telling us what an issue is fundamentally about. In order to apply our definition of framing in a relevant way, let us briefly examine its role in the 2016 United States presidential race. The manner in which the leading candidates are depicted exemplifies episodic framing. This type of framing occurs when specific instances, or episodes, are highlighted over more broad facts and statistics.[3] Episodic framing makes the storyline about what someone said or did.

For instance, the right-wing conservative Republican Party tends to focus on specific instances in which Hillary Clinton, a Democratic candidate for the presidency "lied." The left-wing Democratic Party emphasizes episodes in which Donald Trump says something "moronic" or comes off as "temperamentally unfit" to be president. Social media, talk radio, and the 24-hour news cycle amplify these narratives. We suggest that these framing strategies will influence the election by shaping people's attitudes and the decisions they go on to make in the voting booth. The use of (episodic) framing has the potential to profoundly shape the future of America. For that reason, it is necessary to gain further understanding of the framing effect and the psychological processes that give it such power. Having demonstrated the relevance of

the framing effect, and defined it, we can now transition into our central argument concerning research practices.

We propose the use of 4 research practices for furthering the study of framing. First, researchers should adopt an approach that factors in the tremendous social and technological changes that have taken place over the last few decades.[6] Second, those studying the framing effect must consider how to design studies emphasizing both the cognitive and affective components of framing.[3,7] Third, researchers should pay particular attention to the durability of framing effects.[1,8] Fourth, it is essential that researchers design experiments taking into consideration the external validity of their results.[9,10] Ultimately, the goal is to encourage research practices that give us a meaningful and realistic understanding of social behavior in relation to framing. In order to engage in these research practices, we must take into consideration recent social and technological changes.

Research in communication studies has played a major role in furthering our understanding of the framing effect because so much of the information we are exposed to comes from the media. This media exposure invariably has a frame associated with it. Bennett and Iyengar[6] argue that the theoretical underpinnings of mass communications research are out of date; that is, the foundational practices for this research were established at a time when it was hard to imagine technologies such as the internet and smartphones. These technologies have serious implications for how people are exposed to media frames. Tewksbury[11] found that the internet lends itself to news outlets attracting certain segments of the population. This has the effect of fragmenting audiences such that readers and viewers receive specialized presentations of news stories. For instance, the site foxnews.com is a news outlet attracting a particular set of readers that is likely to be distinct from the readers of the satire site theonion.com. Clearly, fragmentation of this kind could not exist without the relatively recent proliferation of online news media.

In addition to audience fragmentation, there is a tendency for people to take in news that reinforces their ideological beliefs thereby creating an echo chamber.[12] As a result, there is increasing polarization of people's ideological views. We are much more polarized and fragmented in our media usage than we were 40 years ago. Our practices for researching framing and mass communications are still based on studies from when television and radio were all there was. We need to explore how the framing effect has changed over the last decade with the now widespread use of social media platforms, smartphones, and the internet. Information and their accompanying frames are not taken in like they used to be. Researchers must adapt. This will entail incorporating both cognitive and affective components into our study of framing.

In a study of episodic and thematic framing, Kimberly Gross[3] notes that there is little research on the affective basis for framing as most of the research centers on its cognitive side. We suggest that the metaphor of the brain as a computer[13] leads us to excessively emphasize the cognitive features of framing. This causes us to make what neurologist Antonio Damasio[13] calls Descartes' Error: Mistakenly believing or acting as though emotions and reason are separate. Of course, we know that affective and cognitive processes are intertwined. However, it is a real test of a researcher's abilities to design studies with this in mind. Consequently, we argue that it is very important to incorporate emotions, and not just cognitive processes, in framing research studies.

Indeed, Nabi[7] found that emotions can act as frames in and of themselves. Nabi points out that if someone experiences an emotion such as fear, that person will process incoming information with escaping danger as the focus. For example, fear tends to affect our behavior whether it is during the presentation of a speech or when making important life decisions. Notice how with the emotion-as-frame approach both affective (fear) and cognitive (differential information processing) components are incorporated into the study. One specific suggestion for furthering an affective-cognitive approach would be to use surveys such as the *Cognitive Emotion Regulation Questionnaire*.[14] Surveys such as this are an efficient way of incorporating both cognitive and affective dimensions into research design. Affective-cognitive surveys allow us to avoid the theoretical pitfall of privileging cognition over emotion. Keep in mind that this is just one of many pitfalls a researcher must avoid in studying framing. The next one is essential if studies are to be of practical importance.

Research on framing should be conducted with durability in mind.[1,8] Given that policy opinions tend to be volatile, time is an important variable to include in our models.[10] We may want to know if the framing effects actually last for a significant amount of time or just fade into obscurity. The pitfall here is not factoring in time. In other words, it is a mistake to conduct research with a one-off frame exposure and measurement of the dependent variable. Exposure to a frame only one time may be of little practical significance in terms of changing people's attitudes or behaviors.[15] For example, a person is exposed to a frame then immediately forgets it because of an abundance of technological distractions. In this situation, the frame exposure is inconsequential because it lacks the necessary durability to have behavioral ramifications. Accordingly, studies that are designed to have a one-off frame exposure are questionable from the standpoint of pragmatism. Thankfully, there are intriguing studies that have avoided the one-off mistake. For instance, Lecheler, Keer, Schuck, and Hänggli[1] found that political knowledge moderated the relationship between repeated exposure to a frame and the durability of attitudes. People with moderate knowledge of politics were most prone to having their views changed in an enduring manner when repeatedly shown a particular frame.

As an important side note, their use of a moderator, political knowledge, is a strength in their research design. When moderators or mediators are included, results more accurately

represent the complexity of psychological phenomena. In effect, many factors contribute to framing so moderation and mediation analyses are necessary at times. Researchers may shy away from the inclusion of these variables because it makes the theoretical justification for their designs more difficult. Furthermore, the statistical analysis is substantially more complex when moderators and mediators are included. Researchers may be prone to excluding these variables from their models because factoring them in is a hassle. In the final analysis however, research must be done is such a way that attempts doing justice to the world in all its complexity. Failing to do so makes results in framing research suffer from a lack of external validity. This is problematic because framing studies should be conducted in as externally valid a manner as possible.[9,10]

Let us consider some practical suggestions for enhancing the external validity of framing studies. Chong and Druckman[15] argue that participants should be exposed to competing frames on an issue. For example, show participants a frame in favor of farm subsidies and another against them. These two frames, in favor and against, are competing with one another to define the "essence of the issue".[5] We are regularly exposed to competing frames in this manner; just turn on the nightly news to watch an endless stream of it. These competing frames may be diametrically opposed to your stance on an issue. For instance, you might find yourself gravitating towards those favoring one particular political candidate**.** Inevitably, you would hear about another candidate you do not like from a relative on your Facebook newsfeed. This example demonstrates that exposure to competing frames is a part of the fast-paced information age we live in.

Indeed, the information age has led many of us to be in a constant state of distraction.[16] On this point, Kinder[9] criticizes framing studies for guaranteeing that participants are directly exposed to frames. This type of direct exposure is uncommon in everyday life. Realistically, given the widespread use of modern communication technologies, people are in a rather passive and distracted state when they take in frames. Consider that even the mere presence of a cell phone has a unique ability to distract us.[17,18] The smartphone is an innovation that has changed the manner in which we are exposed to frames. This connects with Bennet and Iyengar's[6] argument that the theoretical underpinnings of framing research have fallen behind changes in technology. Researchers may conduct studies with low external validity because their theoretical *assumptions* are derived from a (technological) environment that no longer exists. With these misguided assumptions, one cannot help but question our supposed knowledge of framing effects.

We may have misrepresented the framing effect because of experimental manipulations lacking in external validity. In framing research, participants typically read texts describing how one *rationally justifies* their stance on an issue.[9] In other words, the frames used in manipulations are cognitively oriented

and logical. This has its place, but we must not forget that framing can take on a multitude of forms. Kinder notes that framing includes "metaphors, exemplars, catchphrases, visual images, rhetorical flourishes, and justifications through appeals to principle".[9] These approaches lend themselves well to more emotionally oriented appeals. Given the excessive emphasis placed on the cognitive components of framing, it comes as no surprise that these approaches have received little attention despite their ubiquity. Ultimately, our experimental manipulations need to more closely match the wide variety of frames used in mass communications. In doing so we will help realize what has been the goal of this paper, to advance framing research practices.

To make our case for improving framing research practices we stressed social and technological changes, research emphasizing cognitive and affective components, durability, and external validity. Indeed, there are many other commendable research practices. However, these four are most relevant and salient to us. They standout because we see them as especially crucial for understanding the fascinating phenomena that is framing. Even beyond its intrigue, we can see how framing is a vital construct to understand. Consider, for example, our constant exposure to frames throughout the day and the inextricable connection between information and frames. Notice that it is difficult, if not impossible, to present information without highlighting some elements over others. The act of including information *necessitates* exclusion of other information. Therefore, frames cannot help but be ubiquitous and have an unceasing impact on the psyche. In our opinion, this is the strongest theoretical argument for the importance of framing research. There is also the more concrete and practical observation that framing is a strategic part of the United States presidential race. In sum, framing is eminently relevant to politics and social behavior, while remaining a profound construct from a theoretical standpoint. In light of this, not conducting methodologically sound framing research would mean to miss out on understanding a construct more meaningful than we give it credit for.

CONFLICTS OF INTEREST

The authors declare that they have no conflicts of interest.

REFERENCES

1. Lecheler S, Keer M, Schuck ART, Hänggli R. The effects of repetitive news framing on political opinions over time. *Commun Monogr*. 2015; 82(3): 339-358. doi: 10.1080/03637751.2014.994646

2. Binder M, Childers M, Johnson N. Campaigns and the mitigation of framing effects on voting behavior: A natural and field experiment. *Political Behavior*. 2014; 37(3): 703-722. doi: 10.1007/s11109-014-9292-2

3. Gross K. Framing persuasive appeals: Episodic and thema-

tic framing, emotional response, and policy opinion. *Political Psychology*. 2008; 29(2): 169-192. doi: 10.1111/j.1467-9221.2008.00622.x

4. Lakoff G. *Don't Think of an Elephant! Know Your Values and Frame the Debate*. Sudbury, MA, USA: Recorded Books; 2011.

5. Gamson W, Modigliani A. The changing culture of affirmative action. In: Braumgart R, ed. *Research in Political Sociology*. USA: JAI Press Inc; 1987: 3: 137-177.

6. Bennett WL, Iyengar S. A new era of minimal effects? The changing foundations of political communication. *J Commun*. 2008; 58(4): 707-731. doi: 10.1111/j.1460-2466.2008.00410.x

7. Nabi RL. Exploring the framing effects of emotion: Do discrete emotions differentially influence information accessibility, information seeking, and policy preference? *Communication Research*. 2003; 30(2): 224-247. doi: 10.1177/0093650202250881

8. Lecheler S, de Vreese CH. Getting real: The duration of framing effects. *J Commun*. 2011; 61(5): 959-983. doi: 10.1111/j.1460-2466.2011.01580.x

9. Kinder DR. Curmudgeonly advice. *J Commun*. 2007; 57(1): 155-162. doi: 10.1111/j.1460-2466.2006.00335.x

10. Druckman JN. Political preference formation: Competition, deliberation, and the (Ir) relevance of framing effects. *American Political Science Review*. 2004; 98(04). doi: 10.1017/s0003055404041413

11. Tewksbury D. The seeds of audience fragmentation: Specialization in the use of online news sites. *Journal of Broadcasting and Electronic Media*. 2005; 49(3): 332-348. doi: 10.1207/s15506878jobem4903_5

12. Iyengar S, Hahn KS. Red media, blue media: Evidence of ideological selectivity in media use. *J Commun*. 2009; 59(1): 19-39. doi: 10.1111/j.1460-2466.2008.01402.x

13. Damasio A. *Descartes' Error: Emotion, Reason and the Human Brain*. London, UK: Pan Macmillan; 1995.

14. Garnefski N, Kraaij V, Spinhoven P. Negative life events, cognitive emotion regulation and emotional problems. *Pers Individ Dif*. 2001; 30(8): 1311-1327. doi: 10.1016/s0191-8869(00)00113-6

15. Chong D, Druckman JN. A theory of framing and opinion formation in competitive elite environments. *J Commun*. 2007; 57(1): 99-118. doi: 10.1111/j.1460-2466.2006.00331.x

16. Carr N. *The Shallows: What the Internet is doing to our Brains*. New York, NY, USA: Norton, W. W. & Company; 2010.

17. Brown G, Manago AM, Trimble JE. Tempted to text: College students mobile phone use during a face-to-face interaction with a close friend. *Emerging Adulthood*. 2016; 4(1): 1-4. doi: 10.1177/2167696816630086

18. Misra S, Cheng L, Genevie J, Yuan M. The iPhone effect: The quality of in-person social interactions in the presence of mobile devices. *Environ Behav*. 2014; 48(2): 275-298. doi: 10.1177/0013916514539755