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# The Methodical Avoidance of Experiments in Public Relations Research

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Lois Boynton & Elizabeth Dougall  
University of North Carolina at Chapel Hill

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## Abstract

*Despite its ranking and reputation as the most rigorous of the available research methods, the experiment is rarely used in public relations research. In contrast, our colleagues in advertising and marketing have long accepted and effectively applied the experimental method to better explore and understand consumer behaviour and media effects. The 'methodical avoidance' of experiments is manifest in the public relations literature. The effect of this avoidance is worthy of the attention of the field's scholars and educators, given intensifying practitioner attention to research methods that enable the effective measurement and evaluation of public relations programmes. This paper reports the results of a content analysis of all articles published in two of the discipline's most prominent journals, Journal of Public Relations Research (JPPR) and Public Relations Review (PRR) in the 10 years from 1995 to 2004. Of the 400 articles reviewed in this study, just 21 report the outcomes of research that is experimental in design. Of the small number of experiments reported, some fundamental oversights are evident in the authors' explanations of research design and procedures. While not contesting the validity of the research, these reporting oversights are symptomatic of the naivety with which experimental research is treated in public relations.*

## Overview

In his *Primer of Public Relations Research* (2002), Don Stacks argues that experiments are "the only way that we can definitely test whether something actually causes a change in something else" (p. 196). Miller and Levine

(1996) note that persuasion research has long relied on experiments to test the effectiveness of sources and message content on the attitudes and behaviours of the intended audiences, and Broom and Dozier (1990) propose that, in public relations, "every research plan to evaluate program impact includes either an explicit or implicit experimental design" (p. 99). Experimental designs are quite effective in identifying "specific causal variables in persuasion" (Miller & Levine, 1996, p. 265), such as the impact of self-esteem and other factors on a message's ability to affect attitude or behaviour change. "Experimental designs allow the researcher the control necessary to precisely specify and manipulate the source or message characteristics he or she is interested in comparing" (p. 265), and permit researchers to examine and establish causality between variables (Stacks, 2002). In fact, marketing and advertising researchers have utilized experiments in a number of different ways, including to ascertain how public accountability may predict corporate trustworthiness (Sinclair & Irani, 2005), the impact of issues advocacy advertisements on sponsor credibility (Burgoon, Pfau, & Birk, 1995; Goldsmith, Lafferty, & Newell, 2000), and the relationship of source credibility and perceived purchase risk (Grewal, Gottlieb, & Marmorstein, 1994). An informal review of five recent issues of the *Journal of Advertising* (vol. 34, issues 1–4; vol. 35, issue 1) showed that 17 of a possible 40 articles (42%) incorporated experimental methods (e.g., Homer, 2006; Stammerjohan, Wood, Chang, & Thorson, 2005). Additionally, Taylor (2005) discovered that 25% of international advertising articles published in *Journal of Advertising* from 1994 to 2004 applied the experimental method, second only to content analysis, at 34%.

In spite of the place of the experimental

method as the *sine qua non* of the research world (Stacks, 2002), just 21 of 400 articles published in two of the public relations discipline's most prominent journals, *Journal of Public Relations Research* and *Public Relations Review*, in the 10 years from 1995 to the end of 2004, reported the findings of experimental research. Examples of these experiments include results of message testing in health and crisis communication, and assessing the impact of the public relations practice. Only 19 articles explicitly mentioned the experimental method. We believe these results represent an ongoing reluctance—we call it a methodical avoidance—to apply the experimental method. This contrasts with the use of case studies, which comprise up to a third of published articles in the public relations literature (Cutler, 2004). Cutler's survey of the two main journals, *Public Relations Review* and *Journal of Public Relations Research*, also found no articles that specifically addressed methodological issues in public relations research. Despite the wide use made of case studies in public relations research, Cutler contends there is a “methodical failure” (p. 365) of researchers to apply the case study method effectively.

Public relations research draws on both empirical and humanistic traditions (Hazleton & Botan, 1989). While things have changed since 1989 and the field can no longer be described as nascent, Hazleton's and Botan's warning that premature commitment to a particular theory or methodology is inappropriate still holds true. However, public relations practitioners and scholars continue to cling to descriptive methods of research, especially surveys and polls, as well as qualitative methods, especially focus groups and interviews (Stacks, 2002). Although experiments and quasi-experiments are, indeed, used in conjunction with these methods, the vast majority of public relations research continues to be applied, descriptive research that has limited generalisability (McElreath & Blamphin, 1994) and is typically organisation-centric (Dozier & Lauzen, 2000). This is particularly alarming if, as Stacks contends, public relations is to be considered a theory-driven discipline in which outcomes are predictable based on the knowledge of such

‘variables’ as the media, persuasion, and message channels. In that case, as Stacks (2002) argues, “the only way we can actually test whether the theory is ‘good’ is by the most rigorous testing possible” (p. 196). We acknowledge that this position is not consistent with anti-positivist views, a comprehensive discussion of which is outside the boundaries of this study.

The reluctance with which public relations research has treated the experimental method is both exemplified and explained by the dearth of material in public relations textbooks about experiments as a viable research method. For example, the introductory text *This is PR: The Realities of Public Relations* (Newsom, Turk, & Kruckeberg, 2004), does not include experimental research among its discussion of formal research methods. Only a two-thirds-page description of experimental research is included in *Public Relations: The Profession and the Practice* (Lattimore, Baskin, Heiman, Toth, & VanLeuven, 2004). The authors distinguish between laboratory and field experiments, and cite a Department of Energy pretest/posttest design as an example.

Hence, the purpose of this research was to ascertain the use—and occasional misuse—of experimental research in public relations studies. A content analysis of 10 years of articles published in *Journal of Public Relations Research* and *Public Relations Review* was conducted. The basic concepts underpinning experimental research and major principles of experimental research design are now described briefly to provide a framework for the analysis and discussion sections of this paper.

## Designing Experiments

According to Stacks (2002), experiments rely on three main concepts. The study must establish that: (1) “changes in one variable cause changes in the other variable”, (2) “the effect follows the cause”, and (3) “no third variable influenced the relationship” (p. 200). Researchers may employ true, quasi-, or pre-experiments to test theory or evaluate the effectiveness of communication tactics

(Shadish, Cook, & Campbell, 2002; Stacks, 2002).

The true experiment requires the *random* assignment of experimental and control conditions to participants. This approach helps ensure the results are not influenced by such outside factors as a participant's home environment (Miller & Levine, 1996). Random assignment helps to ensure internal validity; that is, whether the independent variable under study has an impact on the dependent variables. The element of condition control central to the experiment has a downside of diminishing generalisability, or external validity (Broom & Dozier, 1990; Shadish, Cook, & Campbell, 2002). Of course, we acknowledge that the use of true randomisation is an ideal that is more often approximated than achieved; again, the anti-positivist view that randomisation is unachievable reaches beyond the limitations of this article. As a result, many researchers employ quasi-experimental designs.

The quasi-experiment also includes variable manipulation, but the assignment of conditions is not random as with the true experiment. For example, participants may be exposed to certain messages in their homes. In these natural settings, it is not possible to ensure that the sole differences between participant groups are controlled within the study's parameters (Broom & Dozier, 1990; Miller & Levine, 1996). The third approach, pre-experimental, does not provide any control or is questionable in controlling sources of validity (Shadish, Cook, & Campbell, 2002). Hence, causality cannot be inferred from the results.

### Research Questions

Classic hypotheses were inappropriate for this exploratory study. Based on the researchers' knowledge of the public relations literature, a relatively small population of articles using or discussing experimental research design was anticipated at the outset. Two research questions emerged from the literature review:

**Research Question 1:** In the context of what public relations problems are experimental research designs applied?

The purpose of this question is to explore the types of issues and questions public relations researchers seek to explain using the experimental method. This information may help guide subsequent researchers in employing experiments to explain attitudes and behaviour and further advance effective public relations theories.

**Research Question 2:** How are experiments explained in public relations research?

The purpose of this question is to explore the authors' explication of the experimental methods they employed; true experiment, quasi-experiment, or pre-experiment. These details will not only reflect the rigour of the studies, but also provide other researchers with valuable information needed to replicate the studies.

### Method

The research questions were explored through content analysis of two of the United States' leading scholarly journals covering public relations issues, research, and practices: *Journal of Public Relations Research (JPRR)*, published by Lawrence Erlbaum Associates for the Public Relations Division of the Association for Education in Journalism and Mass Communication; and *Public Relations Review (PRR)*, published by Elsevier Science. Each journal is published quarterly. *JPRR* "publishes research that creates, tests, or expands public relations theory" (Editorial Scope, 2006, ¶1). Its circulation is more than 500 Public Relations Division members at colleges and universities in the United States and abroad (AEJMC Public Relations Division, 2006). *PRR*, with a circulation of 2,000 (Iowa Guide, 2002), identifies itself as "the oldest journal devoted to articles that examine public relations in depth" (*Public Relations Review*, 2006, ¶1). *PRR* publishes research undertaken by professionals and academics in the field. In addition to containing up to six major articles, this journal includes notes on research in brief, book reviews, and précis of new books relevant to the field.

A 10-year timeframe from 1995 to 2004 was selected for this study. This timeframe produced a population of 40 issues per journal,

or 80 issues in total. The annual bibliography issue of *PRR* was excluded from the study because it does not include any manuscripts, but rather a comprehensive directory of public relations articles appearing in trade and scholarly publications within each given year. A population of 400 articles was derived, excluding book reviews and editor summaries or commentaries.

After a keyword search for the term 'experiment' was made of all 400 articles, 46 articles were extracted. These articles either reported the outcomes of experimental research, or provided conceptual discussions of research methods making reference to experiments. Each article was coded to determine whether either or both of two conditions were met. Using the guidelines provided by Riffe, Lacy, and Fico (1998), the articles were coded using an instrument that allowed coders to capture the key manifest constructs of interest: article authorship, year of publication, journal (*JPRR* or *PRR*), where the experiment was identified in the article (title, abstract, method section), experimental characteristics (true experiment, quasi-experiment, or pre-experiment), experimental manipulations, study subjects, and topic (See **Appendix 1**).

The first condition investigated was whether an experiment was applied within the research design as the sole method or in conjunction with other methods such as surveys. Second, the inclusion of any mention or discussion of the experimental method as part of a methodological critique or conceptual discussion was addressed. Additionally, coders specified where the method was identified—in the title, abstract, method section, or elsewhere in the article—and how the method was identified. That is, was an experiment a fundamental aspect of the method or an explicit but passing reference in the body copy?

After the initial article extraction was completed, the articles were checked and coded by four coders. Inter-coder reliability was calculated at 86% using Holsti's (1969) coefficient of reliability, which exceeded the minimum reliability of 80% suggested by Riffe et al. (1998). This statistic reflects the number of agreements per total number of coding

decisions, and is the simplest and most common method of reporting inter-rater reliability. While many statisticians have judged this method as inadequate because it does not account for chance agreement among raters (Capazolli, McSweeney, & Sinha, 1999), others have argued that methods accounting for chance, such as Cohen's kappa, are overly conservative (Potter & Levine-Donnerstein, 1999). The researchers then checked the coding and resolved differences. The data were collected and analysed using Microsoft Excel 2002. Once the initial quantitative coding was completed, the authors qualitatively assessed the article content to further ascertain how experiments were discussed, and what terminology was used.

## Results

Of the 400 articles reviewed, 12% ( $n = 46$ ) were included in this analysis. Of the 46 articles extracted, 21 reported the findings of original experimental research. The remaining majority—25 articles—included a conceptual discussion of research methods in public relations or made some explicit reference to experiments extending from a brief mention or "passing reference" (e.g., White & Raman, 1999) to a more extensive conceptual discussion and review of experimental research (e.g., Hallahan, 1999b).

### *Conceptual Discussion or Mention of Experiments.*

Of the 25 articles that included a substantive discussion of research methods, 19 articles explicitly mentioned experiments. Three of these articles, all in *PRR*, engaged in a substantive discussion of methods that included experimental research design (Fischer, 1995; Hallahan, 1999b, 2001). Fischer (1995) proposed "control construct evaluation procedures" (p. 45) as an easy, cost-effective way to evaluate information campaigns. Hallahan (1999b) provided an extensive review of experimental research in relation to the implied "third-party endorsement effect" (p. 331), and later (2001) proposed applying

usability research for pre-testing communication messages. None of the *JPRR* articles in this timeframe presented conceptual or critical discussions of experiments.

Another 16 articles made only a passing reference to experiments. A “passing reference” is defined as an explicit mention of experiments with little or no discussion. White and Raman (1999) provide a suitable example of a passing reference to experiments. When offering alternate methods for carrying out the study, the authors state that “focus groups . . . conjoint analyses . . . or experiments may achieve these goals” (p. 417). An additional six articles included a general discussion of methods, but experiments were not mentioned in that discussion. This finding is illustrated by, for example, Hiscock’s (2004) article about qualitative research methods. Knowledge mapping and other methods are mentioned and discussed, but talk of experiments is absent from the article.

#### *Experimental Designs.*

In addition to the 25 articles that mentioned or discussed experiments, 21 coded articles reported the *application* of an experimental research design (see **Appendix 1**); 15 of these articles were found in *JPRR* and six in *PRR*. Only one article defined the experimental method within the title (Coombs & Holladay, 2001), and 14 mentioned the experimental method in their abstracts. All 21 articles discussed the parameters of experimental design to some degree in the method sections of their articles. The following sections describe findings regarding authorship, identified experimental design, types of problems or topics addressed, types of manipulations, typical subjects, and limitations and advantages of experimental design.

#### *Authorship.*

Four researchers appeared as authors or co-authors of multiple journal articles. Timothy Coombs (1998, 1999; Coombs & Holladay, 1996, 2001; Coombs and Schmidt, 2000) and Coy Callison (2001, 2004; Callison & Zillman,

2002) were the most prolific authors with five and three articles respectively, all published in *JPRR*. Coombs’ research focused primarily on crisis communication; Callison pursued experimental research regarding the image of public relations practitioners. Anderson (1995, 2000) was sole author of two publications, one in each journal, and Jo sole-authored one *PRR* article (2004) and co-authored one *JPRR* article with Kim (Jo & Kim, 2003). Anderson (1995) tested the self-efficacy theory to help discourage friends from driving drunk, and later (2000) explored how public health campaign messages should be designed to reach young women about the importance of breast self-examination. Jo, with co-author Kim (2003), employed an experimental design to investigate how Web interactivity and content affected users’ views of corporations. Jo (2004) also explored the credibility of news stories in contrast to advertising.

#### *Experimental Designs Identified.*

It was difficult to identify and confidently categorise the research reported in some of the extracted articles as true, quasi, or pre-experimental. The descriptions of method design did not always explicate how, or if, randomisation or control measures were applied. Only one article defined random assignment of conditions, random assignment of subjects, and subject cell sizes (Jo & Kim, 2003). Their between-group experiment examined the impact of Web site interactivity and content on the relationship between companies and their constituents. However, whether it is, indeed, a true experiment might be questioned because the experimental setting was not controlled; subjects were asked to participate in their own, natural environment. Additionally, Coombs and Holladay (2001) specified manipulations of crisis conditions to measure how a company’s crisis and relationship history are presented, and identified cell assignment to nine scenarios, but did not indicate how cells were distributed.

Furthermore, 11 articles detailed experimental manipulations and conditions, and reported the random assignment of conditions to subjects, but did not specify any detail about

cell size for each random condition (Anderson, 1995, 2000; Arpan & Pompper, 2003; Callison & Zillmann, 2002; Christen, 2004; Fischer, 1998; Hallahan, 1999a; Jo, 2004; Lyon & Cameron, 2004; Owen & Karrh, 1996; Wan & Pfau, 2004). Reporting this information is a standard requirement for this method, and is comparable to reporting response rates in surveys and intercoder reliability in content analysis. Although it might be assumed that these studies are true experiments, classification was hindered by the lack of specificity about the experimental procedures.

Another seven articles described the manipulation of experimental factors and identified sample size, but did not specify randomisation or sample cell sizes (Callison, 2001, 2004; Coombs, 1998, 1999; Coombs & Holladay, 1996; Coombs & Schmidt, 2000; Walters, Walters, Kern-Foxworth, & Priest, 1997). Again, this lack of specifics does not invalidate any of these studies, but hinders the interpretation and independent assessment of findings, and might also affect the ability of subsequent researchers to replicate their studies.

One article (O'Malley & Kelleher, 2002) reported a self-described quasi-experiment exploring the effects of time and geographic separation on Internet self-efficacy in teamwork. The subjects, all students, were randomly assigned to groups and asked to self-report their efficacy in using various Internet technologies before, during, and after an assigned project. At the outset, the authors describe this research as a quasi-experiment; the conditions of the experiment could not be controlled because the subjects were college students working in a natural setting during the course of the two-and-a-half-week timeframe.

#### *Problems Addressed Using Experiments.*

In this section we provide an overview of the topics addressed by experimental research designs. The topic that garnered the most attention in the coded articles was crisis communication, which accounted for eight articles (Arpan & Pompper, 2003; Coombs, 1998, 1999; Coombs & Holladay, 1996, 2001; Coombs & Schmidt, 2000; Lyon & Cameron,

2004; Wan & Pfau, 2004). Four articles addressed company or product messages (Hallahan, 1999a; Jo, 2004; Jo & Kim, 2003; Owen & Karrh, 1996), three focused on the image of public relations practice (Callison, 2001, 2004; Callison & Zillman, 2002), and three presented health communication messages (Anderson, 1995, 2000; Walters, Walters, Kern-Foxworth, & Priest, 1997). One article addressed pedagogical issues (O'Malley & Kelleher, 2002), and two were categorised as "other" topics; problem-solving (Fischer, 1998) and conflict negotiation (Christen, 2004).

#### *Types of Manipulations.*

Study participants were exposed to a variety of manipulated scenarios, public service announcements, news articles, or advertisements. Print news stories were used in seven of the articles (Callison, 2001; Callison & Zillman, 2002; Coombs, 1998, 1999; Coombs & Holladay, 2001; Coombs & Schmidt, 2000; Lyon & Cameron, 2004), and an additional three articles compared news stories and advertising messages (Hallahan, 1999a; Jo, 2004; Owen & Karrh, 1996). Video presentations, public service announcements, and an educational program were used in three experiments (Anderson, 1995, 2000; Walters, Walters, Kern-Foxworth, & Priest, 1997). Case descriptions or scenarios were manipulated in five journal articles (Arpan & Pompper, 2003; Callison, 2004; Coombs & Holladay, 1996; Fischer, 1998; Wan & Pfau, 2004), and one article used company Web sites (Jo & Kim, 2003). A pedagogy study used a geographic dispersion of students (O'Malley & Kelleher, 2002), and another employed a conflict negotiation exercise (Christen, 2004).

#### *Typical Subjects.*

As is typical of academic experimental research across disciplines, the majority of studies—14—relied solely on college students as study subjects (Anderson, 1995, 2000; Callison & Zillman, 2002; Christen, 2004; Coombs, 1998; Coombs & Holladay, 1996, 2001; Hallahan, 1999a; Jo, 2004; Jo & Kim,

2003; O'Malley & Kelleher, 2002; Owen & Karrh, 1996; Walters, Walters, Kern-Foxworth, & Priest, 1997; Wan & Pfau, 2004). Some of these studies (e.g., Coombs & Holladay, 1996, 2001; Coombs & Schmidt, 2000; Owen & Karrh, 1996) indicated that there were limitations associated with relying on the perceptions of students, who often did not represent a realistic stakeholder public. Jo and Kim (2003), however, noted the advantage of using a student population for a Web site study, explaining that this demographic represented a large segment of the Internet user population. O'Malley and Kelleher's (2002) pedagogical study was appropriate to a student research population because it examined issues associated with college-level teaching.

Two studies used both students and community members in their samples (Coombs & Schmidt, 2000; Lyon & Cameron, 2004). Public relations or crisis communication practitioners were subjects in two articles (Coombs, 1999; Fischer, 1998), and journalists/journalism students (Arpan & Pompper, 2003), school teachers (Callison, 2001), and United States residents (Callison, 2004) were the subjects of one study apiece.

#### *Limitations and Advantages of Experiments.*

The limitations of experimental research were reinforced in this study's articles. Authors noted the limitation of testing only a few variables at a time and the inability to generalise results across larger populations (e.g., Arpan & Pompper, 2003; Christen, 2004; Coombs, 1998, 1999; Coombs & Holladay, 2001; Jo & Kim, 2003; Lyon & Cameron, 2004; Wan & Pfau, 2004). Wan and Pfau also noted the impact of the subjects' preconceived notions as possibly affecting the outcome of their study. As noted earlier, the reliance on students as subjects was identified by some authors as a potential limitation (e.g., Coombs & Holladay, 1996, 2001; Coombs & Schmidt, 2000; Owen & Karrh, 1996).

Authors also pointed to the advantages of applying experimental research methods, including finding causal relationships between variables (e.g., Anderson, 1995). Coombs and

Schmidt (2000) argued for the advantages of employing an experimental design: "Although not perfect, the experimental design gives us greater control over the factors and a clearer picture of the effect image response strategies have on people than does a single case study – it provides stronger evidence for drawing causal inferences" (p. 174). Lyon and Cameron (2004) saw value in the use of experimental designs to help define a "protocol for message testing in public relations" (p. 233).

## **Discussion**

This discussion is organised around the two research questions—in the context of what public relations problems are experimental research designs applied, and how are experiments explained in public relations research. The answer to the first research question is that very few professional and academic questions are examined by public relations scholars using experimental research designs. In spite of the rigour and reputation of this method in the world of science, if 10 years of scholarly articles are any indicator, experimental research is poorly used and even more poorly understood in public relations research. The 21 articles that applied the experimental design contributed valuable information for crisis and health communication, product messages, and the public relations discipline's image. Yet, a handful of studies represent the very limited way in which experimental research is applied by the field. Used more liberally and effectively, this method could help us solve compelling measurement and evaluation questions that cannot be adequately measured solely using more popular methods such as surveys, focus groups, or interviews. For example, some questions focusing on organization credibility and trustworthiness are being addressed by advertising scholars using the experimental method (Sinclair & Irani, 2005). Furthermore, just as Cutler (2004) leveled criticism at the field for lack of rigour in designing and reporting case study research, this study revealed some important shortcomings in the reporting of experimental research.

The short answer to the second research question about the way experiments are reported and explained is ‘not very well’. One of the challenges of this study was the categorisation and organisation of the relatively small number of research designs described as experiments. The explication of some of the fundamental methodological imperatives of experimental design—randomisation and control—was sometimes sketchily or poorly undertaken, making it difficult to assess the extent to which the research met the requirements of true experimental research or was, in fact, a pre-experiment, quasi-experiment, or some other hybrid design. In the few published experiments examined in this study, fundamental elements of experimental research design such as randomness and control were not addressed adequately, if at all. While not suggesting that such oversights invalidate the research, we believe they do raise questions about the rigour and reporting standards acceptable for publication in this field.

The most significant contributions were made by researchers applying experimental research designs in response to crisis and health communication research problems. As it is reported in the two major US-based journals, apart from some disparate coverage of other topics, nothing resembling a critical mass of work underpinned by experimental research design exists in public relations research. Two of the acknowledged limitations of this research are the overwhelmingly US bias, together with the exclusion of communication-related journals that are relevant but not exclusive to the field. In the course of this research we uncovered no evidence—*anecdotal or otherwise*—that non-US-based public relations research was more likely to apply the experimental research design. An assessment of the 2003 and 2004 issues of *PRism*, for example, found no experimental designs among the 10 refereed articles or six commentaries. The topic, however, is worthy of further exploration within a broader range of communication journals.

Consistent with the positivist perspective, Stacks (2002) contends that the experimental research design is worthy of far more attention in public relations research, education, and

practice. For example, crisis management pundits suggest that crises compress time, changing the ways organisations make decisions. Although this prediction makes sense and case study research suggests time compression does not change the way people make decisions, what “we lack is experimental validation that time compression (independent variable) changes the way decisions are made (dependent variable)” (p. 197). Additionally, the use of experiments to test the effectiveness of communication messages, similar to those conducted by market researchers about such topics as consumer price judgements (Danziger & Segev, 2006), action-based learning (Eisenstein & Hutchinson, 2006), and brand dilution (Pullig, Simmons, & Netemeyer, 2006), would be of significant value in the public relations domain. Practitioner attention to research continues to intensify—especially in relation to the measurement and evaluation of public relations programs (e.g., Bush, 2006; Iacono, 2006; Institute for Public Relations, 2006)—making this an opportune time to reconsider the place of experimental design in academic and applied research.

The shortcomings identified in this study appear to be symptomatic of the reluctance of the field to explore the opportunities experimental research designs provide for specifying causal relationships. This is further illustrated by the fact that the experimental research design was consistently ignored by researchers, not even rating a passing mention in discussions of research limitations and opportunities for further research.

## Conclusion

Four years ago, researcher Don Stacks (2002) expressed concern that the experiment is “probably the most rigorous kind of research conducted but, at the same time, is almost never found in public relations research” (p. 195), whether in the academic or professional environments. According to the results of this study, not much has changed since Stacks first made that observation. This “avoidance” of the experimental method has persisted over time in spite of three critical factors: the growth of

public relations postgraduate programs; the concomitant progress in producing trained researchers; and the method's usefulness in measuring key public relations-related and relationship-management-related topics such as trust, accountability, and credibility.

Postgraduate programs have blossomed since the profession first introduced its body of knowledge in the 1980s and theory and research methods became keystones of the curriculum. Fifty-one schools provided graduate-level public relations programs in 1981 (Hesse, 1984), and, according to a 1999 study by the Commission on Public Relations Education (Public relations education, 1999), about 70 master's programmes are in operation today. There has been consistent agreement since the early years that public relations training should be grounded in theories that can be empirically tested, for both academic and professional advancements in how public relations functions in the real world. Such real-world glimpses are demanded by practitioners whose interests tend to be given high priority in the field's scholarly research. Yet limited resources and expertise often prevent public relations practitioners from pursuing experimental designs.

It must be asked whether the lack of experimental research has impeded progress in producing trained researchers. Not understanding the long-standing principles and protocols of experimental research, practitioners tend to devalue insights derived in settings that are so rigorously quarantined from the 'real world'. As this study shows, those participating in experiments in academic settings are typically college students; many practitioners (and some scholars) have difficulty understanding the value of findings that do not emerge directly from the publics with whom their organisations seek to build relationships.

Experiments therefore appear to be under-recognised for their usefulness in measuring key public relations- and relationship-management-related topics such as trust, accountability, and credibility. Given the relative enthusiasm and success with which the advertising and marketing fields have accepted and applied the experimental method (e.g., Sinclair & Irani, 2005), it seems that public relations research

may again be legitimately criticised as naïve and lacking rigour. If this study of two top-ranking journals is any indicator, public relations scholars are failing to help practitioners and emerging scholars and educators to understand the potential solutions and insights offered by the less 'accessible' research methods. Scholars could go a long way to resolve the academic-practitioner divide by partnering with the professional community in research endeavors. At a time when the field is looking for more and better ways to measure and evaluate the impact of public relations activities, it is time to acknowledge and reconsider, rather than rationalise, the entrenched methodological bias in public relations research.

## References

- AEJMC Public Relations Division web site. (2006). Retrieved March 30, 2006, from <http://lamar.colostate.edu/~aejmcpr/>.
- Anderson, R. B. (1995). Cognitive appraisal of performance capability in the prevention of drunken driving: A test of self-efficacy theory. *Journal of Public Relations Research* 7(3), 205–229.
- Anderson, R. B. (2000). Vicarious and persuasive influences on efficacy expectations and intentions to perform breast self-examination. *Public Relations Review* 26(1), 97–114.
- Arpan, L. M., & Pompper, D. (2003). Stormy weather: Testing 'stealing thunder' as a crisis communication strategy to improve communication flow between organisations and journalists. *Public Relations Review* 29(3), 291–308.
- Broom, G. M., & Dozier, D. M. (1990). *Using research in public relations: Applications to program management*. Englewood Cliffs, NJ: Prentice-Hall.
- Burgoon, M., Pfau, M., & Birk, T. S. (1995). An inoculation theory explanation for the effects of corporate issue/advocacy advertising campaigns. *Communication Research* 22(4), 485–495.
- Bush, M. (2006, March 27). How P&G measures up. *PRWeek*, 14–15.

- Callison, C. (2001). Do PR practitioners have a PR problem? The effect of associating a source with public relations and client-negative news on audience perception of credibility. *Journal of Public Relations Research* 13(3), 219–234.
- Callison, C. (2004). The good, the bad, and the ugly: Perceptions of public relations practitioners. *Journal of Public Relations Research* 16(4), 371–389.
- Callison, C., & Zillmann, D. (2002). Company affiliation and communicative ability: How perceived organisational ties influence source persuasiveness in a company-negative news environment. *Journal of Public Relations Research* 14(2), 85–102.
- Capazolli, M., McSweeney, L., & Sinha, D. (1999). Beyond kappa: A review of interrater agreement measures. *The Canadian Journal of Statistics* 27(1), 3–23.
- Christen, C. T. (2004). Predicting willingness to negotiate: The effects of perceived power and trustworthiness in a model of strategic public relations. *Journal of Public Relations Research* 16(3), 243–267.
- Coombs, W. T. (1998). An analytic framework for crisis situations: Better responses from a better understanding of the situation. *Journal of Public Relations Research* 10(3), 177–191.
- Coombs, W. T. (1999). Information and compassion in crisis responses: A test of their effects. *Journal of Public Relations Research* 11(2), 125–142.
- Coombs, W. T., & Holladay, S. J. (1996). Communication and attributions in a crisis: An experimental study in crisis communication. *Journal of Public Relations Research* 8(4), 279–295.
- Coombs, W. T., & Holladay, S. J. (2001). An extended examination of the crisis situations: A fusion of the relational management and symbolic approaches. *Journal of Public Relations Research* 13(4), 321–340.
- Coombs, T., & Schmidt, L. (2000). An empirical analysis of image restoration: Texaco's racism crisis. *Journal of Public Relations Research* 12(2), 163–178.
- Cutler, A. (2004). Methodical failure: The use of case study method by public relations researchers. *Public Relations Review* 30(3), 365–375.
- Danziger, S., & Segev, R. (2006). The effects of informative and non-informative price patterns on consumer price judgements. *Psychology & Marketing* 23(6), 535–553.
- Dozier, D. M., & Lauzen, M. M. (2000). Liberating the intellectual domain from the practice: Public relations, activism, and the role of the scholar. *Journal of Public Relations Research* 12(1), 3–22.
- Editorial scope. (2006). *Journal of Public Relations Research*. Published by Lawrence Erlbaum Associates. Retrieved 5 July 2006, from <https://www.erlbaum.com/shop/tek9.asp?pg=products&specific=1062-726X>.
- Eisenstein, E. M., & Hutchinson, J. W. (2006). Action-based learning: Goals and attention in the acquisition of market knowledge. *Journal of Marketing Research* 43(2), 244–258.
- Fischer, R. (1995). Control construct design in evaluating campaigns. *Public Relations Review* 21(1), 45–58.
- Fischer, R. (1998). Public relations problem solving: Heuristics and expertise. *Journal of Public Relations Research* 10(2), 137–153.
- Goldsmith, R. E., Lafferty, B. A., & Newell, S. J. (2000). The impact of corporate credibility on consumer reaction to advertisements and brands. *Journal of Advertising* 29(3), 43–54.
- Grewal, D., Gottlieb, J., & Marmorstein, H. (1994). The moderating effects of message framing and source credibility on the price-perceived risk relationship. *Journal of Consumer Research*, 21(1), 145–153.
- Hallahan, K. (1999a). Content class as a contextual cue in the cognitive processing of publicity versus advertising. *Journal of Public Relations Research* 11(4), 293–320.
- Hallahan, K. (1999b). No, Virginia, it's not true what they say about publicity's 'implied third-party endorsement' effect. *Public Relations Review* 25(3), 331–350.
- Hallahan, K. (2001). Improving public relations web sites through usability research. *Public Relations Review* 27(2), 223–239.

- Hazleton, V., & Botan, C. H. (1989). The role of theory in public relations. In V. Hazleton & C. H. Botan (Eds.), *Public relations theory* (pp. 3–16). Hillsdale, NJ: Erlbaum.
- Hesse, M. B. (1984). Blueprint for graduate study: From idealism to reality. *Public Relations Journal* 40(3), 22–24.
- Hiscock, J. (2004). Developing knowledge management awareness in public relations students. *Public Relations Review* 30(1), 107–115.
- Holsti, O. (1969). *Content analysis for the social sciences and humanities*. Reading, MA: Addison-Wesley Publishing Company, Inc.
- Homer, P. M. (2006). Relationships among ad-induced affect, beliefs, and attitudes: Another look. *Journal of Advertising* 35(1), 35–51.
- Iacono, E. (2006, March 13). Measurement that adds up. *PRWeek*, 15.
- Institute for Public Relations Research Agenda. (2006). Retrieved 5 July 2006. [http://instituteforpr.org/the\\_institute.phtml?article\\_id=research\\_agenda](http://instituteforpr.org/the_institute.phtml?article_id=research_agenda).
- Iowa Guide (2002). *Public Relations Review*. Retrieved 5 July 2006, from <http://iowaguide.uiowa.edu/>.
- Jo, S. (2004). Effect of content type on impact: Editorial vs. advertising. *Public Relations Review* 30(4), 503–512.
- Jo, S., & Kim, Y. (2003). The effect of web characteristics on relationship building. *Journal of Public Relations Research* 15(3), 199–223.
- Lattimore, D., Baskin, O., Heiman, S. T., Toth, E. A., & VanLeuven, J. R. (2004). *Public relations: The profession and the practice*. Boston: McGraw-Hill.
- Lyon, L., & Cameron, G. T. (2004). A relational approach examining the interplay of prior reputation and immediate response to a crisis. *Journal of Public Relations Research* 16(3), 213–241.
- McElreath, M., & Blamphin, J. M. (1994). Partial answers to priority research questions-and gaps-found in the Public Relations Society of America's body of knowledge. *Journal of Public Relations Research* 6(2), 69–103.
- Miller, M. D., & Levine, T. (1996). Persuasion. In M. B. Salwen & D. W. Stacks (Eds.), *An integrated approach to communication theory and research* (pp. 261–276). Mahwah, NJ: Erlbaum.
- Newsom, D., Turk, J. V., & Kruckeberg, D. (2004). *This is PR: The realities of public relations* (8<sup>th</sup> ed.). Belmont, CA: Wadsworth/Thomson Learning.
- O'Malley, M., & Kelleher, T. (2002). Papayas and pedagogy: Geographically dispersed teams and Internet self-efficacy. *Public Relations Review* 28(2), 175–184.
- Owen, A. R., & Karrh, J. A. (1996). Video news releases: Effects on viewer recall and attitudes. *Public Relations Review* 22(4), 369–378.
- Potter, W., & Levine-Donnerstein, D. (1999). Rethinking validity and reliability in content analysis. *Journal of Applied Communication Research*, 27(3), 258–284.
- Public relations education for the 21<sup>st</sup> century: A port of entry*. (1999). New York: Commission on Public Relations Education.
- Public Relations Review*. (2006). Published by Elsevier. Retrieved 5 July 2006, from [http://www.elsevier.com/wps/find/journaldescription.cws\\_home/620188/description#description](http://www.elsevier.com/wps/find/journaldescription.cws_home/620188/description#description).
- Pullig, C., Simmons, C. J., & Netemeyer, R. G. (2006). Brand dilution: When do new brands hurt existing brands? *Journal of Marketing* 70(2), 52–66.
- Riffe, D. T., Lacy, S., & Fico, F. (1998). *Analyzing media messages: Using quantitative content analysis in research*. Mahwah, NJ: Erlbaum.
- Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Boston: Houghton Mifflin.
- Sinclair, J., & Irani, T. (2005). Advocacy advertising for biotechnology: The effect of public accountability on corporate trust and attitude toward the ad. *Journal of Advertising* 34(3), 59–73.
- Stacks, D. W. (2002). *Primer of public relations research*. New York: The Guilford Press.
- Stammerjohan, C., Wood, C. M., Chang, Y., & Thorson, E. (2005). An empirical investigation of the interaction between publicity, advertising,

and previous brand attitudes and knowledge. *Journal of Advertising* 34(4), 55–67.

Taylor, C. R. (2005). Moving international advertising research forward: A new research agenda. *Journal of Advertising* 34(1), 7–16.

Walters, T. N., Walters, L. M., Kern-Foxworth, M., & Priest, S. H. (1997). The picture of health? Message standardization and recall of televised AIDS public service announcements. *Public Relations Review* 23(2), 143–159.

Wan, H.-H., & Pfau, M. (2004). The relative effectiveness of inoculation, bolstering, and combined approaches in crisis communication. *Journal of Public Relations Research* 16(3), 301–328.

White, C., & Raman, N. (1999). The World Wide Web as a public relations medium: The use of research, planning, and evaluation in web site development. *Public Relations Review* 25(4), 405–419.

### **Address for correspondence**

Lois A. Boynton, lboynton@email.unc.edu,  
(919) 843-8342

Elizabeth K. Dougall, dougall@unc.edu, (919)  
962-6396

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## Appendix 1: Articles Employing Experimental Design

Author	Year	Journal*	Experiment characteristics	Manipulation	Subjects	Topic	Where experiment identified
Anderson	1995	JPRR	Random conditions and sample	PSA drunk-driving prevention	Students	Message	Abstract, method
Anderson	2000	PRR	Random conditions and sample	Instructional video on breast self-exam	Students (female)	Message	Abstract, method
Arpan & Pompper	2003	PRR	Random conditions and sample	Crisis scenarios with “stealing thunder” strategy	Journalists	Crisis	Abstract, method
Callison	2001	JPRR	Random conditions	“news” stories	School teachers	PR image	Abstract, method
Callison	2004	JPRR	Random conditions	Fictitious scenarios told over phone	US residents	PR image	Abstract, method
Callison & Zillman	2002	JPRR	Random conditions and sample	“news” stories	Students	PR image	Abstract, method
Christen	2004	JPRR	Random conditions and sample	Negotiation exercise	Students	Other (conflict negotiation)	Abstract, method
Coombs	1998	JPRR	Random conditions	“news” stories	Students	Crisis	Method
Coombs	1999	JPRR	Random conditions	“news” stories about accidents	Crisis managers	Crisis	Abstract, method
Coombs & Holladay	1996	JPRR	Random conditions	Case descriptions	Students	Crisis	Title, abstract, method
Coombs & Holladay	2001	JPRR	Random conditions and sample; cell assignments but not distribution	“news” stories about accident	Students	Crisis	Abstract, method
Coombs & Schmidt	2000	JPRR	Random conditions	“news” stories about Texaco racism	Students and community	Crisis	Abstract, method
Fischer	1998	JPRR	Random conditions and sample	Problem-solving scenarios	PR practitioners	Other	Abstract, method
Hallahan	1999a	JPRR	Random conditions and sample	“Ads” and “news” stories	Students	Message	Abstract, method
Jo	2004	PRR	Random conditions and sample	“news” stories – editorial vs advertising	Students	Message	Method
Jo & Kim	2003	JPRR	Random conditions and sample; cell assignment identified. Natural setting.	Company Web sites	Students	Web and relationship building	Abstract, method

<b>Author</b>	<b>Year</b>	<b>Journal</b>	<b>Experiment characteristics</b>	<b>Manipulation</b>	<b>Subjects</b>	<b>Topic</b>	<b>Where experiment identified</b>
Lyon & Cameron	2004	JPRR	Random conditions and sample	"news" stories	Students, community	Crisis	Abstract, method
O'Malley & Kelleher	2002	PRR	Quasi-experiment	Geographic dispersion of students	Students	Education	Method
Owen & Karrh	1996	PRR	Random conditions and sample	"news" stories – editorial (VNR) versus advertising	Students	Message	Method
Walters, Walters, Kern-Foxworth, Priest	1997	PRR	Random conditions	PSAs about AIDS	Students	Message	Method
Wan & Pfau	2004	JPRR	Random conditions and sample	Crisis scenarios	Students	Crisis	Method

\* JPRR = *Journal of Public Relations Research*; PRR = *Public Relations Review*