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What is This?
A Qualitative Experiment: Research on Mediated Meaning Construction Using a Hybrid Approach

Sue Robinson¹ and Andrew L. Mendelson²

Abstract

This article presents a hybrid methodological technique that fuses elements of experimental design with qualitative strategies to explore mediated communication. Called the “qualitative experiment,” this strategy uses focus groups and in-depth interviews within randomized stimulus conditions typically associated with experimental research. This mixed methods research draws on the advantages of qualitative inquiry to better understand meaning construction and gain a more holistic reading of response differences between varied groupings of mediated content.

Keywords
qualitative, experiment, focus group, interview, mixed methods, communication

Communication scholarship tends to investigate the cause/effect and processing of meaning construction via experiments or ethnography, content or textual analyses, surveys, or interviews. Very seldom in communications research do researchers use some combination of these techniques, enacting the mixed methods theoretical premise that some questions can best be answered only when both positivist and interpretive methods are performed. These mixed methods media studies tend to be in conjunction with each other; for example, a scholar will ask open-ended questions at the end of a survey or code media content so both descriptive statistics and qualitative interpretation can be helpful. When mixed methods are employed, researchers generally attempt to replicate findings using a variety of methods in multiphased studies that triangulate data. This article offers a mixed methods technique that uses qualitative strategies such as focus groups to capture the differences in the processing of meaning construction between groups in a single phase of experimental execution.

In this research, we demonstrate the unique application of an “embedded” (Creswell & Plano Clark, 2010) technique within a “dominant–less dominant design” (Creswell, 1994). Participants in these studies were randomly assigned to experimental conditions, exposed to stimuli—in the tradition of quantitative work—and then subjected to qualitative posttesting of...
focus groups and in-depth interviews in lieu of the more typical surveying. By proposing a “qualitative experiment,” this article details a methodology that structures in-depth interviews and focus groups with the design protocols and comparison of conditions not typically available in qualitative communications work. The idea here was to merge elements of two methods within one study to take advantage of the benefits of singular methodology as well as to consolidate the phasing of triangulation. This qualitative experiment offers a way to investigate mediated communicative processing and responses to varied content presentations. The adapted method blends ways of knowing so that a macro-conceptualization of how a person evaluates content such as news across media platforms can be construed. It also answers the many proposals by researchers to combine methods for a holistic reading of social reality (Benoit & Holbert, 2008; Brannen, 2005; Brewer & Hunter, 1989; Canella & Lincoln, 2004; Creswell & Plano Clark, 2010; Gonzalez, 2000; Patton, 2002; Weaver, 1987). The results could be useful not only to media scholars seeking ways to qualitatively compare reactions to different kinds of content formats but also to media production workers engaged in producing the most effective creative platform.

Media-Research Methods

Social scientists studying media have a long history of testing audience reaction to content from newspapers, television, radio, and other media in both the quantitative and qualitative traditions. The preferred methods of quantitative are experiment and surveys where the researcher typically seeks to test some hypothesis about audience perception on stereotyping, persuasiveness, message efficacy, and so on. In such cases, the researcher can know quite a lot about specific variables in relation to one another—the dependent variable message efficacy according to an independent variable such as gender, for example—but not as much about the context of that person’s reaction. Some qualitative researchers have incorporated the viewing of media as part of ethnography (as Elizabeth Bird did in her studies for The Audience in Everyday Life). Yet such viewing must be highly individualized, take place in natural settings, and only say something about the individual audience member processing the information, and not necessarily anything about the content itself (Benoit & Holbert, 2008).

Historically in communications research very little work has applied a methodological framework that calls on both qualitative and quantitative techniques (Lemus, 2005; Tram, 2010; Trumbo, 2004). One study of journal articles from 1990 to 2000, for example, discovered that communication research “rarely combines quantitative and qualitative approaches” (Trumbo, 2004, p. 417). Two others found that research using multiple methodologies was “minimal” but suggested that that might be changing (Lemus, 2005). The typologies of the mass communication methods show that only 2% to 4% of the articles sampled actually employed multiple methods. The problem, wrote Lincoln (2010), is that mixing the methods distances the researcher from his or her paradigm—or “natural home” (p. 9). She suggested that the way “mixed methods” had developed tended toward the ambiguous and fickle and declared there to be a problem of incommensurability with such approaches, though she expressed optimism for their ideal usability, were they implemented differently (Lincoln, 2010).

Combining methodological approaches dates back to the early 1900s in anthropological and sociological studies. Campbell and Fiske formalized the concept in a 1959 piece (Johnson, Onwuegbuzie, & Turner, 2007). In that research, the idea of triangulation emerged, called multiple operationalism (Campbell & Fiske, 1959)—a term later refined by Webb, Campbell, Schwartz, and Sechrest (1966) to mean the use of two or more measures to approach one construct. By the turn of the millennium, more than 19 definitions existed (Johnson et al., 2007). In
2007, an influential article declared mixed methods to have achieved status as the third paradigm along with quantitative and qualitative (Johnson et al., 2007).

The authors of this research were interested in mining the benefits of techniques offered within all paradigms while staying true to a single paradigmatic “home.” We wanted to conduct an experiment to determine content perceptions of audiences while measuring the construct of abstract and fluctuating interest. But we also wanted to talk to audience members in in-depth interviews and focus groups to unveil their processes of meaning construction for mediated content while being able to compare differences of outputs between groups. This is not to say that we were claiming that mixing approaches could be deemed better than singular attacks on a problem. Rather, for some research questions involving comparisons of content, an experiment with separate conditions and variety of output evaluations might provide a more comprehensive answer.

We found what we were looking for in educational psychologist John Creswell’s dominant–less dominant design (1994) as well as his “embedded” technique (Creswell & Plano Clark, 2010) whereby methodological techniques are combined into one method, within the same study. One of three strands of mixed methods research Creswell proposed, the dominant–less dominant design, includes techniques from both methodologies but an overall framework from just one paradigm (qualitative or quantitative; Creswell, 1994). Creswell specified this approach in the 2010 book he wrote with Vicki Plano Clark, laying out a series of mixed methods designs. The “embedded” design combines quantitative and qualitative “strands” within one- or two-phased studies.

Several scholars have advocated—and even implemented—similar strategies to mixed methods (Creswell & Plano Clark, 2010; Creswell, Shope, Plano Clark, & Green, 2006; Sandelowski, 2000, 2010). Many studies combine observation, intervention, and follow-up interviews and surveys within groups over time, particularly in the education field (Brady & O’Regan, 2009; Cooper, Brown, Azmetia, & Chavira, 2005; Goldenberg, Gallimore, & Reese, 2005). For example, two sociologists studying youth engagement in Ireland designed an elaborate, longitudinal study that randomized a sample of participants in the Big Brother Big Sister program into treatment and control groups and then studied the outcome in interviews and surveys over time (Brady & O’Regan, 2009). However, the studies that use mixed methods—particularly in communication research—tended to practice experimentation in phases of first quantitative and then qualitative inquiry or vice versa but typically not both at the same time. Maxwell and Loomis (2003) and Caracelli and Greene (1997) described these studies as “component” studies versus “integrated” studies that marry qualitative and quantitative as part of the design. And although “component” studies are much more prevalent, “integrated” studies such as those that embed qualitative data collection and/or analysis within a more experimental design do abound (Festinger, Riecken, & Schachter, 1956; Lundsgaarde, Fischer, & Steele, 1981; Maxwell & Loomis, 2003; Maxwell, Sandlow, & Bashook, 1986).

We were also interested in integrating techniques to compare outcomes (content processing and reaction) between audience groups after an intervention (mediated). Specifically, we wanted to show an audience sample different formats of mediated content—websites, magazine photos, and articles—and then compare the different perceptions and reactions of that content across groups. We noted not only the Creswell et al. tradition of the embedded design but also Maxwell and Loomis’ “alternative approach” to practice qualitative and quantitative data collection within a quasi-experiment.

However, we also recognized that as we wanted to capture the processing of that mediated content from the interviews, we needed data that could describe and allow us to interpret the reaction to the texts, qualitatively. In their conclusion of their presentation of an “integrated design model,” Maxwell and Loomis (2003) wrote, “In a sense, we are presenting a more
qualitative approach to mixed methods design, emphasizing particularity, context, holistic understanding, and the process by which a particular combination of qualitative and quantitative elements plays out in practice'' (p. 269). And the authors also heard the call of Mason (2006), who argued for a “qualitative logic” (p. 13) to drive any research design, such as the choosing of cases and construction of items. In her Qualitative Research article, Mason suggested a “qualitative logic” approach to analysis could help a researcher cross from micro-findings into macro-interpretation by contextualizing from mixed methodological data.

We designed research projects that used qualitative “logic”—exercised by in-depth interviews and focus groups—within experimental conditions. These studies combined the concepts found in the following work: Creswell’s dominant–less domain design, Creswell and Plano Clark’s “embedded” techniques, Maxwell and Loomis’s “integrated” and “alternative” design, and Mason’s dialogic approach for understanding the social world using qualitative–quantitative measures. A flexible hybrid technique, the design involved a one-time intervention and one paradigmatic “strand” wherein the participants were shown content and then their reaction from surveys, interviews, and focus groups were qualitatively considered to extrapolate the meaning construction and discover unexpected influences and conditions (Maxwell & Loomis, 2003) arising from the intersection of the text, the individual, and any group interaction. Indeed, the general design is not that novel; marketers and product developers have long treated consumer groups with different stimuli and assessed their reactions in focus groups, for example. Yet we could not find any media-based research that used the “embedded,” “dominant–less dominant design” combination in a formal, academic manner that used episodic, between-groups stimuli application whose analysis followed a “qualitative logic.”

We tested the resulting merged methodological technique in two separate sample studies, one on the east coast and one in the mid-west. In the next sections, we explicate the particular technique, provide a map for replication, detail the two versions executed, and evaluate this particular version of the mixed methodological technique, thinking about the question: what is known from these results? In other words, what epistemological advantages and disadvantages does the unique combination of methods offer?

The Context of a Qualitative Experiment

In 2003, one of the authors, Dr. Andrew L. Mendelson of Temple University, had just emerged from a fellowship with National Geographic Magazine (NGM), which allowed him the opportunity to conduct observations and in-depth interviews even though he had typically committed himself to conducting experiments and content analyses. He became intrigued with the assumptions of NGM editors about their audiences and wanted to do some audience-participant testing. Previous experiments into visual and verbal processing differences focused on attitudinal, affective, and cognitive limitations in traditional psychological designs (Mendelson, 2001; Wanta & Roark, 1994; Zillmann, Gibson, & Sargent, 1999). Such designs are most often limited to close-ended items, such as Likert-type scales and semantic differentials. Even when open-ended questions are used, they are done so in writing and the responses are most often coded quantitatively. Although these studies provided useful information, it was clear that these approaches did not capture the full narratives people form in response to visual and verbal texts, especially the larger (thicker) sense of a place or people readers gain from a magazine article. Nor did the traditional surveying offer a chance to observe people as they processed that information in real time. Mendelson wanted to more fully capture the stories people construct from media texts, while at the same time manipulating the conditions to which the participants were exposed. He and coauthor Fabienne Darling-Wolf developed the “comparative grouping technique” as a way to do both.
Stemming from the dominant–less dominant, embedded design protocols from Creswell’s research, the developed hybrid technique calls on an experimental design by randomly distributing a sample into two or more conditions in which participants are exposed to different stimuli. Once in those groups, participants are subjected to the more qualitative method of open-ended questions via focus groupings or interviews. The answers to the questions represent data that can be coded and analyzed either quantitatively or qualitatively (depending on the researchers’ preferred paradigm), but were done so qualitatively in both the studies recounted here. The researchers chose the qualitative analysis because both pilot studies were investigating the process and richness of meaning construction (as opposed to the effect of meaning construction). Any number of variations on the design can occur, depending on the questions being asked. For example, a researcher could craft pretests and posttests for the respondents before exposure to better account for (or even control for) potential biases in the sample, in addition to semistructured interviewing. Or the researcher could use focus groups—as Mendelson and Darling-Wolf did—to reveal the interactive nature of meaning construction off the stimulus. In this way, one can study the processing of mediated difference in between-group designs.

Figure 1 shows the general path a hybrid-technique design might take, depending on the research question. This sample represents one study executed in four stages where participants receive a pretest to measure their general cognitive preferences and attitudes either as a survey or open-ended questions (Phase I), are exposed to the stimulus such as a media text (Phase II), and then have their interactions with the text “measured” in posttest interviews or focus groups (Phase III) and their reactions to the entire process documented in surveys or open-ended questioning (Phase IV). The form of the specific analysis technique varies for each phase according to its execution, sample size, research question, and scholarly framework. A pretest survey in Phase I would most likely use frequencies or some kind of inferential statistics, whereas the indepth interviews within focus groups of Phase III and Phase IV might be more qualitatively analyzed. The two data sets could be integrated together so that the contextualized answers hold explanatory value to the frequency data.

This four-phased design should be modified according to the characteristics of the project as well as the time and other resources of the researchers. Phases might need to be expanded, curtailed, emphasized, integrated, or eliminated completely. The key here is to determine the best way to compare responses between groups by employing a qualitative tool such as interviewing that allows for an open exchange about and elaboration of the process of meaning construction.

The following section details the two sample studies reflecting two different versions of this design. In the first, Mendelson and Darling-Wolf chose to conduct focus groups between three conditions, with only posttesting. In the second, Sue Robinson of the University of Wisconsin-Madison elaborated on the design by expanding the level of testing, demanding both pretests and posttests, and switching to individual semistructured interviews between three conditions. Both sets of data were subjected to rigorous analysis of a qualitative nature.

Two Sample Studies

Project A: Focus Groups Within an Experimental Design

The first study investigated the interaction of pictures and text in the context of a NGM story on Saudi Arabia. This study built on prior studies that examined the magazine’s overall narrative (e.g., Hyndman, 2002; Lutz & Collins, 1993; Moors, 1996; Nordstrom, 1992; Parameswaran, 2002; Steet, 2000) and on reception of individual pictures (Lutz & Collins, 1993). Similarly, this research drew on the extensive literature from media and education psychology examining the interaction between picture and text. These past studies focused on the way a single
photograph affected story processing (rather than the narrative created by the photographs themselves (Mendelson, 2001; Zillmann et al., 1999) as well as the way the video track affected the understanding of the audio associated with a television news story (Graber, 1990; Grimes, 1990; Lang, 1995). The study at hand was designed to investigate the way photography and writing in a photo story interacted within the readers/viewers. More specifically, Mendelson and Darling-Wolf (2009) were interested in the perceptions readers formed about Saudi Arabia based on which of three versions of this story they read. Which version prompted more stereotypical thoughts about the country and Arabs, in general, and which prompted more nuanced or complicated thoughts? Finally, the researchers were interested if either the photo narrative or the text narrative would dominate.

The design of this study combined focus group interviews with randomized experimental manipulations—Phases II and III of Figure 1. For this study, the researchers chose a story from the October 2003 issue of *NGM*, since a disconnect existed between what the photographs portrayed and the story described. They obtained multiple copies of the October 2003 issue of *NGM*, containing the target story on Saudi Arabia, “Kingdom on Edge: Saudi Arabia,”
a first-person, 4-page story written by Frank Viviano (2003) and photographed by Reza. The authors created three versions of the story for the study: photos only, text only, and both photos and text. To create each version, the unseen elements were simply covered with black construction paper. This allowed the story to appear over the same number of pages in all versions, with photo and text layout retained. Three versions of this package were created using actual issues of the magazine—text only, pictures only, and the entire set of pictures and text. These were the “conditions” of the experimental design.

All participants in a specific group saw the same version. Multiple copies of the issue were used which limited the readers to no more than two people per copy. A trained graduate-student moderator led all the discussions, whereas another graduate student observed and took notes. Participants completed consent forms (in line with university institutional review board standards), and the groups were randomized among the three versions. A short close-ended questionnaire measured their familiarity with NGM and other demographic data. Participants were given 30 minutes to read/view the assigned version. Following this, rather than administering an individual questionnaire to assess reactions, the participants’ perceptions of both the narrative of the NGM story and of the country Saudi Arabia were extracted through focus group interviews.

Focus group interviews as a method allows respondents to answer verbally in an extended, and often spontaneous, manner to open-ended questions so that researchers can compare differences among groups (Krueger & Casey 2000; Schutt, 1999). Focus groups are perfectly intended to examine “subjective experiences” of participants to specific stimuli or situations (Merton & Kendall, 1946). A traditional experiment would be more limiting due to the reliance on close-ended questions and written open-ended responses. In addition, little opportunity for elaboration, probes, or back and forth between participants could be attained. In focus group settings, individuals are able to react to what each says, though agreement among the groups’ members is not the goal (Merton, 1987; Patton, 2002). Furthermore, the group helps individuals feel more confident in offering and elaborating on their opinions (Patton, 2002).

As in many experimental design media studies, the viewing context was highly artificial, with much of the story versions blacked out by construction paper. Only one article was selected to examine for the study, since the focus of the study was to examine the process of narrative generation and not to achieve generalizability of all articles. Each 60-to-90-minute discussion was audio recorded and transcribed. A total of 42 participants, divided among the three versions (4 groups per version), all students at a large East Coast University, participated in the study. Thirty-one were female and 11 were male. Based on the close-ended questionnaire, the groups were similar in terms of age and lack of exposure to NGM. Also, none of the participants had seen the specific story.

The transcripts from the focus groups were analyzed qualitatively using narrative analysis techniques, focusing on the similarities and differences between versions. Narrative analysis techniques seek common thematic and structural choices made by the audience members. Although often applied to media producers, this technique is useful in helping make sense of how audiences wrestle with the stories in their heads in response to media content. A narrative analysis can also piece out how audience members distinguish between text and image (Bird & Dardenne, 1997; Darnton, 1975; Zelizer, 1990). Through discussion between the two authors, conclusions about similarities and differences were checked for reliability. Multiple focus groups for each version helped increase validity of the results (Patton, 2002). Individual responses were not singled out. Rather each group’s transcripts were considered the fundamental unit of analysis so that an overall narrative about the articles could be discerned (though individual influences on the group’s dynamics and vice versa were noted). Each group’s transcripts were read through multiple times to identify major themes, commonalities in reactions to the content, discrepancies in interpretation, presence or absence of stereotyped language, and
other dialogic parts associated with textual analysis (Morgan, 1997). For example, the researchers catalogued the use of specific pronouns used by participants in describing the Saudi Arabians in comparison with the Americans, as well as the tone implied by adjectives such as “hostile” or “ingrained” that might indicate a frame for processing. The researchers looked for patterns within the group transcripts, employing elements of textual analysis that would unveil consensus and discord about any cohesive narrative (Krueger & Casey, 2000; Morgan, 1997). No frequencies or any other statistics were used in this analysis.

Not surprisingly, many commonalities appeared across all the groups, even as some important differences were uncovered, particularly between the text-only and photo-only groups. At the two extremes, those people who saw the photos-only version and those who saw the text-only version reported very different perspectives about Saudi Arabia. The photo-only group reacted to the antagonism they felt Saudis harbored toward Westerners, and in their focus-group interactions they emphasized the threat posed by the Saudis. The stimulus photos did not convey such a tone in any direct manner, yet the feelings were produced in the minds of participants nonetheless. For example, those who only saw the photographs offered comments suggesting the Saudis had an “ingrained hostility toward [American culture],” and were “bitter,” “resentful,” and “angry.” In contrast, participants exposed to the text-only version noted the lack of understanding by both the United States and Saudi Arabia toward each other and focused on the complexity of Saudi society with its diversity of opinions. This group offered statements such as “We all have this view of them that is completely wrong.” Results also revealed that the text-only group saw the story as a cohesive narrative, whereas the photos-only group jumped around the photographs in a nonlinear fashion. The group seeing the entire package recognized the photo story and the text as composed of two competing narratives, which made them uncomfortable. As one respondent said,

Yeah, I would like to have seen the photo spreads more organized in . . . one area, so I could just look at that and then read the article. Just going through one by one, I started reading the captions and everything with the photos, and then I’d have to go right back in the article and lose my place.

Most interestingly, the two groups that examined the photographs stressed more stereotypical views than the group that examined the text only, focusing on the deserts, camels, and oil. The photographs appeared to cause a distraction from the text’s ability to generate a more complex understanding of Saudi culture.

**Project B: Semistructured Individual Interviews Within an Experimental Design**

Across the country, Robinson was designing a study to investigate multimedia and interactive content and whether certain online features changed how viewers received the news and what the features made them feel about their local community in Madison, WI. Much of the relevant literature—such as on web usability—showed a preference for experiments and surveys, measuring things such as response time, credibility, content, screen resolution, and navigation sensitivity (Nielsen, 1999). One-on-one qualitative interviews are also effective as a strategy of inquiry at accessing knowledge processing, particularly as it leads to cultural creation (Fontana & Frey, 2005; Kvale & Brinkman, 2009; Lindlof & Taylor, 2002). A good structured set of questions can reveal assumptions regarding concepts, dissect stated attitudes and perceptions, describe relationships, map social networks, determine influences on actions, and otherwise discover a whole host of rich data about the way people communicate and behave with media (Lazarsfeld, 1944; Lindlof & Taylor, 2002). Some scholars have employed alternative ways to capture people’s perceptions about online content; in particular, the “think aloud” technique—
where a small number of participants report their thoughts while being exposed to some kind of stimulus—has been taken up by both qualitative and quantitative media researchers (Carmel, Crawford, & Chen, 1992; Ericsson & Simon, 1993; Eveland & Dunwoody, 2000; Hill & Hannafin, 1997; Tremayne & Dunwoody, 2001). This method—typically done with a small number of participants (10-20)—works well with online information channels and can reveal cognitive processing of inputting data in an unusual approach. Its limitations, though, are many and include the relatively small samples that prohibit generalizability and a reliance on self-reporting taken to extreme. The comparative grouping method (now renamed the qualitative-experimental method) proposed in 2009 by Mendelson and Darling-Wolf, seemed to offer a way to combine all these techniques to get at an answer to her questions about processing content within different kinds of formatting. She swapped the focus group for individual interviews to better gauge reactions without the bias sometimes innate within group dynamics. She chose a purposive, stratified sample of 60 residents of a Midwest City; participants represented the three categories of the interlocking public as laid out in Kovach and Rosenstiel (2007)—the involved public, the interested public, and the uninterested public.

Her design reflected the four full phases of the qualitative experiment technique (see Figure 1). The researchers gave respondents a pretest survey that measured their familiarity with the topic of the news article (homelessness), their cognitive preferences, and their demographics. They were then randomly exposed to one of three news content templates: A traditional web page with a news article, multimedia, comments, and other content; a prototype of a web page structured around a topics concept called the “beat” platform; and a package of content on the social media site Ning. All three conditions contained the exact same content presented much differently in each. In the first condition, the focus of the stimulus was on the journalism—the news article itself—followed by comments in a traditional format. In the second condition, the reporter “moderated” the content; her bio appeared on the page prominently, she led a discussion in the comments, and the story itself was sectioned into linked chunks so that the emphasis was on the journalist. Finally, respondents assigned to the third condition saw all that same content but with the emphasis on the comments and blogs by the citizen (the news article appeared on the left side).

Participants were asked to spend as much time as they cared on the site. The respondents then were encouraged to “think-aloud” as they navigated the site. This observation and discussion session lasted 20 minutes. A posttest survey followed, measuring changes in perceptions of narrative meaning, presentation, brand, and community attitude. Finally, each participant answered a series of 20 open-ended questions in semistructured interviews. The open-ended questions investigated deeper concepts such as definitions of community and news as well as how they determined content “credibility,” and other queries about what they were seeing in the templates. These questions were not meant to replicate the findings of the experiment but rather to nuance the selections made by the respondents in the surveys and elaborate on “first-blush” answers given during the “think-aloud” portion.

All the transcripts underwent Strauss and Corbin’s (1998) three-pronged grounded theory analysis of open, axial, and selective coding. Grounded theory is an inductive way of analyzing that allows a theoretical framework to organically arise from the data. Responses to the think-aloud and interview questions were transcribed, parsed according to condition, and then analyzed in aggregate. Themes and concepts were first identified (open coding) and then categories and patterns discerned among those themes (axial coding). Individual answers to the questions were checked against the observation session to help with reliability and also credibility and trustworthiness. In the selective phase, the researcher situated the findings within a larger meaning about news perceptions. Thus, the themes that were found—such as the theme of “digging deeper” for news information—were considered along with their patterns—such as the act of
clicking on links or googling news items until a broad understanding of new news considerations could be determined. In grounded theory, analysis arises from the data, no matter how it is stretched or gathered, and thus the approach is particularly useful in comparative grouping analyses. A researcher is not locked into particular conceptual ideas that comes with testing theory, and thus in this instance, one can more honestly appreciate any difference that emerged between groups.

Robinson found that people’s news habits were changing radically by accessing a huge variety of sources, including incorporating social media. Audience consumptive patterns of news were transitioning accordingly, moving from discrete times (i.e., watching the evening news or reading the morning paper) to constant surfing (10% of the sample visited the local news and social media sites on an hourly basis). These quantitative data were then integrated with the open-ended questioning by allowing the lengthy responses to explicate the frequencies from the survey. “Significant news” meant information that allowed them to “dig deeper” and construct knowledge on their own, outside of the institutional borders of the news site itself. Instead of considering the local organization as the primary source of information, respondents thought of the article as a starting piece for an informational journey. Those in the traditional site condition, for example, expressed frustration that no avenues for further research existed in the template given. Participants sought not only information about the topic—as evidenced by comments during review of the templates in the conditions—but also a personal connection to the issue. The differences between content-presentation groups that were documented in the interviews revealed that those who read the straight news story or the content moderated by the reporter cared more about the issue presented and felt more knowledgeable about the topic than those who visited that content on the social media site. However, the interview analysis also showed that those who were exposed only to the social media site expressed much more empathy for victims presented in the story, felt more of a connection to them, and thought the story characters could achieve power and a sense of agency in comparison with participants in the other conditions.

Discussion

The evidence that resulted from these two studies suggests that an adapted qualitative experiment might unveil the different connections people make after viewing varied presentations of media content. See Table 1 for a visual elaboration of the benefits and negatives, gains and losses of employing such a method.

The qualitative experiment was useful in the first project, as it allowed participants to elaborate on the stories prompted by viewing photographic and/or verbal narratives. It was clear that readers constructed different meanings depending on the version of the story seen. Their senses of Saudi Arabia were shaped by whether they saw photographs, text, or both. The open-ended format allowed for extended responses and follow-up clarifications. Furthermore, randomized comparison groups allowed for the researchers to better be able to compare between differently formatted versions. The meaning people form from photographs and texts is highly complex and not easily ascertained through close-ended and individually written open-ended responses. There is clearly a value to allowing people the opportunity to struggle to find the right words to express their own interpretations and to react to others’ observations rather than one singular opportunity to create meaning construction about the text. Most people do not have a practiced vocabulary for succinctly discussing the meaning of texts and photographs, as students in literature or art appreciation classes know. This focus group approach allowed for the complex path of participants’ reactions to be revealed, answering the research questions about Arabic stereotyping manifested in the NGM article.
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<td>No generalizability</td>
<td>Validity low</td>
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<td></td>
<td>No way to measure the same variable in a number of direct items</td>
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<td>Little ability to control for variance</td>
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<tr>
<td></td>
<td>Reliability low</td>
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Note: Adapted from Patton (2002), Krueger and Casey (2000), and Kaplowitz (2000).
In Project B, the format of the design allowed a three-step analysis to occur: the closed-ended items detected an initial answer to the research questions about content presentation difference; then thicker data emerged from open-ended, semistructured interview questions and observations during the think-aloud portion. It was only by comparing the phased data in aggregate that a full picture of new content information processing occurred, according to different formats. This multimethod allowed the researcher to witness the actual actions of the participants engaging with the content while expressing their observations. The comparison of content consumption in a qualitative-experimental design meant that the expectations of participants—generally catalogued using open- or closed-ended questions—could be exercised under observation. Thus, this technique provided a layer of validity to the project by probing the participants for clarity in what was being said. Furthermore, validity is bolstered by allowing the participants to provide the framework and language for the concepts being studied, rather than the researcher through questionnaires, which allow limited elaboration or explanation.

Furthermore, the findings demonstrated that people have an expectation of the kind of information a news story is going to give them. Once they were actually shown the same information in a different presentation, with different agents, they came away with a different perception of the story, one that might be a bit more personal and powerful, but not necessarily as informational. A strict experiment would have exposed the participants in isolation and tested the reactions in generally closed-ended questions. Such reactions tend to be instinctual. This technique prevented solipsistic responding that might be prejudiced by the participants’ historic considerations of concepts such as news rather than the evolving thought process the researchers were seeking. The qualitative experiment approach offered the subject opportunity to deliberate and nuance his or her reaction in a meaning-constructive process that ultimately better reflected the transitioning mindset. In other words, the set-up of this experiment allowed the subject to reconcile what he or she initially thought about some concept with the way in which they actually practiced consumption, leading toward a more complete understanding of the process.

Both studies’ implementation of a qualitative experiment contained limitations and future use of this method would warrant tweaking the approach and/or execution. (Refer to Table 1 again.) For example, though this was not the aim of either sample study detailed here, neither study had a large enough sample to call on inferential statistics. The samples were too limited with only about 15 to 20 participants in each condition. The variables were not isolated; nothing specific could be quantitatively measured in these particular experiments. Therefore, no standardization of responses could occur. In addition, the qualitative approach in these studies prohibited a way to measure the same variable in a number of direct items, rejecting the simplicity of closed-ended questions in favor or the complexity innate in conversation and interviewing. Scholars who consider taking up this method and want to employ inferential statistics might dedicate more resources to its implementation—expanding the sample and offering surveys. In addition, the stimulus could be better crafted, targeting specific variables that would be measured in the posttest surveys. Finally, both these studies were conducted with a researcher present during exposure to stimuli, which surely skewed portions of the experiment (from how long they stayed on the site to what they visited and what they said they were thinking). Neither Project A nor Project B offered content in natural environments. Future designs might offer an online version of the experiment, so that participants could partake either in a home or lab setting, eliminating some bias. Thus, the major losses in the qualitative experiment approach as these two sample studies were conducted suffered reliability inadequacies.

**Conclusion**

Despite these limitations, both designs illuminated processes of news understanding and attitude formation according to medium formats such that the studies attained significant validity.
Epistemologically, in the first study the authors were able to not only uncover a grand narrative as discerned by groups of people collectively (which a simple qualitative focus group technique would yield) but also determine how the meaning construction of the narrative changed between varied mediated formats. In the second study, the mixed methods approach revealed the general attitudes of news habits and conceptions for people as well as the motivations, influences, mode of execution, and nuanced meaning construction surrounding these attitudes. Typically, quantitative experiments can assume that a cognitive processing has occurred because of the difference captured between groups or in between pretest and posttest surveys, but the actual processing tends to be invisible in these studies. In qualitative work such as interviews and ethnographies, we can often discover that processing (as well as the relationships, power plays, and other more interpretive aspects), but the methodology fails to be able to isolate effects according to specific variables. This is not to say that one cannot achieve important results from either methodological paradigm on its own; for many research questions, singular methods perform perfectly well. Nonetheless, by employing a qualitative experiment, the researchers were able to introduce participants to carefully rendered mediated situations and test their reactions in a contextual, reflective manner that unveiled the processing of meaning construction in a unique manner.

Declaration of Conflicting Interests
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Note
1. We have since renamed this technique “qualitative experiment” because reviewers found the initial phrasing too vague. We include the original name here for issues of clarity, as Mendelson has already published results using the terminology, and it was that article that piqued Robinson’s interest.

References


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