Management Slant
VOL. 51 • NO. 1 March 2011

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- Internet Panels for advertising research are cost and time effective and produce comparable results

DOI: 10.2501/JAR-51-1-000-000

Pitting the Mall and the Internet in Advertising-Research Completion

Internet Panels Are More Popular: Are They More Effective?

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Internet surveys—particularly those utilizing panels of consumers—have supplanted the mall intercept as the method of choice for many advertising researchers. Internet surveys are estimated to be growing at a rate of almost 14 percent per year, with as much as 35 percent of all advertising research conducted using Internet panels. One question remains: How do the data utilizing Internet panels compare with mall-intercept data? This empirical study seeks to answer this question by replicating four mall-intercept studies using an Internet panel. Print, broadcast, and Internet ads were tested using the same products/brands, test and control ads, screening criteria, and survey questions. The results showed some differences, particularly with responses to open-end questions. The results also demonstrated that much of that difference appeared to be due to the influence of the researcher in the mall-intercept environment, a factor not present with Internet-panel surveys.

INTRODUCTION

In the 1980s, mall-intercept research supplanted the telephone for the bulk of consumer research and supplanted in-home surveys for advertising research. Malls offered the advantages of easy access to large groups of relatively homogeneous populations and allowed research firms to test express and implied claims and consumer confusion (in trademark matters) in print and broadcast ads and packages. Additionally, because of the presence of a trained interviewer, attitudes, opinions, and beliefs and secondary claims and meanings could be probed with additional open-end and closed-end questions.

Since the late 1990s, the mall-intercept method of testing advertising and package claims has been supplanted by the use of Web surveys for a significant percentage of advertising studies (Frost-Norton, 2005). Part of the reason is the decline of the mall as a destination for shopping, supplanted by the "big-box" stores such as WalMart and Target, and by online buying behavior. Moreover, although there are data to suggest that consumers who view print advertisements on the Web are more critical than those who see the same ads in a print format (Gallagher, Foster, and Parsons, 2001), three questions remain unanswered:

- Is there any difference in the quality of data when an Internet panel is utilized as opposed to a mall-intercept methodology for testing advertising?
- Is there a difference in the data as a function of the type of advertisement tested (i.e., print, television, or Internet) or as a function of the product category tested?
- Is there is a difference in the data between mall-intercept generated data versus Internet-panel data as a function of whether the questions are asked in an open-ended or a closed-ended question format?

DOI: 10.2501/JAR-51-1-000-000

This article seeks to answer all of these questions by replicating two mall-intercept surveys that were used in two separate litigation proceedings, one related to claims made for a food product (chicken) and one for claims made for kitchenware.

The mall-intercept studies were replicated with an Internet panel that tested two print ads: one broadcast (TV) advertisement for a chicken product and one Internet home page for kitchenware. Additionally, in both the mall-intercept and the Internet-panel studies, a control advertisement also was tested, making it possible to assess and compare the impact of the claims made in the different ads, independent of any "noise" that may have been present in the different medium in which the advertisement is tested.

Most mall-related research has focused on comparing mall-intercept studies with other face-to-face research methods such as in-home interviewing.

PRIOR RESEARCH

Mall Intercept

Research on the mall-intercept methodology has focused on two areas:

- The relative effectiveness of the mall method and the quality of mall-derived data as compared to the methodologies it supplanted (namely telephone and in-home interviewing)
- Issues related to sampling and the representativeness of a mall sample

Data Quality Issues in Mall-intercept Research. Most mall-related research has focused on comparing mall-intercept studies with other face-to-face research methods such as in-home interviewing. For example, one study noted that in both, the interviewer can explain confusing or complex questions, use visual aids and/or other stimuli to elicit responses and assess contextual conditions (Hair, Bush, and Orlinan, 2003). Another also found that mall-intercept responders—because they involve the presence of an interviewer—are more likely to give more socially desirable answers than individuals participating in telephone studies (Hair et al., 2006). This second study also found there was no difference in the completeness or depth of answers between mall and telephone respondents.

Sampling Issues in Mall Studies. The second area where there has been extensive research relative to mall studies is the question of the representativeness of the mall sample. The most common critique of the mall-intercept methodology has been that the sample was not representative of the population as the only individuals who could be surveyed were those who happened to be in the mall when the study was executed. In fact, in 1980, Sudman (1980) suggested that researchers using the malls for research should use quota-sampling and sample-weighting techniques in selecting respondents.

Other authors addressing the sampling issue have examined the characteristics of the mall respondent. For example, some have found that those who participate in mall-intercept studies (the "responders") were more likely to be recreational shoppers or "browsers," in part because they spent more time in the mall (Dupont, 1987; Nowell and Stanley, 1991; Keillor and Sutton, 1993). Other have found that browsers and/or mall employees were more likely to participate in mall studies and suggested that they were likely to bias the mall results because they had a higher level of product knowledge and/or tended to be opinion leaders (Jarboe and McDaniel 1987; Keillor and Sutton).

Thus, although mall-intercept studies might have suffered from problems of representativeness, the mall-intercept methodology still had significant advantages over other methods because of their ability to show stimuli and probe for specifics with open-ended questions. The advantage of being able to probe, however, also was a potential disadvantage of the mall-intercept methodology, as it presented the potential for the interviewer to lead the respondent or suggest responses by comments, by nonverbal communications, and even by the depth to which the interviewer probed. Thus, the results may show a particular response as having been given by the respondents without any indication as to the extent to which it was: spontaneous (the result of extensive probing, verbal or nonverbal cues) or simply the fact that the respondent finally "read" the claim sought by the researcher. Although this disadvantage could be controlled—but not eliminated—by the quality and training of the mall-intercept personnel, there was virtually no way to tell from the results the extent to which the face-to-face interviewing process biased the results.

Internet Surveys

The role of the Internet in marketing research no longer is questioned. As noted by Cambiar in 2006, "Online research continues its headlong march to become one of the most dominant (if not the most dominant) data collection methodology worldwide." In fact, ESOMAR, in 2008, estimated that online research was growing by almost 14 percent per year. This

growth is also evidenced by the fact that as much as 35 percent of all data collected in 2006 were online (Bradley, 2006). Internet surveys also have become more prevalent in trademark litigation (Gelb and Gelb, 2006).

Internet-survey Advantages. The primary advantage of Internet surveys is the ability to introduce sophisticated questionnaires and realistic images and audio files. Additionally, Internet surveys can be completed more quickly than mall studies and, generally, at lower cost—particularly if the research firm has a targeted sample with email addresses (Braunsberger et al., 2007). Internet studies also enable firms to target specific types of respondents efficiently through screening questions.

Internet-survey Disadvantages. The biggest disadvantages for Internet survey are the representativeness of the sample and, therefore, the projectability of the results to the population. Clearly, Internet surveys—like mall studies—are limited to the respondents who happen to be members of the selected panel and who self-select to participate in the research. Thus, neither method meets even minimum standards for projectability beyond the selected respondents.

Moreover, although the total number of responses can be increased by increasing the size of the Internet-survey invitation pool,, questions have been raised about actual response rates for Internet surveys For example, in one analysis of more than 100 Web-based surveys, the percentage of undelivered e-mail invitations ranged from 1 percent to 20 percent and that the percentage of respondents who received the e-mail invitation but did not access the questionnaire ranged from 1 percent to 96 percent (Manfreda and Vehovar, 2004). Conversely, another study compared telephone and Web responses and found that there was no difference in the predictive validity between telephone and Web-based surveys (Roster, Rogers, Albaum, and Klein, 2004), Similarly, in a study of 3,238 respondents by the American Association for Public Opinion and Harris Interactive, the authors found "high levels of reliability and validity that gives us much greater confidence that data collected from Web-based surveys can be at least as good as data obtained in other research modalities, if not better" (AAPOR, 2000).

The biggest disadvantages for Internet survey are the representativeness of the sample and, therefore, the projectability of the results to the population.

Internet Panels

The pre-recruited Internet panel is an important component of Internet surveys. In fact, one study found that 66 percent of marketing research firms used pre-recruited outside panels for a significant percent of their research (Cambiar, 2006). The advantage of a pre-recruited panel is that response rates are likely to be significantly higher (because of incentives to participants) and, as some of the Internet-panel firms have access to as many as 2.5 million e-mail addresses, their utilization permits pre-identification and selection of samples to fit desired demographics. Importantly, as noted by Harris Interactive (which has 6.5 million members worldwide on its Harris Online Panel) Internet-panel yields results that are no different from those derived from the traditional Harris telephone-poll results (AAPOR, 2000).

One criticism of Internet panels, however, is the fact that, given the large number of opportunities open to respondents to be paid for their opinions, they become "professional respondents" who often are on multiple panels and are called upon to answer multiple surveys (Dennis, 2001; McDevitt and Small, 2002; Brockett and Golden, 2009). A number of authors, however, have identified steps that can be implemented to ensure the quality of the responses and limit the number of times a panel member can participate in surveys. These include routinely "cleaning" the panel of nonresponsive panel members; barring panel members who have been screened out of a study from being in the panel pool for a number of days; and limiting the number of surveys a panel member may participate in during the year. Other steps include "traps" to ensure that respondents paid attention to the questions and/or visual stimuli before answering (Maronick, 2009; Richarme and Rogers, 2009).

RESEARCH QUESTIONS

Two research questions flow from a comparison of mall-intercept and Internet-based surveys:

- Is there is a difference in responses between the research methodologies as a function of the type of advertising stimuli (i.e., print, TV, or Internet) or product category?
- Is there a difference in responses as a function of the type of question asked (i.e., open-end or closed-end?

This study addresses both questions.

METHODOLOGY

The research design involved replicating two mall-intercept studies using Internet panels to test a total of four ads. The first mall-intercept study examined consumers' perceptions of ads for fresh chicken that claimed the chickens were "raised without antibiotics." Three ads were tested. The first print advertisement tested had an unqualified "Raised Without Antibiotics" (RWA claim). The second print advertisement tested added qualifying language to the RWA claim (i.e., "RWA …that create antibiotic resistance in humans"). The third advertisement tested was a television advertisement for the same chicken product with the unqualified "Raised without antibiotics" claim.

The second mall-intercept study used in this replication examined consumers' perceptions of an Internet ad/homepage for a kitchenware product. The study assessed the extent to which there was consumer confusion as to the source of the kitchenware items in the advertisement and any perceived relationship between the two brands seen in the ad.

The Internet-panel replications of the mall-intercept studies used the same print ads (test and control), television ad, and Internet ad/homepage (test and control) as the mall-intercept studies. The Internet replication also used the same screening criteria and approximately the same number of respondents with comparable mixes of two demographic characteristics: gender and age. The replications also used the same questions as were used in the mall-intercept studies.

Thus, the Internet studies were a "replication with extension" in that they "… do not alter the conceptual relationship of the earlier study but instead tests them by making changes in some aspects of the design" (Berthon, Ewing, Pitt, and Berthon, 2003). The change in the design was the medium within which the studies were executed.

FOOD-PRODUCT STUDIES

Background

Three of the mall-intercept studies tested consumers' perceptions of a claim made by Tyson Foods that its chicken products were RWA. The unqualified "Raised Without Antibiotics" claim was first approved by the U.S. Department of Agriculture (USDA) in May, 2007. Later, in December, 2007, the USDA ordered Tyson to qualify the RWA claim with the addition of "…that create antibiotic resistance in humans." Subsequently, Tyson's competitors, Sanderson Farms and Perdue Farms, sued Tyson Foods, claiming the RWA claim misled consumers.

Mall-intercept Food Study

The plaintiffs in the case (Sanderson and Perdue) commissioned a mall-intercept study that tested three Tyson ads: an unqualified RWA print ad; a qualified RWA print ad; and an unqualified RWA television ad. Included in the design was a control print advertisement that did not mention RWA. Each cell had 150 respondents.

The mall-intercept study was conducted in 28 shopping malls across the country (Bennett, 2008). Respondents in each cell were qualified as having purchased fresh raw chicken in the past 3 months or expected to purchase it in the next 3 months. After being qualified, respondents were shown an advertisement for a plate of freshly cooked Tyson chicken that had the generic copy, "Taste that fits. Great tasting recipe-ready chicken from Tyson." The test advertisements had the addition of either a qualified or an unqualified claim regarding RWA. The control had had the same visuals (i.e., a plate of Tyson chicken) but only the generic copy, "Taste that fits…" claim. After viewing one of the ads, respondents were asked, "What is the main idea of the ad?" There was one probe to the open-end question in the mall-intercept methodology. No respondent saw more than one ad.

Internet-panel Replication: Food Study

The Internet-panel study replicated the mall-intercept study design in every respect. The same print advertisement was used, and separate cells saw a print advertisement with either an unqualified or a qualified RWA claim. The third print ad—the control ad—made no reference to RWA. Thus, the claims in the three print food-product ads were:

- Unqualified Claim: "The taste that fits. Great-tasting, recipe-ready chicken from Tyson—the easy way to eat healthy. Raised without antibiotics." (unqualified claim)
- Qualified Claim: "The taste that fits. Great-tasting, recipe-ready chicken from Tyson—the easy way to eat healthy. Raised without antibiotics that create antibiotic resistance in humans." (qualified claim)
- Control: "The taste that fits. Great-tasting, recipe-ready chicken from Tyson—the easy way to eat." (control)

The fourth tested chicken advertisement was a television commercial that made the unqualified RWA claim for Tyson's chicken product. The control television advertisement was from the same television campaign but did not make any reference to RWA.[1]

The Internet-panel replication used the same screening criteria (purchased/likely to purchase fresh chicken in past/next 3 months) and had sample sizes of

[1] *No separate TV control was used in the mall-intercept study. Rather, the print control ad findings were used as a control measure for both the print and broadcast media tested.*

approximately 150 per cell. The Internet replications utilized the Market Tools' Zoomerang.com Internet panel that has 2.5 million individuals who have agreed to participate in surveys on a periodic basis.

In both the mall-intercept study and the Internet-panel replication, the advertising stimuli remained in view when respondents were asked an open-end question: "What is the main idea that the advertisement is trying to communicate?" In both the mall study and the Internet replication, respondents were asked a single follow-up probe. In the mall-intercept study, respondents were asked an "anything-else" follow-up probe. Respondents could include up to three additional messages. In both the mall-intercept study and the Internet-panel replication, respondents were then asked a closed-end question: "Does the advertisement imply or state anything about antibiotics?" Those who indicated the advertisement communicated something about chicken and antibiotics were asked "What does the advertisement imply or state about Tyson and antibiotics?" and their verbatim responses were recorded.

In both studies, respondents then were asked a closed-end question: "Which of the following statements were implied by or stated in the Tyson advertisement?" Three of the seven statements were relevant to the study: "Tyson chicken is safer than other chicken"; "Tyson chicken is better for you than other chicken"; and "Tyson chicken is more healthful than other chicken." The four response options were: "Yes, the statement was implied"; "No, the statement was not implied"; "Don't know,"; and "No opinion."

KITCHENWARE STUDY

Background

The second mall-intercept study replication compared responses to a test and control advertisement for kitchenware. The mall-intercept study was undertaken as part of a Lanham Act litigation between Farberware, the licensor of cookware, and Meyer, a Farberware licensee that bundled is own Prestige brand of kitchenware (spoons, spatula, etc.) with Farberware cookware sets in packages and in its advertising.

In both the mall-intercept study and the Internet-panel replication, the advertising stimuli remained in view when respondents were asked an open-end question: "What is the main idea that the advertisement is trying to communicate?"

The issue was whether there was consumer confusion as to the maker of the kitchenware products and consumer confusion as to an affiliation between Farberware (the licensor's brand) and Prestige (the licensee's brand; Poret, 2009).

Mall-intercept Study: Kitchenware

Respondents were first screened to include only those who (1) had personally purchased kitchenware in the past 12 months or were likely to do so in the next 12 months; (2) bought sets of kitchenware as opposed to only individual items; and (3) would have considered purchasing kitchenware on the Internet.

A total of 12 geographically dispersed malls were utilized to execute the mall-intercept study (Poret 2009). A sample of 227 qualified respondents were shown an Internet advertisement for Farberware cookware that included the Prestige brand kitchenware. A similar number of respondents (n = 214) were shown the same Internet ad, only with the name "Kitchenware" substituted for "Farberware" as a control condition. Respondents were shown the Internet "Farberware" (test) or "Kitchenware" (control) advertisement on a computer screen and asked the open-end and closed-end questions described below.

Internet-panel Replication: Kitchenware

In the Internet-panel replication, independent samples of respondents were first qualified using the same criteria as in the mall-intercept study. Respondents were then shown either the test (Farberware) or control (Kitchenware) Internet ad. There were approximately 175 respondents in each cell. The Internet-panel sample utilized for the kitchenware replication was the Market Tools Zoomerang.com panel. In the Internet replication, as in the mall kitchenware study, the advertisement stimuli (test or control) remained in view when the respondents answered the questions.

In both the mall-intercept study and the Internet-panel replication of the kitchenware study, respondents in both the test and control cells first were asked an open-end question: "Who do you think makes or puts out the kitchen tools?" The respondents were then asked, "Do you think the company that makes the kitchen tools has a business affiliation with any other company or brand?" and "Do you think the kitchen tools in the advertisement are made or put out with permission or approval of any company or brand?" Respondents who said "yes" to either of

these latter questions then were asked to specify what other company or brand.

FINDINGS

Food-advertising Studies: Print Advertisement, Food Studies

Demographic Profile. There were no significant differences in either age or gender of respondents in the mall and Internet food studies. In both the mall study and the Internet replication, between 70 percent and 75 percent of respondents were female, and approximately half of the respondents in each study were ages 18 to 39 and half ages 40 or older. Therefore, none of the differences found between the mall-intercept study and the Internet replication could be attributed to demographic differences.

Main Idea in Advertisements. There was a significant difference (t = 8.73; α = 0.001) in perception of the main idea in the advertisement with the *unqualified RWA claim* between the Internet-panel respondents and the mall-intercept respondents, with 34.0 percent of Internet-panel respondents saying that "Raised Without Antibiotics" was the main idea, compared to 78.6 percent of the mall-intercept sample (See Table 1). Moreover, similar significant differences (t = 6.56; α = 0.001) also were found in the follow-up closed-end question (i.e., "Does the advertisement mention antibiotics?"), with 51.3 percent of the Internet-panel respondents saying that it did mention antibiotics, compared to 84.7 percent of the mall respondents (See Table 1).

Similar significant differences (t = 5.57; α = 0.001) also were found for the *qualified print advertisement* (i.e., "RWA…that creates antibiotic resistance in humans"), with 32.7 percent of the Internet-panel respondents saying that RWA was the main idea in the qualified print ad, compared to 63.3 percent of respondents in the mall sample (See Table 2).

TABLE 1

Unqualified Tyson Print Ad Open-End Questions

Internet Panel			Mall Intercept			Difference		
Main Idea = RWA (Open-Ended)	51	34.0%	Main Idea = RWA (Open-End)	118	78.7%	44.7%	t = 8.73	α = 0.001
Total *N*	150			150				
Mention Antibiotics? (Closed Ended)	77	51.3%	Mention Antibiotics? (Closed End)	127	84.7%	33.4%	t = 6.56	α = 0.001
Total *N*	150			150				

TABLE 2

Qualified Tyson Print Ad Open-End Questions

Internet Panel			Mall Intercept			Difference		
Main Idea = RWA (Open-Ended)	49	32.7%	Main Idea = RWA (Open-End)	95	63.3%	30.6%	t = 5.57	α = 0.001
Total *N*	150			150				
Mention Antibiotics? (Closed Ended)	96	64.0%	Mention Antibiotics? (Closed End)	121	80.7%	16.7%	t = 3.37	α = 0.001
Total *N*	150			150				

Similarly, there was a significant difference (t = 3.37; α = 0.01) in the follow-up closed-end question (i.e., "Does the advertisement mention antibiotics") in the qualified print- advertisement condition, with significantly more respondents (80.7 percent of respondents) in the mall condition referencing the advertisement mentions antibiotics, as compared to 64 percent of respondents in the Internet sample (See Table 2).

Fewer than 5 percent of the respondents in either the mall-intercept methodology or the Internet replication who viewed the control print advertisement (i.e., with no mention of RWA) gave a positive response that the advertisement mentioned antibiotics. Therefore, no analysis of differences between test advertisement (i.e., unqualified or qualified claim) and the control advertisement was presented for either the mall-intercept or the Internet replication.

Explicit Claims in Ads. Respondents also were asked whether the advertised product was "safer," "more healthful," and "better for you" than other chicken. There were significant differences in net impressions (i.e., test advertisement minus control advertisement) between Internet and panel respondents exposed to the unqualified RWA print advertisement as being "safer" (α = 0.05), "more healthful" (α = 0.05), and "better for you" (α = 0.001) than other chicken (See Table 3).

Similarly, there were significant differences between the mall and Internet respondents in net impression (test ad minus control ad) that the Tyson chicken raised without antibiotics was "safer" (α = 0.01),

TABLE 3
Unqualified Tyson Print Ad Closed-End Questions

	Safer		More Healthful		Better for You	
	Internet	Mall	Internet	Mall	Internet	Mall
	N = 150	*N* = 150	*N* = 150	*N* = 150	*N* = 150	*N* = 150
Test	83 (55%)	97 (65%)	102(68%)	108 (72%)	93 (62%)	91 (61%)
Control	10 (6.7%)	45 (30%)	42 (28%)	69 (46%)	36 (24%)	69 (46%)
Net	73 (48.3%	52 (35%)	60 (40%)	39 (26%)	57 (38%)	22 (15%)
t	2.375		2.61		4.69	
Sig.	0.05		0.05		0.001	

"more healthful" ($\alpha = 0.001$), and "better for you" ($\alpha = 0.001$) than other chicken when respondents were exposed to the qualified RWA ad (i.e., "RWA …that creates antibiotic resistance in humans"; See Table 4).

What is noteworthy in the data in Table 3 and Table 4 is that there was no significant difference in perceptions between the Internet-panel respondents and the mall-intercept respondents seeing the RWA *test ad* in either the unqualified or qualified claim condition across the three explicit claims (i.e., "safer," "more healthful," "better for you"). In other words, all the significant differences in the net impressions in Table 3 and Table 4 were due to the significantly higher positive responses to the control ad in the mall-intercept methodology, which made no mention of RWA. Thus, the difference in net impressions between the mall-intercept respondents and the Internet-panel respondents appeared to be due to significantly higher "noise" or "yea-say" responses as measured by the control condition using the mall-intercept methodology—where an interviewer recorded the verbatim responses—compared to the Internet-panel methodology—where there was no interviewer involvement.

Television Advertisement: Food Studies

In addition to the print ads, a 30-second television commercial with an unqualified RWA claim (i.e., "Raised without Antibiotics") was tested with both the mall-intercept and the Internet-panel sample methodologies. There was a significant difference ($t = 2.08$, $\alpha = 0.05$) in percent of respondents who responded that the main idea of the advertisement with the unqualified claim was RWA when shown the ad in the mall-intercept environment (71.3 percent) compared to the responses from Internet-panel respondents (58.6 percent; See Table 5).

Similarly, there was a significant difference ($t = 2.53$, $\alpha = 0.05$) between the mall-intercept and the Internet-panel respondents when asked the closed-end question about whether the TV ad with the unqualified RWA claim mentioned antibiotics. There were, however, no significant differences in perceptions of the chicken product with the unqualified RWA claim as being "safer," "more healthful," or "better for you" than other chicken products between respondents who saw

TABLE 4
Qualified Tyson Print Ad Closed-End Questions

	Safer		More Healthful		Better for You	
	Internet	Mall	Internet	Mall	Internet	Mall
	N = 150	*N* = 150	*N* = 150	*N* = 150	*N* = 150	*N* = 150
Test	94 (63%)	94 (63%)	121 (80%)	106 (71%)	105 (70%)	90 (60%)
Control	22 (15%)	45 (30%)	42 (28%)	69 (46%	36 (24%)	69 (46%)
Net	72 (48%)	49 (33%)	79 (53%)	37 (24%)	69 (46%)	21 (14%)
t	2.67		5.41		6.46	
Sig.	0.01		0.001		0.001	

TABLE 5
Unqualified Tyson TV Ad Open-End Questions

Internet Panel			Mall Intercept			Difference		
Main Idea = RWA (Open-Ended)	61	58.6%	Main Idea = RWA (Open-End)	107	71.3%	12.7	$t = 2.08$	$\alpha = 0.05$
Total *N*	104			150				
Mention Antibiotics? (Closed Ended)	75	72.1%	Mention Antibiotics? (Closed End)	128	83.3%	11.2%	$t = 2.53$	$\alpha = 0.05$
Total *N*	104			150				

the unqualified claim in the television ad in the mall setting and those who saw it in an Internet-panel settings[2] (See Table 6).

Kitchenware Study

Demographic Profile. There were slight (non-significant) differences in the demographic profile of the respondents to the mall-intercept and Internet-panel replication of the kitchenware study. In the mall-intercept study, 53.7 percent of respondents were female, compared to 61 percent in the Internet replication. Also, in the mall study, 57.4 percent of respondents were ages 21 to 49 and 44.6 percent ages 50 or older. In the Internet replication, 65 percent of respondents were ages 21 to 49, and 34 percent were age 50 or older. Although there were slight variations in ages between the mall and Internet respondents and there are slightly more females in the Internet replication, it is doubtful the differences had any effect on the resulting data.

Open-end Responses. Respondents in the kitchenware study were shown either a test or a control Internet ad/homepage for kitchenware in both the mall-intercept setting and the Internet-panel replication. In both the mall setting and in the Internet replication, respondents first were asked, "Who do you think makes or puts out the kitchen tools shown in the ad?" with their responses recorded verbatim (in the mall setting) or typed in the Internet replication. There was a significant difference (t = 2.51, α = 0.05) between the mall and the Internet respondents in the percent who said "Farberware" (the maker of the cookware set in the ad) "made or put out" the kitchenware products (See Table 7).

[2] *An analysis of "net" impressions (i.e., test–control) from the TV ad is not possible as the mall study did not include a TV control. In the litigation, the print control was used to assess "noise" in the study. However, as such an approach mixes methodologies, it is deemed inappropriate and was not replicated.*

TABLE 6

Unqualified Tyson TV Ad Closed-End Questions

	Safer		More Healthful		Better for You	
	Internet	Mall	Internet	Mall	Internet	Mall
	N = 104	*N* = 150	*N* = 104	*N* = 150	*N* = 104	*N* = 150
Test	64 (62.0%)	100 (67%)	82 (79%)	108 (72%)	64 (62%)	91 (60%)
t	0.75		1.39		0.258	
Sig.	ns		ns		ns	

TABLE 7

Kitchenware Ad/Homepage Gross Confusion Open-End Questions

	Internet		Mall		Difference	
Who Puts Out Product	***N* = 185**	**Percent**	***N* = 227**	**Percent**	***t* =**	**Sig. α**
Farberware (Test)	122	65.9%	175	77.1%	2.51	0.05
Kitchenware (Control)	5	2.7%	18	7.9%	2.42	0.05
Net Confusion	117	63.2%	157	69.2%	1.28	ns

Just as in the case of the food-products survey, however, there was a significantly higher percent of respondents who said, "Farberware"… "made or put out the kitchenware" in the advertisement after viewing the control advertisement in the mall setting (7.9 percent) compared to the percent of respondents who said, "Farberware" after they had viewed the "kitchenware" control advertisement (2.7 percent). The result is that there was no significant difference in the net confusion (i.e., test ad/control ad) between the two methodologies. The higher percent of positive (i.e., "Farberware") responses to the control (i.e., "kitchenware") ad, however, suggested a higher level of "yea-say" or interviewer bias in the mall-intercept methodology.

Gave Permission. As noted, the kitchenware litigation involved violation of the Lanham Act. The act specifies that a civil action can be brought against a firm that "makes a false or misleading representation of fact which is likely to cause confusion… or to deceive as to the affiliation, connection, or association with another person… or his or her goods" (Lanham Act [15 USCS 1125 (43a)]). To test the Lanham Act provisions in both the mall study and the Internet replication, respondents who had not mentioned "Farberware" as to the source of the products (i.e., "Who makes or puts out the kitchenware") in response to the open-end question were asked whether Farberware had "given permission" to the other firm that makes or puts out the kitchen tools shown in the ad.

There was a significant difference (t = 4.23 α = 0.001) in perceptions of whether permission was given between mall-intercept and Internet-panel respondents who mentioned "Farberware" as the source of all the items shown in the ad when those respondents were combined with those who believed that Farberware "gave permission" to the marketer of the kitchen

tools shown in the advertisement (See Table 8).

It also is noteworthy that—just as is the case in the food-products study—a significantly higher percentage of respondents in the kitchenware study gave a positive response (i.e., Farberware "gave permission") to the control condition in the mall setting (10.1 percent) than did respondents in the Internet-panel replication (2.7 percent), again raising questions as to higher "yea say" or interviewer bias present in mall-intercept studies.

TABLE 8

Kitchenware Ad/Homepage Gave Permission

	Internet		Mall		Difference	
Who Puts Out Product	***N* = 184**	**Percent**	***N* = 227**	**Percent**	***t* =**	**Sig. α**
Mention Farberware	122	66.3%	175	77.1%	2.42	0.05
Not Mention Farberware	62		52		2.57	0.05
Gave Permission	29	15.7%	30	13.2%		ns
Total (Mention F/W & Gave Permission)	151/184	82.0%	205/227	90.3%	4.23	0.001
Control (Kitchenware)	5/184	2.7%	23/227	10.1%	3.22	0.01
Net		79.3%		70.1%	2.16	0.05

Have an Affiliation. Respondents in both the mall-intercept study and the Internet-panel replication of the kitchenware study also were asked whether there was "an affiliation" between Farberware (the maker of the cookware set in the ad) and the maker of the kitchen tools shown in the advertisement.

As noted in Table 7, there was a significant difference in the percent of respondents mentioning Farberware in response to the open-end question (i.e., "Who makes or puts out the kitchenware") when shown the advertisement/Web page in either the mall or Internet setting. There also was a significant difference (t = 2.51 α = 0.05) in the perception of respondents in the mall and Internet respondents as to whether there was "an affiliation" between the two companies when the responses of those who did not mention Farberware in response to the open-end question in the mall setting or the Internet setting (See Table 9).

When the responses of those who believed that Farberware was the source of the kitchenware were combined with those who believe there is an affiliation between the two companies, however, there were no significant differences between the mall and Internet methodologies. Moreover, unlike the other comparisons, there also was no difference in the responses across the two samples on affiliation when exposed to the control (i.e., "Kitchenware") advertisement.

TABLE 9

Kitchenware Ad/Homepage Have Affiliation

	Internet		Mall		Difference	
Who Puts Out Product	***N* = 184**	**Percent**	***N* = 227**	**Percent**	***t* =**	**Sig. α**
Mention Farberware	122	66.0%	175	77.1%	2.51	0.05
Not Mention Farberware	62		54			
Has an Affiliation	23	12.5%	12	5.3%	2.51	0.05
Total (Mention F/W & Has Affiliation)	145/184	78.8%	187/227	82.4%	0.89	ns
Control (Kitchenware)	0	0.0%	4	1.7%		
Net		78.8%		80.6%		ns

CONCLUSION AND IMPLICATIONS

Four conclusions flow from these replications:

- First, the mall-intercept methodology resulted in significantly higher positive responses about the claim made in the ad (i.e., "RWA" or "put out by Farberware") with open-end questions such as, "main idea in the ad" and "who puts out the product." This was shown for both the food products studies and the kitchenware study and for print, television, and Internet advertising stimuli. This suggested a possible bias introduced by the interviewer in the mall setting, as he or she would have known from subsequent questions what the issue being studied was and recorded the verbatim responses—a condition not present in the Internet environment wherein there are no cues as to the purpose of the study.
- Second, the Internet-panel methodology was equally as effective in providing responses to closed-end questions as is the mall-intercept methodology. There were no significant differences in responses to closed-end questions related to the test conditions in the Internet replications of the mall studies for both the food products and the kitchenware ads.

Second, the Internet-panel methodology was equally as effective in providing responses to closed-end questions as is the mall-intercept methodology.

In both cases, the differences between mall and Internet sample were found in responses related to the control conditions. This seemed to suggest that substantially more yea-say response bias or interviewer bias existed in the mall-intercept survey methodology than in the Internet-panel methodology. This likely was owing to the role of the interviewer, who, intentionally or unintentionally, may have led or suggested responses that were reflected in the higher positive responses. Importantly, where there was little or no role for the interviewer (i.e., with the closed-end questions), the yea-say bias was substantially less. This suggested that the quality of data from a survey using an Internet-panel may be higher than data from a mall-Internet-generated study when closed-end questions are utilized.

- Third, the fact that there were no significant differences in perceptions of the chicken product between the mall-intercept and Internet samples when exposed to the claim in a broadcast advertisement and asked closed-end questions suggested that the Internet medium may be as effective as the mall-intercept methodology for testing television ads. A possible explanation may be that the Internet more closely replicates the in-home experience of respondents watching television ads.

- Fourth, to the extent that time and cost are factors in deciding on a research methodology, the Internet-panel has clear advantages. The typical cost of a mall-intercept study is $35 to $50 per completed interview, plus extensive consulting time deciding on the appropriate malls, developing the questionnaire and training protocols, and inputting and analyzing the resulting data. In addition, the data collection process takes at least 2 weeks for a large-scale study of the types discussed here.

The cost of the Internet-panel, conversely, is typically less than $5 per completed questionnaire, and digital surveys also have the advantage of significantly less development time given the numerous Internet questionnaire "platforms" that exist. Additionally, the data collection occurs in 2 or 3 days. Furthermore, the data are collected in real time and tabulations reported as the data are collected. This makes it possible to track results as they are coming in. In addition, the Internet data can easily be downloaded to an Excel spreadsheet for additional analysis, thereby reducing the possibility of coding errors. The consequence, therefore, is the total time and cost associated with Internet studies are reduced dramatically, with no diminution in the quality of the data.

LIMITATIONS

There were three limitations to this replication.

- First, the mall-intercept studies all were undertaken as part of litigation and, to the extent the interviewers were aware of the issues in the case, the nature of the inquiry may have affected the degree of interviewer bias found in the yea-say responses to the control questions.
- Second, the mall-intercept studies, which included a very large number of geographically diverse malls (28 in the food products study, 12 in the kitchenware study), all were affiliated with two research firms. Although it is doubtful that different malls would have resulted in different results, the possibility exists that different mall-intercept firms—perhaps with better training as to recording of open-ended responses—may have reduced the apparent interviewer bias that was found in the results reported above.
- Third, the respondents to the Internet replications were all drawn from on panel (i.e., Market Tools's Zoomerang.com). This raises the question as to whether similar results would be found with respondents from one of the other Internet-panel providers. JAR

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