"TRIED AND TRUE" OR "CUTTING EDGE": USE OF DATA ANALYTICAL TECHNIQUES IN MARKETING RESEARCH

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ABSTRACT

Advances in quantitative research methods provide marketing researchers with more tools to test their hypotheses. In many disciples, adoption of new data analytical techniques in published research is slow, with incremental change over two or more decades (Aguinis, Pierce, Bosco, & Muslin, 2009). While researchers choose the means most appropriate to their research questions, over-reliance on long-established tools may impede theory development within the marketing area. Prerequisites for researchers to adopt innovative techniques include adequate education, mentorship by leading scholars, and acceptance in premier research journals (Podsakoff & Dalton, 1987).

Our study identifies trends in the use of data analytical techniques in marketing studies over a ten year period from 1999-2008. We examine the diversity of methods or "triangulation" in marketing research through a content analysis of 1928 articles published in the top six marketing journals (*Journal of Marketing (JM), Journal of the Academy of Marketing Science (JAMS), Journal of Consumer Research (JCR), Marketing Science (MS), Journal of Marketing Research (JMR), and Journal of Retailing (JR)*. The premise of triangulation in research is that the use of multiple research strategies, measurement procedures, and analytical techniques result in increased study validity (Campbell & Fiske, 1959). The benefits of multiple approaches to research are many. First, new research methods may uncover a different dimension of a phenomenon that leads to deepened understanding of the research problem. Second, encouraging researchers to move out of their "methodological comfort zones" can stimulate further innovation in research strategies, data sources, and analytical techniques (Aguinis et al., 2009; Podsakoff & Dalton, 1987). Lastly, researchers can be more confident of their results through integrating and exploring competing theories. This study focuses on methodological triangulation relating to the use of multiple analytical techniques in marketing research, seeking to understand diversity within the discipline, and within individual articles.

We conduct two types of analyses for the study. First, we calculate a Herfindahl index (C_H) to examine the concentration of the data analytical techniques across years and journals. Our findings show some promising trends in marketing research. Marketing studies rely on a consistently mixed set of data analytical techniques, with an overall diversity index of 84.5%. No one data analytical technique represented more than 30% of methods used in any of the ten years of our study. The acceptance of diverse data analytical techniques varies greatly among the six marketing journals. Three journals have diversity indices over 80%, JR (83.2%), JM (83%) and the JMR (80.7%). The other journals, JAMS (78.7%), JCR (71.8%) and MS (67.6%) have lower diversity scores due to an analytical technique representing more than 30%.

For the second analysis, we calculate percentage use indices (PUIs) to identify changes in observed patterns over time, finding that predominant methods for marketing research remain traditional techniques that are "tried and true". ANOVA's or similar GLM techniques represent from 19.8 to 27.5 percent of the total analyses in our sample, with a significant positive trend over time.

In addition to the diversity and acceptance of different analytical techniques in the discipline, we sought to understand the prevalence of multiple methods within one article. Over half of the marketing studies employed one technique, but the trend is positive for articles with three or more techniques. There are great differences in the acceptance of multiple methods among the marketing journals. A single technique was most prevalent in JMR, with 76% of the articles employing one method. Two journals, JCR and JAMS had the greatest number of articles with two or more data analytical techniques.

Adoption of innovative data analytical techniques progresses scientific discovery in a discipline. Our study confirms that while marketing research continues to rely on "tried and true" methods, acceptance of newer techniques is increasing, albeit slowly. We recommend conclude with recommendations for scholars seeking to publish studies using innovative methods.

References Available on Request