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Values, Framing, and Citizens' Thoughts about Policy Issues: Effects on Content and Quantity

Paul R. Brewer
University of Wisconsin-Milwaukee

Kimberly Gross
George Washington University

This study examines how frames invoking a core value shape the content and quantity of citizens' thoughts about a policy issue. An experimental study showed that exposure to a pro-school voucher equality frame increased the probability that participants would invoke equality in their open-ended survey responses. Exposure to an anti-school voucher equality frame produced the same effect, as did exposure to both frames. At the same time, participants who received either frame or both frames provided fewer open-ended responses. Thus, the frames appeared to focus participants' thoughts on one value while reducing the overall extent to which they thought about the issue. In broader terms, value framing may have implications for the nature and quality of public deliberation about policy issues—a point that scholars should keep in mind when considering how to define and study framing effects.

KEY WORDS: values, framing effects, counterframing, open-ended survey responses, deliberation

Politicians and political activists often attempt to define—or *frame*—issues in terms of values (e.g., equality, compassion) that are widely cherished among the public. In some cases, two opposing sides in a political controversy may even invoke the same value. Within the American political context, for example, both supporters and opponents of affirmative action have framed their favored course of action as promoting equality (Gamson & Modigliani, 1987; Kinder & Sanders, 1996). Likewise, each side in the debate over welfare policy has invoked compassion, with supporters framing welfare reform as a way to replace a failed

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welfare system with "effective compassion," and opponents framing welfare reform as a violation of humanitarian principles (Brewer, 2001).

It is easy to see why those who seek to influence public opinion appeal to the public's values. Many citizens understand political issues in terms of values: When they think about a policy choice, they base their opinions on the connections that they draw between the issue and their core beliefs (Feldman, 1988; Feldman & Zaller, 1992; Hurwitz & Peffley, 1987). To capitalize on this, political elites use values to frame issues in the hope that citizens will receive their definitions (typically through exposure to the mass media), accept them, and use them to reason about particular political controversies (Gamson & Lasch, 1983; Gamson & Modigliani, 1987, 1989). Put another way, elites invoke values to forge common frames of reference among the public (Chong, 1996).

In this study, we examine the impact of such framing on how citizens think about policy issues. Specifically, we test for effects on the content and quantity of citizens' thoughts about a particular issue. In doing so, we seek to provide new insights into two subjects. The first is the extent to which *counterframing* can limit the impact of framing on public opinion. In contrast to earlier studies that emphasized the power of framing to shape public opinion (see Druckman, 2001b for an overview), some recent studies have argued that the real-world impact of any given frame on opinion is often neutralized by the introduction of a counterframe—that is, a second frame that rebuts the first (e.g., Sniderman & Theriault, 2004). According to Brewer (2003), for example, the effects of exposure to a pro-gay rights equality frame ("gay rights are equal rights") and exposure to an anti-gay rights equality frame ("gay rights are special rights, not equal rights") canceled out one another. To date, however, research on the impact of counterframing, like most research on the impact of framing itself, has focused on its consequences for one dimension of opinion: its direction. In this study, we examine the effects of exposure to a frame and its counterframe not only on the direction of opinion but also on the nature and number of people's thoughts about the issue at hand.

Our second aim is to shed additional light on the implications of framing and counterframing for the nature of public deliberation about politics—which, in turn, plays a crucial role in the success of democracy (Mill, [1859] 1947). Although the substance of citizens' thoughts about issues and the extent to which citizens think about issues have received relatively little attention in research designed to isolate framing effects, each may have important consequences for deliberation. If framing influences whether citizens invoke a value in describing their thoughts about an issue, then it may ultimately shape how they discuss it with fellow citizens and whether they can arrive at shared frames of reference for deliberating about it. Just as frames may help individual citizens find their voices (Kinder & Sanders, 1996, p. 171) so too may they help the public find its collective voice; indeed, several studies have shown that citizens rely on frames as

resources in conversing about politics (Gamson, 1992; Price, Nir, & Cappella, 2003; Walsh, 2004).

Moreover, if framing influences how much citizens think about an issue, then it may also have consequences for the depth and breadth of public deliberation about the issue. Given that deliberation requires citizens to contribute thoughtful and well-elaborated opinions to a diverse marketplace of ideas (see, e.g., Cappella, Price, & Nir; 2002; Kim, Wyatt, & Katz, 1999; Mill, [1859] 1947; Price & Neijens, 1997), we should consider whether framing (and counterframing) fosters or impedes the formation of such opinions. For example, effects of exposure to framing on the quantity of thoughts that citizens have in mind when considering an issue may shape their ability to supply a wide and varied range of reasoned arguments to a marketplace of competing ideas.

Understanding the Effects of Value Frames on How Citizens Think about Issues

For our purposes, a frame is "a central organizing idea or story line that provides meaning"; it suggests "what the controversy is about, the essence of the issue" (Gamson & Modigliani, 1987, p. 143). A value frame, in turn, is a particular sort of frame that draws "an association between a value and an issue that carries an evaluative implication: it presents one position on an issue as being right (and others as wrong) by linking that position to a specific core value" (Brewer, 2001, p. 46; see also Shah, Domke, & Wackman, 1996).

When citizens encounter a frame within public discourse (e.g., by reading a newspaper article), they may internalize it and use it to understand the controversy at hand (Chong, 1993; Entman, 1993; Kinder & Sanders, 1996). Initial accounts assumed that framing effects on public opinion resulted from a passive, automatic, and accessibility-driven psychological process: exposure to a frame within communication makes it more accessible within memory (i.e., easier to recall) and thus more likely to be used in subsequent judgments (e.g., Iyengar, 1991; Zaller, 1992). Recent accounts, however, have suggested that framing effects result from a more deliberate process in which citizens weigh frames and their implications. In particular, Nelson and his colleagues have argued that value frames influence the importance that audience members attach to values, rather than the accessibility of values (Nelson, Clawson, & Oxley, 1997; Nelson, Oxley, & Clawson, 1997). This perspective allows greater room for citizens to resist the frames that they encounter (Brewer, 2001, 2002; Druckman, 2001a, 2001b; Druckman & Nelson, 2003).

A number of studies have used experiments to test the effects of value frames embedded in survey questions or simulated news coverage on responses to close-ended survey items that provide participants with a set of options from which to

choose in indicating whether they favor or oppose a particular policy position (e.g., Brewer, 2001; Druckman, 2001a; Druckman & Nelson, 2003; Nelson, Clawson, & Oxley, 1997). This approach has the advantage of allowing readily quantifiable and internally valid inferences about the impact of framing on the direction of opinion. For instance, experimental studies using such close-ended responses have shown that exposure to a value frame can shape not only what policy opinions participants hold but also how much weight and even what implications they attach to specific values in forming those opinions (Druckman, 2001a; Druckman & Nelson, 2003; Nelson & Kinder, 1996; Nelson, Clawson, & Oxley, 1997). Studies along these lines have provided evidence that citizens can resist a value frame under a variety of circumstances, as well: for example, when they do not trust its source (Druckman, 2001), when they form negative cognitive or emotional responses to it (Brewer, 2001), when they receive a counterframe themselves (Sniderman & Theriault, 2004), or when they are allowed to discuss the issue with others exposed to an alternative frame (Druckman & Nelson, 2003).

Despite its virtues, however, an approach that relies exclusively on such close-ended responses has an important limitation: it reduces the substance of public opinion to the direction of opinion. Although this dimension of opinion is undoubtedly an important one, it is not the only one. Indeed, close-ended responses provide only partial and indirect information about the nature of citizens' thinking about policy issues. Thus, relying solely on a "directional" approach in defining and studying framing effects may lead us to a narrow and incomplete understanding of the consequences of framing and counterframing for public opinion, as well the implications of each for the nature of public deliberation.

Motivated in part by this concern, a few scholars have used more qualitative methods to study the effects of value frames in broader terms. For instance, Gamson (1992) has used focus group research to examine the role of value frames from public debate (as well as other sorts of frames) in shaping how citizens converse about issues, and Walsh (2004) has used participant observation to the same end (although she focused more on social identity frames). Likewise, Chong (1993, 1996) has drawn on in-depth interviews in examining how citizens use value frames in thinking about issues. These studies, like the aforementioned experimental studies, have provided evidence that such frames can influence public opinion. At the same time, they have yielded richer portraits of how citizens negotiate the implications of—and sometimes resist—the frames that they find in public debate, as well as how citizens use these frames in efforts at collective deliberation. Yet focus groups, participant observation, and in-depth interviews have their own limitations when used to study the impact of framing on citizens' thought processes. Most importantly, these methods do not provide strong evidence of causal relationships between exposure to frames and ways of thinking about issues.

Studies conducted by Shah, Domke, and Wackman (1996) and Brewer (2002) have suggested a third approach: designing experiments that capture the effects of value framing on participants' responses to open-ended questions (i.e., questions that allow them to respond in their own words).[1] This approach retains the virtues of experimentation—random assignment, control, and high internal validity—while allowing researchers to define opinion in terms beyond its direction and adding some (if not all) of the greater depth provided by more qualitative methods. Using such an approach, Shah, Domke, and Wackman (1996) found that exposure to an ethical interpretation of health care in a simulated news article led participants to provide ethical interpretations of the issue in their own words and that exposure to a material interpretation of the same issue led them to provide material interpretations of it.

Similarly, Brewer (2002) found that exposure to an equality-based frame in a simulated news article led participants to invoke equality when using their own words to describe their thoughts about gay rights and that exposure to a morality-based frame led participants to invoke morality when describing their thoughts about the issue. As he observed, these results follow from the notion that exposure to a value frame leads audience members to attach greater importance to the value around which the frame revolves. At the same time, Brewer found that although such exposure encouraged participants to invoke equality and morality in ways that paralleled their uses in the article, it also encouraged them to invoke the values in ways that challenged their uses in the article. In other words, participants sometimes "borrowed" the values in the frames to make their own points about the issue (Brewer, 2002, p. 305).

Framing and Counterframing School Vouchers

The present study builds on this research by examining the effects of two value frames—each the counterframe of the other—on the content and the quantity of people's thoughts about the school voucher controversy. Both frames under study revolve around the value of equality. One, the pro-school vouchers equality frame, advocates vouchers as promoting equality; the other, the anti-school vouchers equality frame, criticizes vouchers as undermining equality. Drawing on previous research regarding the effects of value framing on the direction of opinion and its relationship to support for values (e.g., Kinder & Sanders, 1996; Nelson, Clawson, & Oxley, 1997), one might expect those exposed to the first frame to be more likely to support school vouchers, more likely to draw positive associations between support for equality and support for vouchers, or both. Sim-

[1] In addition, an experiment conducted by Rhee (1997) examined the impact of strategy-framed and issue-framed media coverage (but not value framing) on the content of letters written by participants. The author found that exposure to framing in media coverage of a campaign influenced how participants interpreted that campaign in their letters.

ilarly, one might expect those exposed to the second frame to be more likely to oppose school vouchers, more likely to draw negative associations between support for equality and support for school vouchers, or both. Put another way, exposure to each frame might influence what opinions people hold; alternatively (or additionally), it might influence how people interpret the value of equality in this context. Drawing on research regarding the effects of counterframing, however, we also expect exposure to both frames at once to neutralize any effects of each on the direction of opinion or the underlying relationship between support for equality and the direction of opinion (Brewer, 2003; Sniderman & Theriault, 2004).

On the other hand, we do not expect exposure to a frame and its counterframe to be so inconsequential in net impact when it comes to the content of thought about school vouchers. Following the findings of Shah, Domke, and Wackman (1996) and Brewer (2002), we hypothesize that those exposed to the pro-voucher equality frame will be more likely to invoke equality in their open-ended responses than those not exposed to any value frame for the issue. Likewise, we hypothesize that those exposed to the anti-voucher equality frame will be more likely to invoke equality in their open-ended responses than those not exposed to any value frame.

Moreover, we hypothesize that those exposed to both the pro-voucher equality frame and the anti-voucher frame will be more likely to invoke equality in their responses than those not exposed to either frame. Thus, our expectation for the impact of counterframing on the content of thought differs from our expectation for its impact on the direction of opinion. Instead of "canceling out" the effects of framing, exposure to frame and counterframe may even produce additive effects; that is, participants exposed to both frames may be more likely to invoke equality than those exposed to just one frame or the other.

All of these hypotheses, including the last one, follow from the premise that exposure to a value frame (or to two value frames revolving around the same value) will lead audience members to attach more importance to the value invoked by the frame(s). To be sure, an alternative hypothesis for the "both frames" condition is that audience members exposed to conflicting equality frames will dismiss the principle of equality as confusing or ambiguous in the context at hand (Brewer, 2003, p. 196). Under this scenario, each frame might indeed cancel out the effects of the other on the content of open-ended responses. In our view, however, the more likely scenario is that exposure to conflict over the meaning of a value will, if anything, further highlight the importance of that value.

We also extend the scope of previous research by examining the impact of value framing and counterframing on the quantity, as well as the content, of citizens' thoughts about an issue. What impact, then, might one expect exposure to a value frame—or a value-frame and its counterframe—to have on the extent of thought on the part of audience members? We hypothesize that the number of thoughts that participants provide in response to open-ended questions will decrease with exposure to a value frame presented either individually or in con-

junction with a counterframe. Our logic here is that people use frames to *simplify* complex issues that may implicate numerous values, as well as interests and beliefs about social groups (Kinder & Sanders, 1996; Nelson, Clawson, & Oxley, 1997). Cast in the terms suggested by Nelson and his colleagues (Nelson, Clawson, & Oxley, 1997; Nelson, Oxley, & Clawson, 1997), a value frame helps citizens understand issues not only by highlighting one value as important but also thereby suggesting that a range of other considerations are less important or even unimportant. Nor should exposure to counterframing that invokes the same value neutralize this effect, given that such a counterframe also highlights this value as important even though its interpretation of it differs. Put more simply, our hypothesis implies that exposure to a value frame—with or without a counterframe—reduces the extent to which participants think about the issue being framed. Accompanied by framing effects on content, this hypothesis would furthermore suggest that value framing focuses participants' thoughts on a particular way of understanding the issue *at the expense* of other ways in which they might reason about it.

An alternative possibility, of course, is that the number of thoughts provided in response to open-ended questions will not vary with exposure to value frames, even if the content of thought does. Put simply, value framing could alter what participants think about the issue without influencing how much they think about it. Another rival hypothesis is that exposure to value frames will lead to more extensive thought about the issue. One might argue that exposure to value framing increases the availability of information to those who are not aware of the frame, thereby giving them more information about which to comment. One could argue also that exposure to value framing may activate thoughts in memory that participants would not otherwise recall; likewise, it may lead them to weigh thoughts to which they would otherwise attach little importance. Thus, the number of thoughts that participants provide in response to open-ended questions could increase with exposure to either value frame or both value frames. In our view, however, this expectation does not take into account the key psychological function that value frames serve for citizens: namely, reducing the complexity of issues (Nelson, Clawson, & Oxley, 1997, p. 568), and, by implication, the extent of thought.

Method

Our data come from an experiment conducted in late 2001. One hundred and sixty-five undergraduates at George Washington University completed the procedure. We recruited participants by visiting classes and offering free movie passes as compensation.[2] The nature of our sample raises questions, of course, about the

[2] A pretest administered several weeks before the experimental treatment included a range of descriptive measures. Around half of the participants (51%) were women. 84% identified themselves as white, 5% as African American, 5% as Asian American, and 3% as Hispanic; the remainder chose

extent to which we can generalize the results to the broader public—a point we revisit in the conclusion (see Sears, 1986).

Participants read three newspaper articles, one of which concerned the school voucher controversy (see the appendix). Each participant was randomly assigned to one of four conditions. The 44 participants in the first condition read a version of the school voucher article that included neither the pro-voucher equality frame nor the anti-voucher equality frame; we used these participants as our baseline for comparisons. The 39 participants in the second condition read a version of the article that included the pro-voucher equality frame but not the anti-voucher equality frame, while the 41 participants in the third condition read a version that included the latter but not the former. The 41 participants in the fourth condition read a version of the article that included both value frames. To enhance the realism of the treatments, we constructed the various versions of the article from passages in real newspaper articles.

After reading the articles each participant completed a pen-and-paper questionnaire. This posttest included an open-ended item that read as follows:

> When you hear or read about school vouchers, what kinds of things do you think about? Please list as many thoughts as you have. Write your answers in the boxes below. List only one thought in each box. Use as many boxes as you need. Please state your thoughts as concisely as possible; a phrase is sufficient.

Participants were provided with four boxes in which to list their thoughts. We derived our approach to studying participants' thoughts from the thought-listing technique used in research on cognitive response and elaboration likelihood models of persuasion. Although much of this research focuses on the valence of thought (see Eagly & Chaiken, 1993, for a summary), recent studies have demonstrated that thought-listing can be used to study framing effects on other aspects of opinion (Brewer, 2002; Shah, Domke, & Wackman, 1996). Participants also answered a close-ended question about vouchers: "Do you favor or oppose a school voucher program that would allow parents to use tax funds to send their children to the school of their choice?" Among those who answered, 28% strongly opposed vouchers, with 31% opposed, 15% neutral, 20% in favor, and 6% strongly in favor. Upon completing the posttest, participants were compensated and debriefed.

Results

Our first analysis examined the effects of the value frames on close-ended responses, following the approach typically used in studies of value framing

"other," chose multiple categories, or did not identify their race or ethnicity. Mean placement on a 7-point party identification scale was 3.01 (standard deviation = 1.81), where 1 = strong Democratic and 7 = strong Republican; mean placement on a seven-point ideology scale was 3.07 where 1 = extremely liberal and 7 = extremely conservative (standard deviation = 1.46).

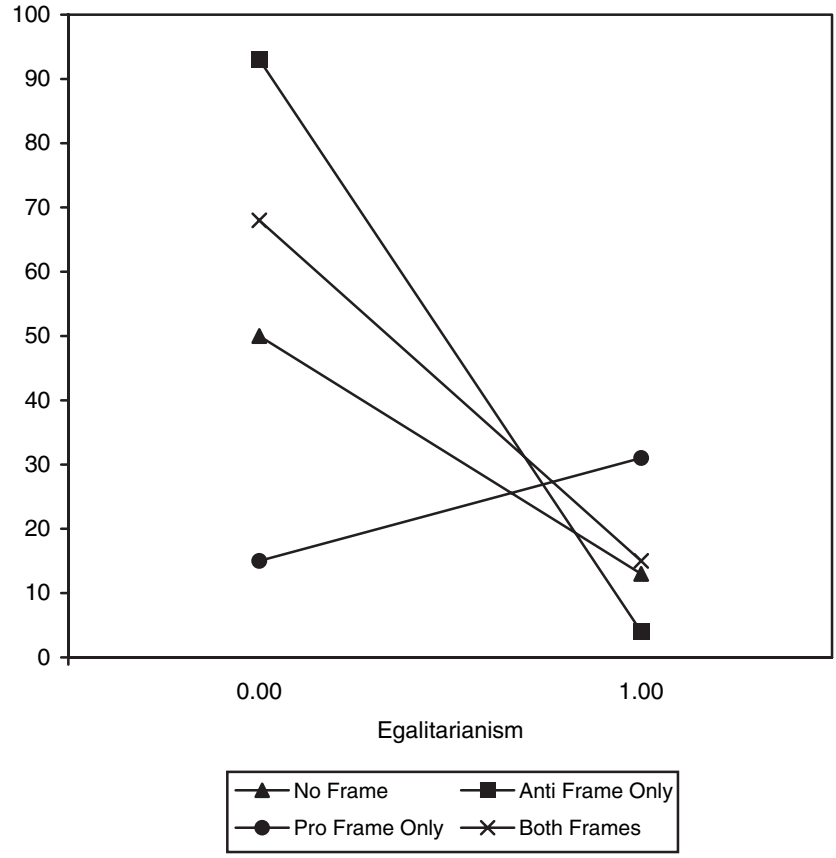

Figure 1. Predicted Probability of Favoring or Strongly Favoring School Vouchers, by Condition and Egalitarianism.

effects. We found no significant main effects of the treatments on the direction of opinion toward school vouchers.[3] We did, find, however, that the frames altered the relationship between support for equality and support for school vouchers. Figure 1 illustrates the predicted probability that a participant would favor or strongly favor school vouchers as a function of experimental condition and

[3] Among participants in the control condition, the mean level of support was 2.29 (standard deviation = 1.17); among those in the pro-voucher frame only condition, it was 2.42 (1.20); among those in the anti-voucher frame only condition, it was 2.40 (1.17); and among the both frames condition it was 2.63 (1.46). None of the differences between these means approached statistical significance. Note that our study differs from Sniderman and Theriault's (2004) in that we found no framing effects on overall opinion and, thus, could not test whether such effects disappeared in the face of counterframing. Instead, we examined whether counterframing canceled out the effects of framing on the correlates of opinion.

support for equality (see King, Tomz, & Wittenberg, 2000).[4] As the figure shows, participants who received neither frame tended to draw negative but relatively weak associations between egalitarianism and support for school vouchers. Participants who received the anti-voucher frame drew stronger negative associations between egalitarianism and support for school vouchers. Those who received the pro-voucher frame, on the other hand, actually drew positive associations between egalitarianism and support for school vouchers. Thus, the magnitude and even the direction of the relationship between support for the value and support for vouchers depended on the framing manipulations—a result that echoes previous findings regarding the power of framing to shape the implications of values such as equality (see, e.g., Kinder & Sanders, 1996). At the same time, the results also parallel previous findings regarding the power of counterframing to neutralize framing effects (see, e.g., Brewer, 2003; Sniderman & Theriault, 2004). Given that the two frames had contradictory effects, the relationship between egalitarianism and support for vouchers among participants who received both frames resembled the relationship among those who received neither.[5] As will soon become clear, however, we found no evidence of such "canceling out" when we looked at the effects of the frames on the content and quantity of participants' open-ended responses.

In general, participants were quite willing to provide open-ended responses detailing their thoughts about school vouchers: 39% of them used all four boxes, 30% used three, 23% used two, and 9% used one. Only two participants listed no thoughts.[6] The nature of the responses varied considerably. Many were individual words or simple phrases (e.g., "fairness," "unnecessary," "G. W. Bush," and "private education"). Others were questions (e.g., "Where will middle class kids go?"), statements of a position (e.g., "I oppose school vouchers"), or admissions of uncertainty (e.g., "not sure exactly what they are"). Still others consisted of arguments for (e.g., "vouchers help poor kids") or against (e.g., "I feel that if we had vouchers, then public schools wouldn't get improved") school vouchers.

Although the responses were diverse, the results clearly indicate that exposure to the value frames influenced their content. Table 1 presents the percentage of respondents in each condition who explicitly invoked the notion of equality (by using the words "(un)equal," "(in)equality," or "(in)equalities") in at least one

[4] The figure is derived from an ordered probit model of support for vouchers that included a dummy variable for exposure to the pro-voucher equality frame (0 if no, 1 if yes) and another dummy variable for exposure to the anti-voucher equality frame (coded in the same way), as well as a six-item index of pretest support for egalitarianism (based on the American National Election Studies battery; mean = .70; reliability = .81) and its interactions with the two frame variables. The coefficients for the multiplicative terms (the key terms in the analysis) were significant at the .05 level. Results from an additional analysis indicated that the effects of the treatments were additive rather than interactive.

[5] More precisely, the predicted probabilities of supporting vouchers in the no frame and both frame conditions did not significantly differ from one another for any value of the egalitarianism index.

[6] Our analyses exclude the additional thoughts that four participants listed outside of the boxes.

Table 1. Use of Equality Language, by Condition

No Frame (N = 44) 5% used equality language	Pro-Voucher Equality Frame (N = 39) 23% used equality language
• possibility for equal opportunity argued • we wouldn't need them if the public schools were better and equal throughout the country	• it would create an unequal balance between those with $ and those without—the bad schools would get worse • equality being distorted • we need to address inequalities without resorting to privatization/vouchers would not solve education inequality • does nothing to increase equality of opportunity • is this going to promote equality • equality for education • the current socioeconomic inequality in our education system • equal opportunities • I think about unequal opportunity
Anti-Voucher Equality Frame (N = 41) 24% used equality language	**Both Frames (N = 41) 41% used equality language**
• inequality • inequality • equal opportunity • giving everyone equal opportunity • unequal opportunity • equal chance for students • equality among rich & poor families • the need for equality in education • inequality in education • is there still an equal playing field with the vouchers?	• equal opportunity sounds great but I think we need more than vouchers to obtain • not going to solve the real issue of equal education • inequality—vouchers don't fix it • vouchers create inequality • increases inequality • vouchers does not allow for total equality • impossible to bring total equality into a society • (in)equality of class/equal opportunity for education • equality • national economic inequality/all children should be equal but they're not • education equality • greater equality in regards to education between classes • opportunities should be equal • equality of education • inequality within the public school system • savage inequalities exist in status quo • equal opportunity

of their open-ended responses. The table also presents the full text—a verbatim transcription of everything that the participant wrote in the box—of each open-ended response that mentioned equality.[7] Among participants who received neither value frame, only two (or 5%) invoked equality in their open-ended responses. In the absence of exposure to an equality frame, then, participants were highly unlikely to discuss their thoughts about school vouchers in terms of equality.

By comparison, participants who received one or more equality frames for school vouchers were considerably more likely to explain their thoughts in terms of equality. Among those who received the pro-voucher equality frame but not the anti-voucher equality frame, 23% did so; among those who received the latter but not the former, a nearly identical proportion (24%) did so. Each of these proportions was significantly greater than the proportion in the baseline condition ($p < .01$, one-tailed test; the z scores were 2.40 and 2.51, respectively).[8] Thus, the two frames had similar effects on the content of open-ended responses, even though one endorsed vouchers and the other advocated a diametrically opposed position on the issue.

As Table 1 shows, participants who received both value frames were also more likely than those in the baseline condition to invoke equality in their open-ended responses ($p < .01$, one tailed test; $z = 3.98$). Indeed, the percentage of participants doing so was significantly greater in this condition (41%) than it was among participants exposed only to the pro-voucher frame ($p = .04$, two-tailed test; $z = 1.72$) or the anti-voucher frame ($p = .06$, two-tailed test; $z = 1.64$). The two frames did not produce an interactive effect; instead, each frame appeared to exert an independent and additive effect on the likelihood that participants would explain their thoughts about school vouchers in terms of equality.

In sum, we found support for our hypotheses regarding the effects of value frames on how participants would explain their thoughts about school vouchers in their own words. Each value frame influenced the content of citizens' thoughts. Moreover, these competing frames did *not* cancel out one another's effects on the content of thought. Thus, even when exposure to a value frame and its counter-frame has little net impact on public opinion as measured by close-ended responses, such exposure may still have consequences for other aspects of public opinion.

At the same time, a closer look at the open-ended responses suggests that the participants did not necessarily constitute a passive, malleable audience for the frames. In particular, a number of participants who received the pro-school

[7] Three participants invoked equality in two separate thoughts. For these cases, Table 1 reports the text of both thoughts. Given that our "content analysis" here consisted of a literal word search, there was no need to test for reliability.

[8] We use one-tailed hypothesis tests for content effects given that our hypotheses regarding such effects specify their expected directions.

voucher frame—either alone or in conjunction with the anti-school voucher frame—invoked equality in ways that challenged this frame (see Table 1). Sometimes the challenge was explicit: for example, one participant commented that "vouchers would not solve education inequality," another that "vouchers create inequality," and yet another that "equal opportunity sounds great, but I think that we need more than vouchers to obtain [it]." In other cases the challenge was implicit but still clear: for example, one participant who received only the pro-school voucher frame wrote that "equality [was] being distorted," and another participant in this condition commented that vouchers "would create an unequal balance between those with [money] and those without—the bad schools would get worse."

On the other hand, we did not find any clear evidence that participants counterargued the anti-school voucher equality frame. Of course, it is possible that such resistance took place and that our measure simply failed to capture it. Still, if participants were more likely to resist the pro-voucher equality frame than its rival, then we can point to two possible explanations for this. The first, and in our view more plausible, is the distribution of opinion about vouchers. Recall that a majority of participants held negative attitudes toward vouchers. If people deliberately weigh frames that they encounter, as recent studies have argued (Nelson, Clawson, & Oxley, 1997; Nelson, Oxley, & Clawson, 1997), then many participants in our sample may have been not only predisposed to reject frames endorsing school vouchers but also capable of doing so.

An alternative possibility is that participants deemed the source of the pro-school voucher frame to be less credible than the source of the anti-school voucher frame. The treatments attributed the anti-voucher frame to a Democratic senator (Paul Wellstone), as well as an author (Jonothan Kozol) and the pro-voucher frame to a Republican House member (John A. Boehner) as well as another author (Joseph P. Viterriti). Given that people judge frames in part by the credibility of their sources (Druckman, 2001a) and that credibility in politics is often defined in partisan terms (Zaller, 1992), our participants may have responded to the frames on the basis of not only their content but also their source cues. In particular, the more numerous Democratic identifiers may have trusted the frame attributed to a Democrat more than the frame attributed to a Republican. Then again, none of these sources was likely to be particularly familiar to participants (note that the study took place *before* Wellstone's heavily publicized fatal plane crash). Furthermore, the treatments provided no party labels. To be sure, a design that held source constant could have ruled out this possibility entirely—and, for that matter, any potential confound between the content of the frames and their sources. Nevertheless, we still can be reasonably confident that the content of the value frames influenced the content of participants' open-ended responses, even if some participants invoked equality in ways that challenged one of those frames.

Did the frames also influence the quantity of open-ended responses? As Table 2 illustrates, the answer is yes. This table reports the mean number of open-ended

Table 2. Mean Number of Open-ended Responses, by Condition

No Frame (N = 44)	Pro-Voucher Equality Frame (N = 39)
3.38 (1.24)	2.79* (1.08)
Anti-Voucher Equality Frame (N = 41)	**Both Frames (N = 41)**
2.68** (1.06)	2.95† (1.14)

Notes. Table entries represent the mean number of open-ended responses in each condition; standard deviations are in parentheses.

†Difference from no frame condition mean significant at $p < .10$ (two-tailed test).

*Difference from no frame condition mean significant at $p < .05$ (two-tailed test).

**Difference from no frame condition mean significant at $p < .01$ (two-tailed test).

responses that participants in each condition listed. Among participants who received neither frame, the mean was about three-and-a-half responses. Among participants who received only the pro-voucher equality frame, the average number of responses was less than three, a difference that was significant at $p < .05$ (two-tailed test; $t = 2.39$).[9] Likewise, the mean among participants who received only the anti-voucher equality frame was less than three and significantly lower than the baseline ($p < .01$, two-tailed test; $t = 2.89$). The mean among participants who received both frames, in turn, was almost exactly three—greater than the mean among participants who received only one frame or the other (although not significantly so; $t = .65$ and 1.14, respectively) but less than the mean among participants who received neither ($p < .10$, two-tailed test; $t = 1.81$).[10]

The results provide support for our expectation—namely, that exposure to either frame or both frames would lead participants to provide fewer thoughts by concentrating their thoughts on a specific value at the expense of a wider set of considerations. By the same token, the results disconfirm both the null hypothesis and the alternative hypothesis that such exposure would lead to more thoughts.[11] In sum, we found that even though exposure to the value frames induced participants to discuss a value that they would have otherwise neglected,

[9] We use two-tailed hypothesis tests here in light of the alternative hypothesis that exposure to the frames would lead to more thoughts.

[10] Given that the number of open-ended responses was censored (because it was bounded at four, even though some of the participants who provided four responses might have provided more if given the opportunity), we also estimated a tobit model of the number of responses (see Long, 1997) that included dummy variables (0 = yes; 1 = no) for whether the participant received only the pro-school voucher frame, only the anti-school voucher frame, or both frames (with the control condition as the baseline). The findings of this analysis were virtually identical to the results reported above.

[11] One could argue that our design confounded the presence of frames and the quantity of information to which participants were exposed. Yet increasing the amount of information to which participants were exposed should (to the extent that it had any effect at all) have increased the availability of information to participants and thereby led them to provide more open-ended responses—an expectation that runs counter to our findings. Put another way, any such confound would have made it more, not less, difficult to find evidence consistent with our preferred hypothesis.

it did not appear to lead to more extensive thought about school vouchers. Nor did exposure to the frames simply alter the content of thought while leaving its quantity unaffected. Instead, participants who received either or both of the frames responded by providing fewer thoughts about the issue. This finding is particularly intriguing in light of the impact of the frames on the content of thought. Taking the two types of effects together, the results imply that when participants received equality frames for school vouchers, their thoughts about equality occupied an increased role within a less-extensive thought process. Put another way, such thoughts became bigger fish in smaller ponds.

Conclusions

This study provides evidence that value frames can produce two sorts of effects on citizens' thoughts about issues. As in previous research (Brewer, 2002; Shah, Domke, & Wackman, 1996), exposure to frames invoking a value (in this case, equality) led participants to use that value to describe their own thoughts about an issue (in this case, school vouchers). At the same time, exposure to such frames also led them to express fewer overall thoughts about the issue. Thus, exposure seemed to simultaneously focus and narrow citizens' thoughts about a specific policy issue.

Moreover, the same effects emerged regardless of which side in the debate over the issue invoked the value or whether both did so, even though audience members may have been more critical of one side than the other.[12] Whereas counterframing attenuated the effects of value framing on opinion as captured by close-ended responses, it did not neutralize the effects of value framing on either the content or the quantity of thought. In the case of content, exposure to both frames actually produced a stronger effect that than exposure to either alone. Our results, then, corroborate previous research on the power of counterframing to neutralize some sorts of framing effects but also challenge the notion that the presence of counterframing renders value framing inconsequential in all regards.

To be sure, the features of our study necessitate some caution in drawing broader conclusions from its results. Most obviously, our sample of college students was unrepresentative of the American public on a number of dimensions; for example, they were unusually educated, Democratic, liberal, opposed to school vouchers, and presumably young.[13] Our claims, however, focus on relative

[12] Given the attention in previous studies to knowledge as a mediator of framing effects (e.g., Druckman & Nelson, 2003; Nelson, Oxley, & Clawson, 1997), we also tested whether political knowledge (as measured by a six-item index; mean = .76; standard deviation = .27; reliability = .74) mediated the effects of the frames on the use of equality language and on the number of open-ended responses. We found no evidence of moderating effects for political knowledge; given the relatively small sample size and skewed distribution of knowledge, however, we cannot rule out the presence of such moderating effects.

[13] We base this claim on comparisons to recent surveys of the American public conducted by the Pew Research Center for the People and the Press (2000).

comparisons across conditions rather than absolute levels of the variables in question. In addition, several recent studies of framing effects have argued that the psychological processes underlying value framing effects should not vary from student samples to the general population—or, for that matter, from one medium to another (e.g., Nelson, Clawson, & Oxley, 1997). Our finding that the manipulations produced a type of framing effect on close-ended responses that previous studies (e.g., Kinder & Sanders, 1996) have also found further bolsters our confidence in the generalizability of our findings regarding the open-ended responses, as well.

Our findings, taken with appropriate caution, suggest both good and bad news about the nature of public deliberation about policy issues. An optimistic interpretation of our results would be that value framing can help to promote shared frames of reference for understanding issues. Such shared frames, in turn, may facilitate more effective deliberation among citizens about policy choices: for example, citizens who discuss school vouchers in terms of equality may have a starting point for meaningful conversations even if they disagree about the implications of this value in the context at hand. A more pessimistic interpretation would be that value framing can ultimately render public deliberation about political issues less rich and less diverse by discouraging more extensive thought. Exposure to value frames may lead individual citizens to think about policy choices in ways that are less idiosyncratic but also less likely to produce the collision of competing ideas that thinkers such as Mill ([1859] 1947) hold to be so important.

Still, it would be premature to endorse either conclusion based on the evidence at hand. Just as we have pointed out the dangers in adopting a narrow definition of framing effects that focused on the direction of opinion, so do we acknowledge that our study has not captured the full range of what may constitute such effects. Rather, we hope that our study serves as one step toward a research agenda that examines more fully the consequences of framing for the nature and quality of thought and deliberation about political issues. One logical next step would be to collect more extensive open-ended data that would allow for more sophisticated analyses of how value framing affects citizens' thinking styles. For example, one could use such data to examine the impact of exposure to value frames on cognitive complexity (Tetlock, 1983), reasoning style (Rosenberg, 1988), consideredness of opinions (Kim, Wyatt, & Katz, 1999), and argument repertoire (Cappella, Price, & Nir, 2002). Perhaps an even more useful step would be to study how value framing influences both the content and the nature of collective deliberation about politics. One might do so by conducting focus group discussions among experimental participants exposed to treatments such as those in the present study, then analyzing what participants say, how much they say, and how they say it.[14] In short, we suggest that future studies could

[14] For one example of this approach applied in an online setting, see Price, Nir, and Cappella (2003). Druckman and Nelson (2003) have also used focus groups within an experiment to examine the extent to which collective deliberation attenuates framing effects.

produce useful insights into the political consequences of value framing by expanding the notion of what framing effects may entail. This recommendation is not new—Gamson (1992, p. 180) made a similar point over a decade ago—but we believe that it still deserves more attention from current framing research.

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APPENDIX: Treatment Article

Trends Make Education's Future a Mystery
Carmen J. Lee

When it comes to forecasting what American schools will look like in the future, educators and analysts steeped in the history and current events of education in this country agree that traditional public schools will see increased competition from charter schools, and that there will be some continued interest in publicly funded vouchers to private schools.

Mike Griffith, a policy analyst with the Education Commission of the States in Denver, said he believed that the use of magnet schools would decline as charter schools increase. That's because charter schools can offer educational themes, as magnet schools do, but aren't as restricted by regulations. "Magnets have had problems competing with charter schools," Griffith said. "Charter schools are where magnets were 10 years ago."

The picture for vouchers is less clear. Vouchers provide tax money to parents to help pay for a private education. The issue of school vouchers is both divisive—the public nationally is split right down the middle—and highly volatile.

"At the heart of the debate over vouchers is the issue of equality," said Diane Ravitch, an education historian. "The tenor of the discussion is: Do vouchers help poor kids? How can we design a system that increases equality?"

Opponents believe that a voucher system would further stratify the education system by income because some parents would add their own money to the voucher and buy an expensive education, while others could not. **Equal opportunity—already crumbling as more parents choose private schools—would collapse.**

Senator Paul Wellstone opposes vouchers "1,000 percent." He argues that "every child in America should have the same opportunity to reach his

or her full potential regardless of the income level of the child's parents. We do so little to attack what author and children's advocate Jonothan Kozol terms the 'savage inequalities' in American education today." Vouchers will only exacerbate those inequalities and do little to provide greater opportunity, said Wellstone, who is a member of the Senate Health, Education, and Labor-Pensions Committee.

Supporters say that vouchers will ensure equal opportunity by giving poor students the choice that middle- and upper-income families, who can afford to send their children to private schools, already have. *Representative John A. Boehner argues that while wealthier parents have the option of transferring their children out of public schools, poor parents do not. "We don't have equal education choice for our students," said Boehner, the House Education Committee chairman.*

Joseph P. Viterriti, the author of "Choosing Equality," advocates vouchers for low-income students in failing public schools. A voucher system, he says, is "not a market model but an opportunity model. What you see is money directed at poor kids, defined by need."

Anti-voucher equality frame in **bold**

Pro-voucher equality frame in *italics*

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