WHAT IS REFERENCED IN MARKETING PUBLICATIONS AND HAS IT CHANGED OVER TIME?

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ABSTRACT

Academic research has identified that business/marketing journals tend to draw on knowledge from a diverse set of disciplines. However, there has been limited examination of the source of these ideas in terms of types of materials (journals, books, conferences, business/popular press, and others) or whether the use of these sources has changed over time. This paper examined these issues and found that within the three leading marketing journals (JM, JMR, JCR), the citation of journal articles has generally increased over time while that of non-journal sources (i.e., journals, books, conferences, business/popular press, and other sources), has decreased. There are, however, differences in the specific citation behavior in the three journals and thus the citation of materials may be journal specific.

INTRODUCTION

Armstrong (2004) espoused the view that journals are the main source of “useful” knowledge. Others have argued that while journals are important, other valuable knowledge, for example, practical guidance on how to apply theory is sometimes only communicated in non-journal sources such as business and popular publications, newspapers, industry/governmental reports, and corporate information (Rossiter 2001, 2004; Uncles 2003). It is therefore important that academics draw on a diverse cross section of sources when developing academic theory.

Knowledge and theory are usually developed in an interactive, iterative process where one person’s ideas build on others’ ideas, drawing from a cross section of disciplines (Sivadas and Johnson 2005). As such, the development of academic knowledge needs to consider ideas presented in various forums, including non-journal sources. It has been suggested that the discussion of research within non-journal forums serves an essential function in the development and refining of knowledge (Anderson and Haley 1984; Baumgarter and Pieters 2003; Fugate and Milliman 1988; Widing, Brown, and Luke 1989; Zinkhan, Saxton, Roth, and Zaltman 1990). Some non-journal forums are highly regarded in academia. Conference proceedings often communicate valuable information and are highly ranked in comparison to academic journals. The proceedings of the Association of Consumer Research conference – Advances in Consumer Research (ACR) were ranked 6th across all “journals” by Baumgarter and Pieters (2003); 17th by Theocharakis and Hirst (2002); and 13th by Hult, Neese, and Bashaw (1997). Other non-journal forums, such as business and popular publications like The Wall Street Journal, Business Week, Time, etc., also communicate valuable ideas and information. Non-journal forums also enable the dissemination of knowledge more quickly (Sellitto 2005). As such, non-journal forums are a valuable source of knowledge, to be drawn on in academic research.

While the process of developing academic knowledge has not fundamentally changed, the issues being considered have evolved over the past 30+ years (Brown, Fisk, and Bitner 1994; Green, Johnson, and Neal 2003; Wilkie and Moore 2003). For example, Ulrich’s Periodical Directory (2006) indicates that in 1970 there were fewer than 10 academic marketing-focused journals, but this increased to 153 in 2006. The Internet has also resulted in increased access to journal and non-journal sources of knowledge, while new sources such as Blogs enable individuals to share ideas. As such, academics have an increasing number of sources of knowledge from which to draw ideas.

The objective of this paper is to examine what types of materials (i.e., journals, books, conferences, popular press, and other sources) have been cited within the leading marketing journals – Journal of Marketing (JM), Journal of Marketing Research (JMR), and Journal of Consumer Research (JCR), and to determine whether there have been changes in types of materials referenced over time. Changes in citation behavior might suggest that academics are not drawing on the fullest range of knowledge sources, although changes might also reflect the perceived value of different sources of knowledge. The paper will conclude with some suggestions for future research examining the development of academic knowledge in marketing.
BACKGROUND

Past researchers have considered the diversity of disciplines and sub-disciplines cited in marketing journals (Bettencourt and Houston 2001a, 2001b; Baumgartner and Pieters 2003; Sivadas and Johnson 2005). These authors have recognized that there is a significant contribution of non-marketing disciplines to marketing thinking—that there is some sharing of ideas within the broader business area. However, the past research has not examined the contribution of different types of sources of ideas to marketing thinking. In fact, the role of these sources, such as conferences works, books, and professional publications in the development of knowledge, is not extensively discussed within the literature (Guidry, Guidry-Hollier, Johnson, Tanner, and Veltsos 2004). There is some suggestion that communication in non-journal forums is vital to broader knowledge development (Fugate and Milliman 1988; Holbrook and Thayer 1985; Zinkhan et al. 1990). A philosophy of science perspective suggests that knowledge develops by building on existing ideas, where theory is continually re-examined in an attempt to refine and develop thinking (Fuller 2003). Thus, the more an idea is discussed, the greater the opportunity to refine and advance thinking. For ideas to advance, they must move beyond the traditional knowledge framework (Sivadas and Johnson 2005, p. 339). This is potentially harder to do in academic journals (Armstrong 1992), than in non-journal forums.

Thus, while the replication of existing research is essential for knowledge to develop (Berthon, Pitt, Ewing, and Carr 2002), critical ideas could be ignored simply because they have been posited in non-journal forums. Interestingly, some journal editors recognize that the presentation and discussion of ideas in non-journal forums are essential for manuscripts to be developed to a publishable level (Wittink 2004). Yet there appears to be limited overt recognition of the true value of non-journal sources of information in the knowledge development process. While citation rates of non-journal materials within journals may be lower than journal citation rates (Armstrong and Pagell 2003; Guidry et al. 2004), this doesn’t reflect a lesser intellectual value of these sources. The content of published journal papers often evolves intellectually through exposure to ideas proposed and discussed in non-journal forums. A conference environment allows authors to discuss ideas and consider alternative perspectives rather than simply defend their thinking (Fugate and Milliman 1988). Such opportunities for free-flowing discourse do not occur with journals.

In some instances, non-journal sources of information, such as the business and popular press, could serve as catalysts for developing research ideas (Polonsky and Waller 2005). Research processes, such as grounded theory, draw directly on a diverse set of information sources, which are then triangulated to draw out the underlying theory (Corbin and Strauss 1990; Goulding 2001). In the case of grounded theory, it is only after processing a range of information sources that structured communication of ideas can be presented in a more formal academic format, such as a journal article.

Finally, at the very least, material presented within the business and popular press often serves as an example, supporting proposed theories within journal articles, and therefore playing a critical role in enhancing knowledge development (Polonsky and Waller 2005). In this way, non-journal sources can provide contextualization to conceptual theory development. While researchers have examined the disciplines cited in marketing journals (Bettencourt and Houston 2001a, 2001b; Sivadas and Johnson 2005; Zinkhan et al. 1990) there has been limited examination of what types of sources are being cited by academic journals (i.e., journals, books, conferences, business/popular press, and other sources). Work by Anderson and Haley (1984) examined the citation of conference proceedings within the JM, JCR, and JMR between 1975 and 1982. They found that the percentage of citations from conference proceedings was JM – 4.27 percent, JMR – 6.08 percent, and JCR – 7.36 percent of all materials cited, with the ACR being the most cited conference proceeding. Guidry et al. (2004) examined the materials cited between 1977 and 2001 in leading marketing journals and found that on average 77.76 percent of materials cited were academic journals, 0.78 percent were conference proceedings, 21.31 percent were books, and 0.15 percent were websites. It is unclear if the citation of types of materials within leading marketing journals has changed over time. The number of journals between 1970 and 2003 has increased and their accessibility through databases is far greater (Bar-Ilan et al. 2003; Herring 2002; Polonsky, Jones, and Kearsley 1997; Zinkhan 2004). Thus, we propose that:

**H1:** The citation rate within leading marketing journals to materials published in journals has increased over time.

We will also explore whether there are differences in the citation rates of the different types of non-journal materials within each journal. H1 suggests that overall citation rates of non-journal sources should decrease over time. There is no suggestion in the literature of how referencing of these subcategories of non-journal materials will change. As such:

**H2:** The citation rate to various categories of non-journal materials in a given journal will not vary over time.

Non-journal materials cited within journals include a diverse set of sources. Anderson and Haley (1984) found that journals’ citation rate of conference materials varied. Guidry et al. (2004) also found that citation rates to conference materials, books and websites also varied between journals. Neither of these studies examined this issue over time and any differences in citation rates would...
suggest that citation behavior is journal specific. Thus we propose that there will be no difference in the use of these materials between journals within each time period. That is:

H₁: The citation rate, across leading journals to various categories of materials will not vary.

Within this paper we have examined the citation of materials within the Journal of Marketing (JM), Journal of Marketing Research (JMR), and Journal of Consumer Research (JCR) at three points in time over the past 30 years – 1975, 1990, and 2003. The rationale for selecting these journals and time periods will be discussed in the methodology section.

METHODOLOGY

The objective of this research is to identify whether there are any differences in regards to types of materials (journals, books, conferences, business/popular press, and other sources) referenced within leading marketing journals over time, using a content analysis of the materials referenced in articles within JM, JMR, and JCR in 1975, 1990, and 2003. This resulted in 12 issues of each journal being examined, 36 in total. These journals have consistently been identified as leading journals in marketing (Baumgarter and Pieters 2003; Hawes and Keillor 2002; Polonsky and Whitelaw 2005). Other authors, such as Bettencourt and Houston (2001a, 2001b), Guidry et al. (2004) and Sivadas and Johnson (2005) have also explored the citation behavior in these three journals, although their focus was not on the types of materials cited. The rationale for selecting three periods of time for exploration is based on the suggestion that the complexity of theory, and thus the materials cited, has evolved over time. Green, Johnson, and Neal (2003) suggested that within marketing research, there have been four phases of development; (1) the 60s, (2) the 70s, (3) the 80s and 90s, and (4) the decade ahead. In exploring citation behavior in marketing, we have combined the 60s and 70s, given the limited number of marketing focused journals during this period. We selected to examine citation behavior in 1975, as this was the first year that the Journal of Consumer Research published four issues.¹ The second year examined was 1990, which was the mid-point of Green et al.’s (2003) 80s and 90s. The year 1990 is also important as it preceded the mass use of Internet and electronic dissemination of published materials (Bar-Ilan et al. 2003; Polonsky et al. 1999). To reflect the decade beyond, we selected 2003, which was the last full year of data available at the time of data collection.

A research assistant collected reference pages from articles within the four issues of journals for the three years. Editorials, book reviews, as well as regular columns such as legal developments in JM and Computer software reviews in JMR were excluded. References cited within each article were categorized as journals, books, book chapters, proceedings and conference papers, business/popular press, and other² by another research assistant. These were then checked by one of the authors for accuracy.

Z-tests were applied to compare the citation rates for each relevant category type between pairs of years (i.e., 1975–1990; 1990–2003; 1975–2003) within each journal to identify changes within that journal over time and to examine H₁ and H₂. Z-test comparisons were also made between journals for each reference type in similar time periods (i.e., journal citations for: JM 90 – JCR 90; JM 90 – JMR 90; and JCR 90 – JMR 90). This was examined to enable us to identify any variations in behavior across journals and explore H₁.

ANALYSIS AND DISCUSSION

Table 1 provides a summary of publication behavior in the three journals over the three periods. As can be seen, the number of articles appearing in JCR has increased over time while the number of articles in JMR has decreased. The number of articles in JM decreased between 1975 and 1990, but did not reduce further between 1990 and 2003. In all three journals, the number of pages of the journals has increased over time, as has the average length of articles.

In all cases the total number of references has increased. Between 1975 and 2003 the average number of references per article has almost doubled in JCR and JMR, but in JM there is almost an eight-fold increase. The change may relate to the limited literature base in the 70s, or that in the early years, these journals had a more applied focus (Green et al. 2003; Wilkie and Moore 2003; Wittink 2004). Table 1 indicates that over time, journal articles have become longer and cite an increased number of sources. This might suggest there have been changes in academic standards for supporting ideas and theory. This could also be a result of technological innovations, such as the Internet and full-text databases, that have changed the way in which academics undertake research (Bar-Ilan et al. 2003; Herring 2002).

Table 2 reports on the proportion of citations within each journal (JM, JMR, JCR) by category – journals, books, book chapters, proceedings/conference papers, business and popular press, and others – in three years – 1975, 1990, and 2003.

Table 3 reports on the z-test comparisons in citation rates for each category over three time periods (i.e., 1975–1990, 1975–2003, and 1990–2003). For all three journals there was a statistically significant increase in the proportion of citations attributed to journals between 1975 and 2003. This increase appears to have been incremental, as there was also an increase between 1975–1990 for JMR and JCR, as well as between the years of 1990–2003 for all three journals. As such H₁ is supported, i.e., citation of journal sources has increased over time.
While the above results indicate a decrease in the reference to non-journal materials, the overall results for each sub-category are less clear. The citation to books referenced has reduced over time, although these reductions are only statistically significant for the JCR between 1990–2003 and the JMR between 1990–2003 and 1975–2003. There is no statistical difference in book citations for any periods for JM. In regards to book chapters, these have also reduced over time. There were no statistical differences in book chapter citation rates for JCR, but there was a decrease for JMR (1990–2003 and 1975–2003). For JM there was an increase in book chapter citation rates between 1975 and 1990, which then fell in 1990–2003 back to 1975 levels.

There was a reduction in citations to conference proceedings and papers between 1975 and 2003 for all

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<tr>
<td>Number of articles</td>
<td>37</td>
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<tr>
<td>Number of pages</td>
<td>319</td>
</tr>
<tr>
<td>Average pages per article</td>
<td>8.6</td>
</tr>
<tr>
<td>Number of references</td>
<td>915</td>
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<tr>
<td>Average number of references per article</td>
<td>24.7</td>
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<tr>
<th>TABLE 2</th>
<th>CITATION RATE FOR EACH TYPE OF MATERIAL REFERENCED</th>
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<tbody>
<tr>
<td>Journals</td>
<td>52.9</td>
</tr>
<tr>
<td>Books</td>
<td>18.8</td>
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<tr>
<td>Chapters</td>
<td>11.3</td>
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<tr>
<td>Proceedings &amp; Conferences</td>
<td>9.2</td>
</tr>
<tr>
<td>Business &amp; Popular Press</td>
<td>0.7</td>
</tr>
<tr>
<td>Others</td>
<td>7.2</td>
</tr>
<tr>
<td>Totals</td>
<td>100</td>
</tr>
<tr>
<td>Number of References</td>
<td>915</td>
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</table>
three journals. However, the drop in citations attributed to conference materials is only statistically significant for all three journals between 1990 and 2003, and was only statistically significant between 1975 and 1990 for the JMR. The results relating to the referencing of materials from the business and popular press are also mixed. Citations to these materials increased for the JCR, but decreased for JM. Between 1990 and 2003, references to business press then decreased in JCR, but increased in JMR and JM. The net effect during this period is mixed with no statistical difference in JM references to professional materials, statistically significant increases in JCR references to these materials and statistically significant decreases in JM references to these materials.

Finally, there has been a decrease, within all three journals, in regards to other materials cited for all pairs of comparisons (i.e., 1975–1990, 1990–2003, and 1975–2003). While we did not tabulate the sub-groupings in this category (i.e., working papers, unpublished Ph.D. thesis, governmental reports, legal cases, etc.), it did appear that in 1975 there was extensive use of unpublished Ph.D. theses and working papers. The reduction may again have been the result of increased publishing opportunities, i.e., additional journals in which authors could publish their theses and working papers.

The results for \( H_2 \) are therefore somewhat mixed. There were 31 instances where there were statistical differences in citation rates for a specific type of non-journal material between pairs of years within a given journal (i.e., 14 instances where there were no differences). Of these 31 pairs of differences, only three reflected increases in the citation of a type of material. It would appear that the citation rate of all non-journal materials has generally decreased over time and thus academics might not be drawing on the fullest range of knowledge sources. The only two instances where there were no changes over the three years for a category occurred in regards to book chapters within the Journal of Consumer Research and books within the Journal of Marketing.

Z-tests were also used to compare the citation rates between journals for common years (i.e., test \( H_3 \)) and differences are reported in Table 4. The results for \( H_3 \) are mixed, although on balance, there are more differences than similarities between types of materials cited across journals at given points in time. In looking at the first row we see that in five instances, the citation rate to journal sources statistically differed across journals (i.e., five out of nine). The differences however vary between journals and years. For example, in 1975 JM relied less extensively on journal articles than did JMR and JCR. But by 2003, citations to journal articles in JM caught up with JMR and surpassed citations to journals in JCR. As such, there does appear to be a difference in citation behavior of journal articles across the journals, although the difference is not necessarily consistent over time.

In regards to non-journal materials, the results are equally mixed. There were no differences in books citations in 1975 between journals. However in 1990 and 2003, JCR relied more heavily on books than did the other two journals. Statistically, JCR consistently has more citations to book chapters than the other journals. The articles in JCR also contain the most citations to conference materials. This is not surprising as the ACR is often cited in articles appearing in the JCR (Zinkhan et al.)

### Table 3

**Differences Over Time in the Citation Rate Within Each Journal for Each Type of Material Referenced**

(X INDICATES Z-TESTS SIGNIFICANT AT THE \( P < .05 \) LEVEL)

<table>
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<tr>
<th></th>
<th>JCR (%)</th>
<th>JMR (%)</th>
<th>JM (%)</th>
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<tbody>
<tr>
<td></td>
<td>75–90</td>
<td>90–03</td>
<td>75–90</td>
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<tr>
<td>Journals</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Books</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Chapters</td>
<td></td>
<td>X</td>
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<tr>
<td>Proceedings &amp;</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Conferences</td>
<td></td>
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</tr>
<tr>
<td>Business &amp; Popular</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Press</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>X</td>
<td>X</td>
<td>X</td>
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</table>
Proceedings were cited to the same degree in JM and JMR (1990, 2003) and JMR and JCR (1975, 2003).

The JCR generally cited the business and popular press less frequently than the other journals, other than in 1990 when compared to JMR. So again there appears to be a difference in the citation of various non-journal materials across journals. Articles appearing in JM used “other” sources statistically more frequently than articles appearing in JCR across all time periods and statistically more frequently than authors of papers appearing in JMR in 1975 and 1990. This again might relate to the focus of the journals and types of research. JM could be considered to be more managerial focused, and relies more frequently on other sources to better develop this managerial focus. Overall we can reject H3 as there are more differences in citation categories across journals. Thus, citation behavior in journals varies, which is also supported by Guidry et al. (2004), although they did not empirically test the differences in citation rates across the journals they examined.

### LIMITATIONS

It is assumed that there is no bias in the citation of articles published in a given year. However, if an issue of a journal focused on a specific topic (say legal issues in marketing), it could result in a variation of materials cited (Olk and Griffith 2004). We do not believe that there were any special issues within these three journals during the three years examined and thus the results should be representative of the periods of research explored. In some cases, conference proceedings are published as books, so what appears to be book chapters are actually conference papers. This would reduce citations to conferences, but it is not possible to identify if this has occurred without referring back to the original references cited.

It is unclear how materials have been used within the literature. Identifying where materials are used will possibly allow for a better understanding of how they affect knowledge development. For example, are books primarily used to deal with methodological issues? Are popular materials used to support theoretical findings, or are they used to develop background discussions and to identify issues for examination?

A final limitation is the lack of previous research on citation sources. As readers will note, many of the references within this paper are from conference papers. This does not reduce their relevance, but identifies that the issue is one that has not been extensively studied in the literature.

### CONCLUSIONS

The results suggest that citations within academic articles rely more on journal articles today in JM, JMR, and JCR than they did in 1975, although marketing theory still refers to some non-journal material. Within the marketing domain there are also differences in the citation of various non-journal materials, both within and between journals over time. It seems to suggest that marketing
academics are referring to non-journal sources less frequently. It is unclear whether this is because there are more journals that are more accessible or that academics (authors and possibly reviewers) perceive non-journal works to have less value. Given that non-journal materials are still used, albeit to a lesser degree, they still play an important role in knowledge development.

There is most certainly a need to examine the role of non-journal materials in knowledge development. As these sources are often essential (Drott 1995). For example, how do conference materials contribute to the overall development of theory, research and knowledge? Even though the literature suggests that conferences are important for knowledge development, the existing literature does not consider the powerful effect that formal and informal sharing of ideas at conferences can have (Sellitto 2005). The intellectual discourse occurs at various levels within the conference environment, including reviewer’s reports, discussant’s comments, audience input, stimulation from ideas presented in other papers, or collaborative partnerships that form as a result (Fugate and Milliman 1988; Holbrook and Thayer 1985; Zinkhan et al. 1990).

One might also question whether the decline in the business and popular press means that there is less focus on managerial issues? The salience of academic research to practitioners has been questioned in the past (Sivadas and Johnson 2005). A number of authors (i.e., Armstrong and Pagell’s 2003; Baldridge et al. 2004; Bushardt and Fowler 1993) have suggested that academic journal materials may not be readily accessible to practitioners. This decrease in the use of the business and popular press in published works could be one reason why managers believe that academic works are less relevant to them.

This research suggests that over time within marketing journals, there has been increased reliance on the citation of materials in other journals. However, there is some variation across marketing journals as well, and thus the focus of a journal can impact on the materials cited. The implication for publishing or for having one’s research cited by others is less clear. It might be that reviewers perceive citations to non-journal materials negatively and thus authors are responding to external forces (i.e., reviewers). It could be that the type of research being undertaken is not driven at a managerial level and is therefore seen to be less relevant. These issues lead to a range of opportunities for future research.

**FUTURE RESEARCH**

There are of course many issues that need to be examined in regards to how these non-journal materials have been, and are being used within academic articles to develop or assist in developing marketing knowledge. This could be explored across types of non-journal materials. In the case of the business and popular press, is this being used to identify research issues or to give context to research findings, or are they used in some other way in the literature? Might increased access to industry publications mean that academics are in a better position to incorporate practical issues in theory development? In the case of books and book chapters, are these used primarily for methodological support or are more specialized texts being used in theory development? Given that these still tend to be available in hard copy format, their use in research may in fact decline as electronic access to journals, proceedings, etc. increases. As for conference papers, broader access might allow researchers to integrate the most current thinking and encourage a quicker dissemination of ideas.

Future research could also explore the implications of using various references in terms of academics’ works being cited by others. Sivadas and Johnson (2005) suggested that the more citations in a journal article, the more frequently it would be cited by others. However, the types of materials cited make a difference. For example, Stremersch and Verhoef (2005) found that works with global authors were less cited by others. In regards to the types of materials cited, it might be that using more non-journal citations could affect how others regard the work and therefore whether it is cited. If non-journal works were seen to contribute to knowledge development, the citation of works with large numbers of non-journal references would be high. On the other hand, if non-journal materials were not valued, referring to them could reduce the citation of ones work by others. The impact of citation type on how the works are viewed is something that requires further study.

Future research can also explore the effect of the World Wide Web and other electronic forums in regards to academic research and publishing in marketing. While there has been limited literature on this issue in other disciplines (for example, Bar-Ilan et al. 2003; Herring 2002), it has not been explored within marketing. One might anticipate that the more accessible the material, the more likely it is to be cited. This assumes that academics perceive all types of materials to be valuable. If not, accessibility may only assist certain types of materials. This could partly explain why the proceedings of the *Advances in Consumer Research* are one of the most cited proceedings in marketing (Zinkhan et al. 1990), simply because they have been web accessible, for free, for many years.
ENDNOTES

1 According to Ulrick’s in 1970 there were only nine marketing journals which expanded to 39 in 1989 and 80 in 2000.

2 The other category included working papers, unpublished Ph.D. thesis, governmental reports, legal cases, etc.

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________________ (2004), “RESPONSE: Where Does Use-


