How Researchers Respond to Replication Requests Revisited

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Author cooperation is almost always needed when attempting to replicate important advertising research because critical study details are often omitted from articles due to the value of journal space. We replicate and extend Reid, Rotfeld, and Wimmer (1982) by measuring authors’ compliance with requests to share their study’s details, which are needed to replicate their published empirical advertising journal articles. More than a third of authors did not share enough details of the requested study to enable independent replication and extension of their work. Extending earlier research, we find that obtaining details of author-generated data is much easier (75%) than public secondary data (44%). Obtaining details of third-party data was largely impossible. We also found important differences in compliance with requests for replication information across journals. Our results have implications for advertising knowledge generation and the ability to independently replicate published research. We offer suggestions to improve and increase advertising scholars’ ability to obtain necessary information to replicate published findings.

Multiple former editors of the Journal of Advertising have called for more replication studies of important findings (Carlson 2015; Faber 2002; Hunt 1979; Laczniak 2003; Reid 2014). The lack of replication research in advertising journals was first empirically reported by Reid, Soley, and Wimmer (1981) and recently replicated, extended, and confirmed by Park and colleagues (2015). In Reid’s (2014) opinion, “[A]fter three decades and much scholarly commentary on the importance of replication, there is no replication tradition in the pages of JA” (p. 412).

Extensive discussion of the importance of replication can be found elsewhere (e.g., Easley, Madden, and Dunn 2000; Hubbard and Vetter 1996; Madden, Easley, and Dunn 1995; Reid, Soley, and Wimmer 1981; Uncles 2011; Wells 2001). Journal space is scarce, so authors can seldom publish all information needed for either exact or systematic replication. Thus, advertising replication research depends on scholars sharing unpublished yet vital details with others. Our goal is to empirically reexamine whether authors provide to independent scholars the information needed to replicate their research.

LITERATURE REVIEW AND HYPOTHESIS

Exact experimental replications require copies of original study stimuli. Replication with extension also needs detailed study information. But researchers receiving replication requests may not cooperate. Without original study specifics, it is uncertain whether differences between a replication and the original work are due to planned research design factors or inadvertent changes between the studies. Meta-analyses find both theoretical and methodological factors impact results. For example, not only can the advertising medium, product type, country of origin, level of economic development, and culture significantly influence the amount and quantity of objective consumer advertising information but study design factors, such as coder training, can also significantly influence ad information (Abernethy and Franke 1996).

Empirical assessments sharing replication information are more than 30 years old. Madden, Franz and Mittelstaedt (1979) found 29 of 60 authors in American Marketing Association (AMA) and Association for Consumer Research (ACR) proceedings claimed they would share methodological details for replications. Reid and Wimmer (1982) made a single mailed request for replication materials from authors of six communication journals spanning the most recent complete volumes available (the 1978 and 1979 issues); 48% of authors said replication data were readily available, 19% replied the data were unavailable, and 33% failed to respond. Wimmer and Reid (1982) noted some authors were highly defensive about replication. Author defensiveness is understandable because supplying data to a third-party scholar could reveal...
errors in analysis or interpretation, which could damage scholarly reputations. But only Reid, Rotfeld, and Wimmer (1982) directly assessed whether authors actually shared replication information for published advertising and marketing journal articles. They requested all replication information be mailed by authors from three marketing journals (Journal of Marketing, Journal of Marketing Research, Journal of Consumer Research) and two advertising journals (Journal of Advertising, Journal of Advertising Research) from 1978 and 1979; 50% supplied replication materials, 14% stated that materials were no longer available, and 36% did not respond to two mailed requests.

We replicate Reid, Rotfeld, and Wimmer (1982) by asking authors of published advertising research to share unpublished replication information. We extend their findings five ways. First, we sample from two additional advertising journals, International Journal of Advertising and Journal of Current Issues and Research in Advertising. Because our focus is on advertising research, we limited our requests to these advertising journals and advertising research published in the three marketing journals from the Reid study. Second, we directly assess whether replication request compliance varies by journal. Third, we include non-U.S. authors (excluded from the prior study) to assess whether replication compliance differs by country. Today, international scholars frequently publish in top journals (Ford and Merchant 2008) and e-mail has almost eliminated the costs of sending materials internationally. Fourth, we determine whether authors from business schools have different replication compliance rates than authors from other disciplines. Scholars from many disciplines study advertising, but business faculty represent the largest group (Ford and Merchant 2008). Fifth, we assess whether the data source (author generated, public secondary, private third party) impacts replication compliance rates. Author-generated data include experiments and surveys. Public secondary data include content analyses of ads and economic and public advertising spending data. Private third-party data examples include information from A.C. Nielsen, Arbitron, or trade associations.

Previous research finds a roughly 50% compliance on replication requests from U.S. authors in advertising, marketing, and communication journals. For multiple reasons, we expect a higher compliance rate today. First, we request replication materials be sent via e-mail, which costs much less than traditional mail. Second, retaining research materials today with electronic data storage is easier than paper storage. Now an entire research career of surveys, analyses, and papers can be stored on one external hard drive. Third, we made up to three requests for the information compared to a maximum of two requests done previously. Last, the recent emphasis (or at least discussion) advocating for the replication of important findings may increase authors’ likelihood to provide requested materials. Therefore we posit the following:

**H1:** Compliance with requests to supply replication materials for published advertising journal articles will be greater than 50%.

**METHODOLOGY**

For analysis, we selected empirical advertising articles from seven journals: Journal of Advertising (JA), Journal of Advertising Research (JAR), International Journal of Advertising (IJA), Journal of Current Issues and Research in Advertising (JCIRA), Journal of Marketing (JM), Journal of Marketing Research (JMR), and Journal of Consumer Research (JCR). The title, author(s), and departmental and university affiliation were recorded for all empirical advertising articles published in 2012 and 2013. To more accurately replicate Reid, Rotfeld, and Wimmer (1982), we used the most recent two-year time period for our sample. As originally stated by Reid, Rotfeld, and Wimmer (1982), confining the analysis to the most recent two-year time period enhances the probability that the requested information and materials needed for replication are available.

If a researcher published more than one article in these journals, or if authors within the same department published more than one article, we randomly selected only one article from that pool for our sample. As Reid, Rotfeld, and Wimmer (1982) stated: “This procedure was performed to reduce the potential biasing effects of receiving multiple requests and of interdepartmental communication among researchers about receiving replication requests” (p. 216). Like Reid, Rotfeld, and Wimmer (1982), we excluded articles by nonacademics. Following a systematic sampling process, we identified 91 journal articles for replication requests.

Compared to the 1970s, advertising journal articles are more likely to report multiple experiments, analyses, or data sets. To limit the burden on respondents, we requested only one type of data for each article instead of everything necessary to replicate all analyses in the paper. The types of information requested were (1) a copy of the survey and details on how the sampling frame was selected; (2) a bibliography of all studies included in a meta-analysis and a copy of the coding sheet for meta-analysis variables; (3) a copy of the coding sheet, coding definitions, and coding instructions for content analyses; (4) a copy of the experimental stimuli, instructions, and measures for the first two experiments in an article (we did not request videos or experimental websites due to the difficulty of electronically supplying such large files); or (5) a copy of the data set and the programming specifics for the data analysis for secondary or third-party data. To reiterate, only one of these five types of data requests was made for any paper. If papers had multiple types of data, we requested the least burdensome, going in rank order from data type 1 to data type 5. For example, if a single published paper contained a consumer survey about magazine advertising, a content analysis of magazine ads, and an experiment using magazine stimuli, we would request only a copy of the survey and the survey...
sample frame. Likewise, if a paper had six experiments, we requested the stimuli, measures, and instructions to the subjects for the first two experiments only.

Our initial e-mail request was made to the first author or the contact author. A second request was sent after two weeks with no response. After another two weeks without a response, a request was sent to the second author, if applicable. Inquiries to second authors stated that the first (or contact) author had been previously contacted. No further requests were made when the initial contact refused to supply replication materials, claimed the information was lost, or stated the information could not be shared due to confidentiality agreements. We did not e-mail coauthors when the initial contacts stated they were attempting to locate the information. Figure 1 provides a sample replication request. Unlike the previous study, where the individual making the request was a doctoral student, our request was made by the first author of this article, a former American Academy of Advertising officer who has published advertising research for decades.

Following Reid, Rotfeld, and Wimmer (1982), the authors were not notified they were participating in an assessment of the willingness to comply with replication requests. A strong socially desirable response exists toward opinions about replication, making disclosure problematic. Also, authors may be willing to comply with replication requests only to find that the data have been lost. Thus, surveying authors for their willingness to supply replication information will likely provide substantially different results compared to assessing actual rates of supplying requested information.

RESULTS

A total of 57 authors (62.6%) supplied the requested replication materials, 3 (3.3%) refused the request, 7 (7.7%) used third-party data with a confidentiality agreement, and 24 (26.4%) did not respond to our multiple requests. Our 62.6% compliance with replication requests is significantly greater ($z = 2.48; p < .01$) than the 50% found previously, which supports hypothesis 1. The highest response rate was from authors in IJA (80%), followed by JA (66.7%), the three marketing journals (63.6%), JCIRA (44.4%), and JAR (42.1%), and these differences are statistically significant ($\chi^2 = 8.11, p < .10$; see Table 1). No statistically significant differences were found between authors in business schools or other disciplines (60.3% versus 69.6%, respectively) or between U.S. and non-U.S. universities (62.5% versus 62.7%, respectively). The type of data requested had a major impact on our ability to obtain replication materials. Author-generated data were supplied 74.6% of the time, compared to 44.4% for public secondary data and 0% for private third-party data ($\chi^2 = 24.1, p < .01$).

Third-party data need additional discussion. Seven of the 11 authors of third-party data papers stated the data could not be shared due to a confidentiality agreement, with the remaining four authors being nonrespondents. The seven papers were from JAR (three papers) and JM/JMR (four papers). Because nondisclosure agreements preclude sharing replication data, compliance becomes 100% in the three marketing journals and 50% in JAR (8 of 16) when papers using private and confidential third-party data are omitted. Because only JAR, JM, and JMR published articles that relied on private third-party data, this must be taken into consideration when comparing replication compliance rates among journals. Two additional factors should be noted. Articles based on undergraduate or master’s theses make replication difficult. The students often retain the replication materials, and faculty may lose track of students entering industry. International authors shared replication materials with the understanding that the requestor is responsible for English translation.
DISCUSSION AND RECOMMENDATIONS

We extended Reid, Rotfeld, and Wimmer’s (1982) findings by including international authors and a broader selection of journals, and by assessing variations in compliance rates resulting from the type of data used in the study. On the plus side, compliance with requests for replication materials is significantly higher than 30 years ago and international authors are as cooperative as domestic authors. The development of the Internet, inexpensive and compact electronic data storage, making a maximum of three requests instead of two requests, and more author interaction at international conferences all may have contributed to a higher response rate. Some international authors apologized for supplying surveys or experimental stimuli in a language other than English, but we believe authors should feel no obligation to translate their materials for other researchers’ use. Today, journal articles are more likely to contain multiple experiments, analyses, and data sets compared to the 1970s articles studied by Reid, Rotfeld, and Wimmer (1982). To limit the burden on respondents, we limited the amount of requested information when multiple data sets were used. Nevertheless, we believe that authors who cooperate by providing information to replicate part of a study would probably be willing to share the remaining information.

We think that journal space will remain valuable and it is unlikely that journals will print articles containing all information necessary for replication. In addition, the print format of advertising journals precludes publication of television or radio ads used in experiments. We do think that current practice can be improved. All of the marketing journals (JM, JMR, and JCR) support the use of web appendixes in their journal policy statements. For example, JMR uses this policy statement: “JMR supports Web appendixes for all papers. This enables authors to provide data for replication or deep understanding that would be difficult put in the paper version” (AMA 2015). We suggest advertising journals adopt a similar policy and encourage the use of web appendixes in author guidelines. This compromise recognizes the value of journal space while encouraging authors to share information for replication.

Several authors unable to supply replication information responded that their articles were based on supervised work by an undergraduate, master’s, or doctoral student and the student had the only copy of the data or data collection methods. Unfortunately, these professors had lost track of students or the students had discarded the materials after completing their degrees and obtaining industry jobs. For this reason, we recommend that faculty members who are coauthors for students retain an electronic copy of the data and data collection materials. Electronic data storage is inexpensive and easily reduces the sizable risk that data will be lost when students leave academia for industry. This recommendation may necessitate journal editors changing submission guidelines to require that jointly authored student/faculty submissions require the faculty member to retain a copy of the data and data collection materials. Given the very low cost and space use of data storage, making this a requirement imposes a minimal burden on faculty.

We recommend that all doctoral training include coverage of the importance of replication in advancing science. This includes instruction that every author has a personal

### TABLE 1
Results of Request for Replication Data

<table>
<thead>
<tr>
<th>Specific Type of Request</th>
<th>Replication Data Obtained</th>
<th>Replication Data Not Obtained</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Journal of Advertising</td>
<td>18 (66.7%)</td>
<td>9 (33.3%)</td>
<td>27</td>
</tr>
<tr>
<td>Journal of Advertising Research</td>
<td>8 (42.1%)</td>
<td>11 (57.9%)</td>
<td>19</td>
</tr>
<tr>
<td>International Journal of Advertising</td>
<td>20 (80%)</td>
<td>5 (20%)</td>
<td>25</td>
</tr>
<tr>
<td>Journal of Current Issues and Research in Advertising</td>
<td>4 (44.4%)</td>
<td>5 (55.6%)</td>
<td>9</td>
</tr>
<tr>
<td>Three marketing journals</td>
<td>7 (63.6%)</td>
<td>4 (36.4%)</td>
<td>11</td>
</tr>
<tr>
<td>Schools</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business school</td>
<td>41 (60.3%)</td>
<td>27 (39.7%)</td>
<td>68</td>
</tr>
<tr>
<td>Non–business school</td>
<td>16 (69.6%)</td>
<td>7 (30.4%)</td>
<td>23</td>
</tr>
<tr>
<td>Universities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S.–based</td>
<td>25 (62.5%)</td>
<td>15 (37.5%)</td>
<td>40</td>
</tr>
<tr>
<td>Non–U.S. based</td>
<td>32 (62.7%)</td>
<td>19 (37.3%)</td>
<td>51</td>
</tr>
<tr>
<td>Type of information requested</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Author-generated data</td>
<td>53 (74.6%)</td>
<td>18 (25.4%)</td>
<td>71</td>
</tr>
<tr>
<td>Public secondary data</td>
<td>4 (44.4%)</td>
<td>5 (55.6%)</td>
<td>9</td>
</tr>
<tr>
<td>Third-party-generated data</td>
<td>0 (0%)</td>
<td>11 (100%)</td>
<td>11</td>
</tr>
</tbody>
</table>

*Note.* The three marketing journals are Journal of Marketing, Journal of Marketing Research, and Journal of Consumer Research.
HOW RESEARCHERS RESPOND TO REPLICATION REQUESTS REVISITED

responsibility to retain materials needed for outside replication and a willingness to share these materials with other interested scholars. Building a replication tradition in advertising research should start with training and mentoring students on the scientific process and the responsibilities of individual researchers. It may also be helpful to have panels at advertising conferences discussing the importance of replication in advancing advertising theory and practice. Replication has many positive outcomes for individual researchers. Published work obtains greater prominence and validity when results are confirmed. Published findings are extended. One of us found a wonderful coauthor with whom collaboration yielded many excellent publications based on a request for a full data set on a controversial advertising public policy topic. A request for replication materials should be considered an honor, not a threat, to individual researchers. After all, a replication request means that another scholar has read the work and is so interested that he or she wants to better understand the paper and potentially replicate and extend the findings. As it’s said, imitation is the sincerest form of flattery.

Our response rate was almost 75% when authors had total control over the data (i.e., author-generated data). However, when private third-party data were used, replication information was never available. Public secondary data fell between these two extremes. Some types of published journal articles cannot be replicated by other scholars. Third-party data represent a tradeoff for editors and reviewers. Confirming when advertising theory holds up in the marketplace is important. Some advertising effects may work only in tightly controlled experimental conditions but may explain so little marketplace variation that the effect is undetectable. Establishing external validity is very important for researchers and practitioners alike. Unfortunately, the expense of testing advertising theory with real consumers spending real money is beyond the resources of almost all scholars. Using third-party data from commercial firms helps bridge this gap between theory and practice. But a previously overlooked shortcoming of research using third-party data is the inability of independent scholars to replicate empirical findings due to confidentiality agreements. We concur with Martin (1994) that “full disclosure” to allow for reproducing a study is a fundamental research standard, but confidential third-party data can be vital to assessing the external validity of a theory.

JCR’s publication standards have a proprietary data policy we recommend for adoption by other journals (ACR 2015). Authors must make replication data available upon request for five years after publication. The policy does note, “Exceptions will be made for identifiable or proprietary data. Authors must request such an exception and state the basis for it in the first version of a submission in which the relevant data appear.” We further recommend that the methodology section or the author biographies disclose when data are used under a confidentiality agreement. Because confidential data cannot be replicated or confirmed by other researchers, we believe editors and reviewers should closely scrutinize the data properties and analysis procedures of confidential data during the review process whenever possible. We stress that third-party proprietary advertising data shielded by confidentiality agreements can be highly valuable to the discipline as a whole in establishing both external validity and boundary conditions of theory. But the use of confidential information should be disclosed at the time the paper is submitted for journal review, as well as disclosed in published manuscripts. Furthermore, editors and reviewers play an especially important gatekeeping role in the review process, because outside replication is often impossible.

Like Reid, Rotfeld, and Wimmer (1982), we excluded articles when all authors are practitioners. It is possible that practitioners are willing and able to share data with other scholars interested in replication, while academics with third-party data cannot due to confidentiality agreements. It is also possible that papers using third-party data cannot be replicated by outside scholars regardless of the author’s employer. Given the 0% compliance rate for advertising research using private third-party data, we suspect that compliance with replication requests from practitioners is higher than the levels we report for academics. However, this is an educated guess on our part and we leave it to future researchers to test this hypothesis.

There were significant differences between replication compliance rates between journals. When papers with confidentiality agreements are removed, there is 100% compliance from marketing journal authors and about 58% compliance from JAR authors. With this change in measurement, we find that JCIRA had the lowest compliance rate for providing replication materials. Based on author correspondence, we discovered that JCIRA lacked a publisher for several years, which greatly delayed the appearance of accepted manuscripts. Thus, JCIRA papers were reporting older data than other journals published in the same year. This provides initial support for the belief that as time passes it is increasingly difficult for interested scholars to obtain replication information from published articles. Data can be lost and authors can move, retire, or die. Data collection software and the data it generates can become unusable on modern computers.

Several studies published in JCR were recently retracted upon discovery that an author fabricated data. In response, JCRs policies were revised. Currently, all three marketing journals have stricter requirements for authors to supply data when articles are under review and explicit expectations that authors will share replication information with interested scholars upon request (see AMA 2015 and ACR 2015). JM and JMR require authors to make replication information available for interested scholars and encourage the use of websites to disseminate specifics on data and methodology (AMA 2015). JCR requires authors to share replication information upon request and to retain replication data for a minimum of five years after publication (ACR 2015). Given the 100% compliance rate with advertising article replication requests from
these journals for data not covered by confidentiality agreements, these policies seem to have had a positive impact on the availability of replication information. Reid (2014) pointed out that advertising journals do not have a replication tradition. If advertising journals change their policies to mandate that authors retain replication data for a minimum of five years and share that information with interested scholars upon request, we believe that an advertising research replication tradition can be quickly established. It is important to mention that IJA already seems to have a “replication culture” given their 80% compliance rate with replication requests.

There are several limitations to our research. A phone call or a direct conversation at a conference could gain better compliance in obtaining replication information than an e-mail request. Unfortunately, a phone call or direct conversation does not lend itself to the nature of this research and could introduce confounding effects related to the persuasive skills of the individual making the request. Using multiple methods (e-mail and a phone call) could also improve response rates. Future researchers should explore this. We made requests for the two most recent complete publication years to purposely replicate the Reid, Rotfeld, and Wimmer (1982) sample methodology. Surveying authors over a longer time period and at different time intervals would be interesting. We believe replication request compliance rates will decline as more time passes from initial publication, because there were unforeseen publication lags at JCIRA that may have been associated to its lower response rate. We leave it to future researchers to expand the sample time frame to explicitly test this hypothesis.

CONCLUSION

As a discipline, advertising research has shown both improvements and shortcomings in providing unpublished information needed to make all forms of replication possible. Our replication and extension of Reid, Rotfeld, and Wimmer (1982) finds that, most of the time, detailed unpublished information needed for replication research can be obtained through direct requests to authors. Compliance rates with replication requests increased compared to 30 years ago. International authors are just as willing to share replication data as U.S. authors. However, our correspondence and observation of JCIRA authors’ lower levels of compliance lead us to believe that the ability to obtain replication materials decreases over time. Finally, we think studies using proprietary third-party data, such as A.C. Nielsen, are vital to determining whether advertising theory works in complex business environments. An important caveat, however, is that none of the private third-party data used in studies in our sample could be shared with other scholars due to confidentiality agreements.

We provide multiple suggestions for building a replication tradition in advertising research. Some of the suggestions require modifications to graduate education. Other suggestions require editorial changes in some journals. We think that published studies using confidential information should be required to disclose this in both the review process and in published manuscripts. Our empirical findings and associated recommendations suggest multiple paths forward for the profession.

REFERENCES


