

**A Taste of a Method's Own Medicine:
A Content Analysis of Content Analyses**

Graham Austin*

124 Brooks Hall
Athens, GA 30602-6258
Phone: (706) 542-3764
E-Mail: graham1@terry.uga.edu

Angeline Grace Close*

124 Brooks Hall
Athens, GA 30602-6258
Phone: (706) 542-3764
E-Mail: aclose@terry.uga.edu

Sunil Contractor*

132 Brooks Hall
Athens, GA 30602-6258
Phone: (706) 542-3372
E-Mail: sunilc@arches.uga.edu

Ji Hee Song*

131 Brooks Hall
Athens, GA 30602-6258
Phone: (706) 542-3774
E-Mail: jhsong@arches.uga.edu

Qiyu (Jason) Zhang*

G17A Brooks Hall
Athens, GA 30602-6258
Phone: (706) 583-0146
E-Mail: qiyu@arches.uga.edu

*The team of authors contributed equally, and are PhD students in marketing, at the Terry College of Business at the University of Georgia, Athens GA 30602. The authors worked under the guidance of Dr. Leonard Reid and Jisu Suh, of UGA's Grady college of Journalism and Mass Communications.

A Taste of a Method's Own Medicine: A Content Analysis of Content Analyses

ABSTRACT

Here, we investigate how content analyses published in four marketing journals (*Journal of Marketing*, *Journal of Marketing Research*, *Journal of Consumer Research*, and *Journal of Business Research*) have evolved from 1977 to 2002. The three research questions guiding our study are:

RQ1 From the marketing perspective, what is the overall contribution of content analyses published in the marketing literature from 1977 to 2002?

RQ2 What is the developmental history of content analysis as a research method in the selected marketing literature?

RQ3 As a research method, has content analysis been adequately applied in the marketing literature?

We find that content analysis has become an increasingly sophisticated analytical tool over the past twenty-five years, as evidenced by content analysts' heightened reliance on theory to inform research design and interpretation of findings, and by their increasing use of advanced statistical methods to analyze data. However, many content analyses still rely solely on simple percentages to interpret their data. Furthermore, many content analysis researchers do not report essential information in their articles, such as reliability and validity testing. We call for researchers to uphold more rigorous standards in content analyses in order to improve its efficacy as a research method.

KEYWORDS

Content Analysis, Research Method, Marketing Journals, Trends, Methodology Issues

A Taste of a Method's Own Medicine: A Content Analysis of Content Analyses

Introduction

Science does not monopolize truth, but science does monopolize the process of checking and advancing truth (Bunge, 1961).

The methods typically employed in marketing research tend to be those borrowed from positivistic science, where the “methodology of science is its logic of justification.” (Hunt, 2002, p. 23) That said, a unified (e.g., scientific) method generally guides marketing researchers. However, marketing research often involves the examination of the processes of communication as well. Content analysis is a widely used method for the evaluation of communication forms (Yale and Gilly, 1988). Thus, in this content analysis of content analyses, we review all content analysis papers published from 1977 to 2002 in four exemplary marketing-oriented journals: *Journal of Marketing*, *Journal of Marketing Research*, *Journal of Consumer Research*, and *Journal of Business Research* – herein identified as *JM*, *JMR*, *JCR*, and *JBR*. We report methodological trends, as well as insights into how well marketing researchers have employed content analysis as a tool for achieving a greater understanding of their research topics.

Content analysis is an observational research method, a tool used systematically to evaluate the symbolic content of all forms of recorded communications (Kolbe and Burnett, 1994). Content analysis allows researchers to investigate communications in an unobtrusive manner; in contrast, in direct methods of inquiry (e.g., interviews, observation), researchers’ intervention may lead to a bias in informants’ responses. While content analyses are often performed as the sole method of inquiry, a combination of research methods allows researchers to offer a richer description of marketing phenomena (Brewer and Hunter, 1989). Multimethod research also allows improved validation of results as it “mitigates method biases” (Kolbe and Burnett, 1994 p. 244). For example, Reddy et al. (1998), combined content analysis with regression in order to discern correlations among variables that determine the relative success of Broadway shows.

The primary weakness in content analysis as a method is the possibility of researcher bias. Bias may influence the choice of research questions, data collection and statistical analysis methods (Riffe et al., 1998). A second weakness is that the method may investigate only documented content (Kolbe and Burnett, 1994), yet the definition of appropriate “documented content” blurs as communication technologies advance. While the Internet is a potentially rich source of images, words, and thematic units of study for content analysts, the accuracy and veracity of most websites is not adequately documented. Not one of the content analyses articles included in our study focused on Internet-based content. A final weakness of the method is that content analyses generally report categorical data (Kolbe and Burnett, 1994). While categorical data yield high identification, description, and classification, higher-order constructs (not frequently used in content analysis research) often lend themselves to richer, more in-depth analyses. We identify marketing researchers’ continuing underutilization of the power of content analysis in our own study, and propose reasons as to why marketing researchers are not turning to content analysis in greater numbers in their scholarly pursuits.

Research Objectives

We began with a series of informal hypotheses, which informed this study. Our first *a priori* notion was that content analysis has moved over time from a positivistic paradigm to an interpretive paradigm, as evidenced by an increasing examination of latent-meaning variables and by the increasing use of theory in content analyses. Second, we hypothesized that content analysis has become an increasingly sophisticated analytical tool, as evidenced by the use of more advanced statistical methods over time.

Previous studies on content analysis (e.g., Yale and Gilly, 1990; Kolbe and Burnett, 1994) serve as a framework to which we add, and our study has three goals. First, we seek to identify the overall contribution of content analysis to marketing research by summarizing and characterizing articles published in four selected marketing oriented journals from 1977 to 2002. Second, we look for methodological trends by tracking the developmental history of content analysis as a research method.

Third, we examine the extent to which knowledge acquired from past content analysis “how-tos” (e.g., Kassarian, 1977) is applied, and if it is applied correctly.

A Look into the Literature

In 1977, Kassarian introduced content analysis to marketing researchers as a new lens for examining marketing-related material. He pointed out the lack of methodological rigor in previously published content analyses and provided specific criteria to improve reliability, sampling, quantification, systematization, and objectivity for content analyses. Kassarian’s work constitutes a methodological benchmark in the field of marketing, especially in consumer behavior research (Kolbe and Burnett, 1994).

A decade after of Kassarian’s contribution, Yale and Gilly (1988) used the method to examine articles published in six advertising research journals from 1976 to 1985. They discovered a significant relationship between each journal and its published topics. For example, the *Journal of Advertising Research* covered advertising practices, while the *Journal of Advertising* covered advertising content. Another major finding of their study was that certain advertising topics, (e.g., industrial advertising, service advertising, and direct advertising) received inadequate attention from researchers.

In 1994, Kolbe and Burnett operationalized Kassarian’s (1977) stated directives by investigating whether researchers conducted and reported content analyses in accordance with his critical method. Kolbe and Burnett investigated content analyses in comparative advertising (Jackson et al., 1979), in industry (Stevenson and Swayne, 1984) and in business publications (Swayne and Stevenson, 1987). Kolbe and Burnett’s empirical methodological review serves as the basis for our investigation. We add to their findings by examining content analyses in marketing research.

Finally, Riffe and Freitag (1997) performed a content analysis of content analyses published in *Journalism Quarterly*, a mass communication journal. They specifically looked at methodological procedures, such as sampling, secondary methods, data collection, theoretical links, research questions, and hypotheses. Riffe and Freitag concluded that increased reliability reporting, as well as the use of sophisticated statistical analyses, are research trends in this particular journal.

METHODOLOGY

Sampling

We designed our project to examine all full-length (i.e., no “research in brief”) content analyses published from 1977-2002 (inclusive) in four marketing-related journals. We selected 1977 as our first year in order to assess the impact of Kassarijian’s recommendations on marketing researchers’ use of the method. Previous studies have used various methods to identify articles from academic journals for content analysis. These methods range from the most reliable/most time-consuming method (read each article) to the least reliable/least time-consuming method (computer search or journal index scan). For this project, the authors read each article’s title, abstract and methods section in order to identify content analyses. To avoid possible omission of articles, we crosschecked articles listed in the reference sections of identified articles. Furthermore, we ran a computer search on “content analysis” to confirm our sample.

Our selection of the *Journal of Marketing*, *Journal of Marketing Research*, *Journal of Consumer Research*, and *Journal of Business Research* was purposive; these journals publish a wide range of marketing articles and uphold the highest standards of scholarship. The number of years involved in the content analysis (25) and depth of the article selection method necessitated limiting the number of journals included in the study to just these four. The resulting sample contained 35 articles using content analysis as a primary or a secondary method, which were obtained from 497 issues containing 4,156 total articles. The sources for content-analysis studies were *Journal of Marketing* (n=10), *Journal of Marketing Research* (n=3), *Journal of Consumer Research* (n=15) and *Journal of Business Research* (n=7).

Coding

The operational definitions used to code the studies are detailed in Appendix A. The definitions were agreed upon by the group as a whole, and coder training was conducted by all authors' independently coding a pilot article. We resolved any disagreements by discussing the terms at hand until the team arrived at a consensus. Overall coding categories consisted of 1) objectivity, 2) systematization, 3) quantification, 4) sampling, and 5) reliability. Four authors of this paper conducted the final coding of the articles. Two main coders jointly coded all the articles while two checkers each coded half the articles for reliability purposes. Three of the four coders were international students for whom English is a second language; all the articles in our sample were written in English. Based on the findings of Peter and Lauf (2002), we determined that language comprehension would not affect the reliability of coding.

Reliability

We calculated interjudge reliability using Perreault and Leigh's (1989) standard, and report individual and global reliabilities below, in Table 1: Inter-coder Reliability.

Table 1: Inter-coder Reliability

Variable Name	Raw Percent Agreement (%)	Scott's Pi	Cohen's Kappa
Medium studied	98.35*	N/A	N/A
Country of content origin	97.2	0.921	0.921
Manifest content	94.4**	N/A	N/A
Latent content	91.7**	N/A	N/A
Coder training	94.4**	0.884	0.884
Pretest	86.1	N/A	N/A
Inter-coder reliability reported	100**	1	1
Intra-coder reliability reported	88.9	N/A	N/A
Theoretical framework	97.2**	N/A	N/A
Hypothesis	86.1	N/A	N/A
Link to other methods	86.1	N/A	N/A
Data, then theory	83.3	N/A	N/A
Theory, then data	97.2**	N/A	N/A
No theory	97.2**	N/A	N/A
Primary technique	91.7	N/A	N/A
Future research	83.3	N/A	N/A
Managerial implications	80.6	N/A	N/A
Coding procedure reported	88.9**	N/A	N/A
Coding independently	94.4**	0.862	0.862
Kassarjian	97.2	N/A	N/A

* the average of 12 individual media-related variables (TV, magazines, Internet, etc.)

Global Reliability	94.1	N/A	N/A
---------------------------	-------------	-----	-----

The authors used the PRAM (Program for Reliability Assessment with Multiple-Coders) software package, as recommended by Neuendorf (2002), to calculate various reliability coefficients including: percent agreement, Holsti’s method, Scott’s pi, and Cohen’s kappa. For the 31 items coded, our initial general inter-coder reliability (raw percent agreement) was 83.9% and individual reliabilities ranged from 52.8% to 100%. Following Neuendorf (2002), we used 80% agreement as the cutoff point. Thus, items with reliabilities lower than 80% were subject to checking and recoding. In total, nine items were independently recoded by two team members (one main coder and one checker). Before the recoding, the research team thoroughly discussed all items to be coded, thus achieving consensus.

The final overall raw percent inter-coder reliability was 94.1%, with individual reliabilities ranging from 80.6% to 100%. Because two coders coded the same units, the value for Holsti’s method was also 94.1%. Values for Scott’s pi and Cohen’s kappa may be calculated only when variables have more than two possible answers (Riffe et al., 1998), and were therefore reported for only four variables (international content, coder training, intercoder reliability, independent coding). Scott’s pi and Cohen’s kappa reliabilities available from our data were all above .85, indicating excellent intercoder agreement (Banerjee et al., 1999).

RESULTS AND DISCUSSION

RQ1 From the marketing perspective, what is the overall contribution of content analyses published in the marketing literature from 1977 to 2002?

Content analysis is not a widely used method in marketing research — in fact, its presence is almost nonexistent. Of 4,156 articles published in the four journals over 25 years, less than 1% were content analyses. 31% of our sample studied magazines as the sole or primary medium; television was the second most prevalent medium studied (28.6%). Surprisingly, the analysis of articles published in academic journals (14.3%) exceeded the frequency of newspaper advertisements (8.6%) and outdoor

** as a result of recoding

advertising (2.9%). Other sources of research content included comic books (5.7%), novels (2.9%), and experimental data (2.9%).

Content analyses can be divided into information content studies (i.e., what marketers say), and message content studies (i.e., how they say it). Most content analyses in the marketing literature analyze message content. Message content studies may focus either on the message itself or on its effects. We found the overall contribution of content analyses in marketing to be the advancement of knowledge and theory related to specific topics. Appendix B contains a complete summary of all articles included in our sample. Content analyses have covered topics from sex and race to shopping behaviors and comic books, and source materials come from around the world. In other words, this is a method of rich topical inquiry, and a variety of themes in the marketing literature have emerged in our study. The three major content areas we have identified are 1) Advertising appeals, 2) Social values, and 3) Research methodology.

Advertising appeals. Of the 35 articles in our sample, more than half (51.4%) relate to advertising. A variety of appeals (e.g., sociocultural, humorous, sexual), have been studied in marketing content analyses. For example, Zinkhan et al. (1988) found that advertisers appeal more frequently to consumers' need for affiliation than to their need for achievement. Alden et al. (1993) studied the universality of humorous communications across diverse cultures. Studies on sexual appeals in marketing include Hirshman (1987, 1993), Gilly (1988), and Schneider and Schneider (1979). Finally, marketing researchers have used content analysis to further their understanding of advertising appeals in Australia information content in advertising (Dowling, 1980; Gilly, 1988), the Soviet Union (Lazer, 1986), China (Tse et al., 1989), Japan (Javalgi et al., 1995), and Mexico (Gilly, 1988).

Social values. A substantial 14.3% of the articles we analyzed focused on social values, and the most frequent topic of inquiry was materialism. Content analyses have shown that wealth is presented in comic books as both a positive and a negative force (Spiggle, 1986; Belk, 1987). Belk (1987) found that the values of hard work and honesty are portrayed as being ultimately more important than wealth. Belk and Pollay (1985) found the depiction of images of the "good life" in advertisements (luxury-based appeals) to be cyclical. Researchers have also used content analyses to recognize cross-cultural patterns

in consumption and materialism. For example, Tse et al., (1989) found that advertisements in three distinct Chinese societies have moved towards a vision of Western-style consumption-oriented culture.

Research methodology. Research methodology as a topic of study was content analyzed in 11.4% of the articles in our sample. However, only Kolbe and Burnett (1991) have published a study on content analyses in marketing. Other method-based articles appearing in the literature have examined published replications in academic business journals (Hubbard and Vetter, 1986) and the nature of consumer behavior research as it appears in the marketing literature (Helgeson et al., 1984)

RQ2 What is the developmental history of content analysis as a research/analytical method, as exemplified in the selected marketing literature?

Evolution of Content Analysis from Methodological Perspective

Content analysis has had a minor presence in the marketing literature, with its greatest prominence occurring in the late 1980s. From the methodological perspective, it is valuable for marketing scholars to investigate the history of content analyses in the marketing literature (Riffe and Freitag, 1998). Through a longitudinal examination of content analyses, we can identify trends concerning the use of the method, as well as research trends within the discipline of marketing overall.

As shown in Table 2: Sample Distribution, the number of content analysis papers appearing in the selected marketing literature from 1977 to 1984 was negligible. In the mid- to late 1980s, this method enjoyed substantial popularity; 17 articles – nearly half our sample – were published between 1985 and 1990. However, an increase in the numbers of published content analyses is not necessarily a step forward, unless these analyses provide a theoretical contribution to the marketing literature (Riffe and Freitag, 1998; Shoemaker and Reese, 1990).

Table 2: Sample Distribution

YEAR	No. of Articles	Percentage of Sample	YEAR	No. of Articles	Percentage of Sample
1977	1	2.86	1989	4	11.43
1978	1	2.86	1990	2	5.71
1979	1	2.86	1991	2	5.71
1980	1	2.86	1992	1	2.86

1983	1	2.86	1993	2	5.71
1984	1	2.86	1994	2	5.71
1985	3	8.57	1995	1	2.86
1986	4	11.43	1996	2	5.71
1987	3	8.57	1998	1	2.86
1988	1	2.86	2001	1	2.86

Note: There were no content analyses published in 2002. N=35.

A theoretical contribution requires sophisticated evaluation of the subject matter under investigation, including the interpretation of latent content meanings. The percentage of content analysis articles studying latent variables has been steadily growing. In Table 3: Two-Period Comparison of Data, we show that 47% of the content analysis articles published in Period One studied latent meaning variables, compared with 72% of the articles published in Period Two.

Based on this evidence, we suspected that the application of content analysis has evolved from a positivistic orientation to an interpretive one over the past 25 years. Positivistic analysis is defined as one that only counts manifest meanings of subject content. It does not build theories or use other theories to interpret its findings. An example of positivistic content analysis could be recording the durations of television advertisements. The interpretative paradigm is characterized by the analysis latent variables and use of theory-based research methods. A study of time-saving appeals in advertisements (Gross and Sheth, 1989) is an example of an interpretive content analysis.

To capture the paradigm shift, we investigated the manifest/latent property value of content in each article, and examined whether or not each study contained an explicit theoretical framework. Table 3 summarizes the information related to our longitudinal examination of content analyses' orientation, and presents the paradigm change by using a two-period comparison. We divided the sampling frame of the time into two periods, pre-1988 (inclusive) and post-1988, and each period contained equal numbers of content analysis articles; we calculated frequencies and percentages for each variable.

Table 3: Two-Period Comparison of Data

Description of Measurement	Period One (1977- 1988)	Period Two (1989- 2002)
Percentage of articles that examine latent-meaning variables	47%	72%
Percentage of articles that have a theoretical framework	59%	94%

Percentage of articles that have hypotheses	29%	61%
Percentage of articles with advanced statistical analysis	78%	83%
Average # of advanced statistical methods in each article	1.05	1.67
Percentage of articles with methodology as research topic	5.9%	16.66%
Percentage of articles analyzing academic journals	5.56%	22.22%
Percentage of articles using multiple methods	5.56%	38.88%
Percentage of two-method articles where CA is secondary method.	0 (0 out of 1)	71.4 % (5 out of 7)

Early content analyses in the marketing literature merely reported descriptive findings, primarily a group of frequencies. Recent works, however, are more likely to incorporate theories in their research designs for a greater understanding of the material under examination. In addition, an increasing number of authors are posing and testing hypotheses with data obtained from content analysis (see Table 3). In Period One, only 59% articles contained a theoretical framework, and 29% tested hypotheses. In contrast, these numbers rose to 94% and 61% respectively in the second period. Since 1990, almost all the content analysis articles have been linked to theory.

We assume that multi-method studies are more comprehensive and have more validity than single-method research designs. Hence, the increased number of multi-method studies indicates that content analyses are improving with regards to methodological complexity. As identified in Table 3, multi-method articles increased from 5.56% to 38.88% between Period One and Period Two. Table 3 also gives evidence that content analysis is increasingly used as a supporting research method, rather than the primary means of investigation; the percentage of multi-method articles where content analysis is a secondary method increased from 0% to 71% between Periods One and Two.

Furthermore, by examining the application of advanced statistical methods within content analysis articles, we found evidence that content analysis in marketing research has been becoming a more sophisticated analytical tool. We grouped descriptive statistical methods (frequency and percentage, t-test and chi-square test) as basic methods and classified all other statistical methods as advanced (e.g., ANOVA, regression, structural equation modeling). We tracked the average number of advanced statistical methods used in each article over time. The average number of advanced statistical

techniques reported in content analyses rose from 1.05 in Period One to 1.67 in Period Two, an increase of nearly 60% (see Table 3). The increase in the mean number of advanced statistical methods supports our informal hypothesis, that content analysis is evolving as a research method in marketing.

However, when comparing subject matter of content analysis within marketing literature between two periods, we found that scope of inquiry has not expanded over time. Researchers' choice of topics remained consistent across all articles. Perhaps this is due to our limited sample of content analyses. For example, we were surprised to find that none of the articles in our data set studied content related to E-Commerce, E-Marketing, or the Internet. By expanding the number of journals, we might find more variety in subject matter.

RQ3 As a research method, has content analysis been adequately applied in the marketing literature?

In order to answer this research question, our team first had to define what constitutes methodological adequacy. We determined that content analyses must include *a priori* coder training, specific coding rules and procedures, independent coders (or some other predetermined method for ensuring reliability of results), reliability reporting (both inter- and intra-coder), and validation of findings. These criteria were specified by Kassirjian (1977) as being essential for conducting content analyses. Furthermore, we concluded that methodological adequacy also encompasses the sophistication of statistical analyses used in content analysis research, as well as the theoretical underpinnings that authors use to justify their research questions and their interpretation of results. Finally, we determined that the depth and scope of the content analyses conducted over the past 25 years merited examination. Depth and scope may be analyzed by examining 1) whether authors used fields outside marketing to aid in their research, 2) the amount of international content analyzed, and 3) whether authors specified future research and/or managerial implications of their work.

We found that the conscientious application of Kassirjian's criteria varied widely in our sample. For example, 94.4% of the authors described their coding rules or procedures, but only 69.4% reported whether they had conducted independent coding; in the other 30.6% of articles, the actual coding process

was left unclear. As another example, 83.3% of papers gave either general or specific inter-coder reliability figures, but 88.9% did *not* cite figures for intra-coder reliabilities, and 94.4% did not attempt to validate their findings in any way.

Our research team was interested in post-Kassarjian (1977) application of content analysis methods. Therefore, we examined papers that cited Kassarjian to determine whether those authors actually followed his prescriptions for content analysis. In approximately half of the cases, authors cited Kassarjian as a source in their articles (see Table 4: Number of Papers Citing Kassarjian and Following his Guidelines). Despite his clear methodological prescriptions, authors citing Kassarjian over the past 25 years have tended to follow the general overall pattern. For example, 81.3% of authors citing Kassarjian’s work reported specific values for inter-coder reliabilities, compared with 83.3% overall. There were a few contrasts between the groups: 81.3% of Kassarjian-citing authors conducted and reported independent coding of their samples (compared with 69.4% of authors overall). However, only one of these authors discussed intra-coder reliabilities and validation of the content analysis, in keeping with the overall sample.

Table 4: Number of Papers Citing Kassarjian and Following his Guidelines

(N=16)

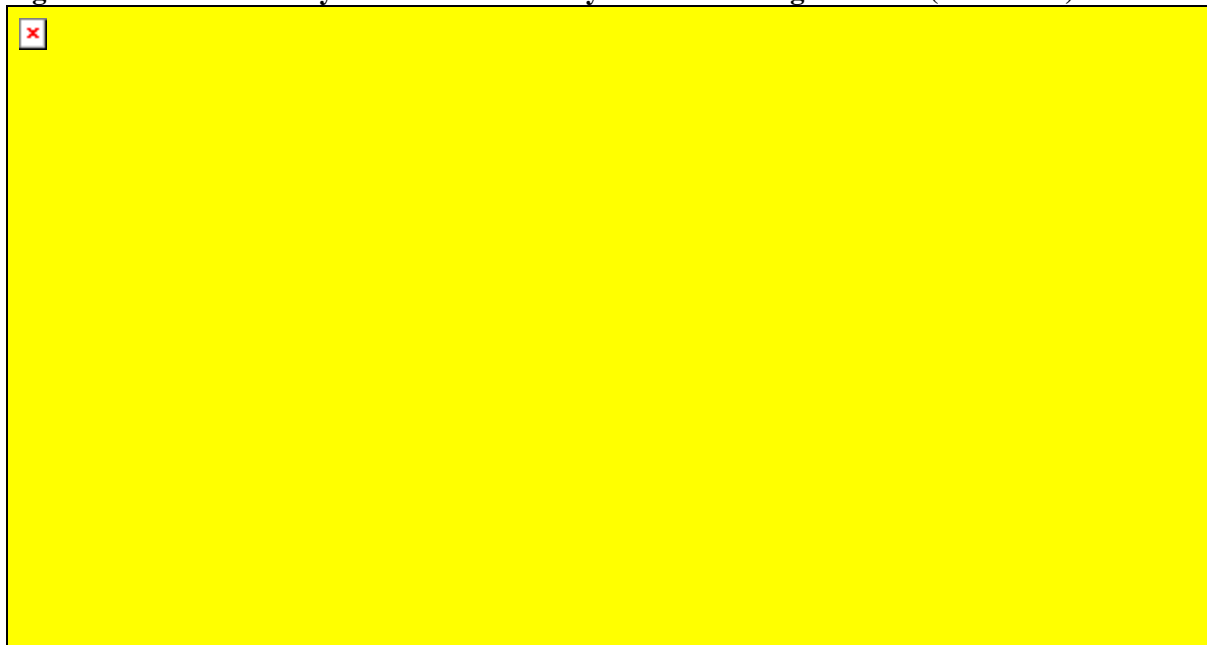
Paper Includes	Total # (%)
Coder training (Yes)	6 (37.5%)
Pretest/Pilot (Yes)	6 (37.5%)
Coding rules and procedure (Yes)	16 (100%)
Independent coding (Yes)	13 (81.3%)
Inter-coder reliability (Yes-specific reporting)	13 (81.3%)
Intra-coder reliability (Yes)	1 (6.3%)
Validation (Yes)	1 (6.3%)

As for statistical analyses, we found that frequencies and percentages were by far the most popular analytical methods employed. See Figure 1: Statistical Analysis via Content Analysis in Marketing Journals for a comparison of all statistical methods used. This lack of sophistication might be the result of small sample sizes. For example, our own attempts at looking for statistical significance

using chi-squared tests, cross tabulations, regressions, and t-tests were for the most part unsuccessful due to our limited sample (N=35).

The content analyses we examined were far more theoretically sophisticated than statistically sophisticated. The articles were almost universally theory-driven (80.6%), with 77.8% citing a specific theoretical framework that informed the research *a priori*. Furthermore, the authors of the articles we

Figure 1: Statistical Analysis via Content Analysis in Marketing Journals (1977-2002)



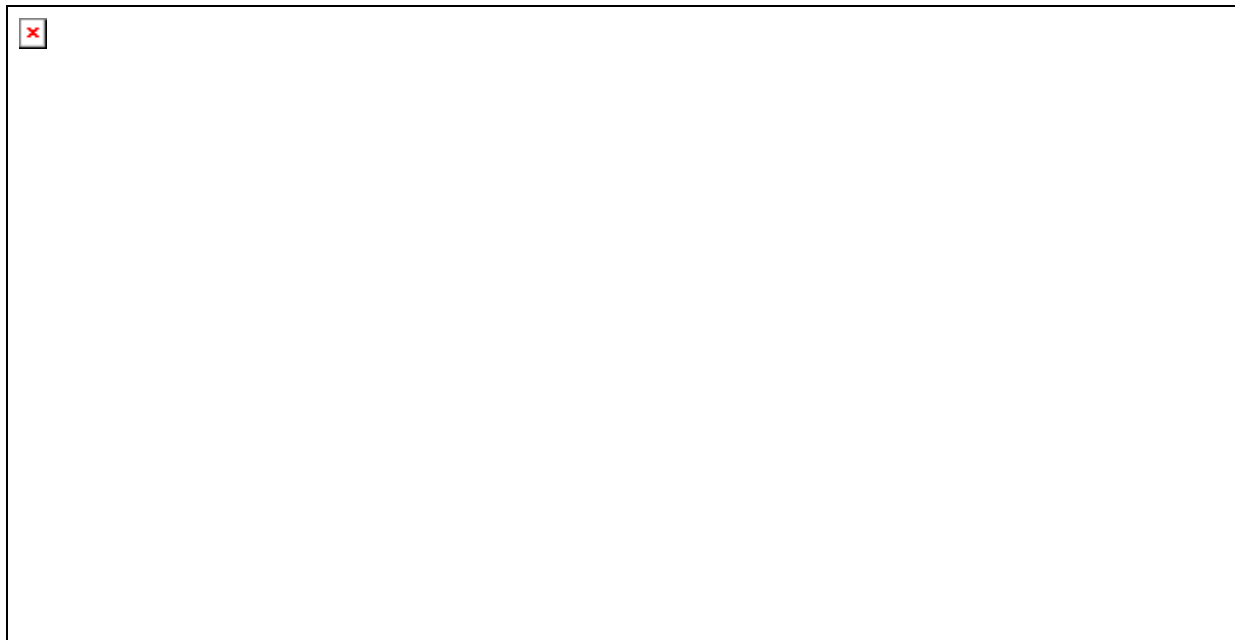
examined were not shy about borrowing from other fields of academic inquiry to justify their research questions and their interpretation of findings. See Figure 2: Fields Used in Content Analysis in Marketing Journals. As marketing is a synthetic, applied discipline, it relies on other disciplines to inform both its theories and methods. It is not surprising that advertising (63.9%), sociology (50%) and psychology (38.9%) were the fields most commonly used to aid in marketing-oriented content analyses.

One of our most interesting findings came from a cross-tabulation of statistical methods and outside interpretations. Those authors who used psychological theories to guide their research also used the most sophisticated statistical techniques to examine their findings. Psychology-based studies relied on simple percentages only 64.3% of the time, employing ANOVA in 35.7% of their analyses and regression in 28.6% of cases. (It should be noted that these categories are not mutually exclusive: in

many cases researchers used more than one method to analyze their results.) Academic psychology has a history of maintaining the highest methodological rigor, which is reflected in its application to marketing analyses.

Finally, a substantial number (20%) of the articles analyzed international content, either in lieu of or in conjunction with domestic sources, indicating that it is an effective method for conducting cross-cultural research. Of these internationally-oriented articles, 71.4% discussed the managerial and/or future academic implications of their findings, which is higher than the overall percentages (44.4% and 69.4%, respectively). In general, we find content analysis research methods to be rich in interpretation and outlook, yet lacking rigor and sophistication in its quantitative application.

Figure 2: Fields Used in Content Analysis in Marketing Journals (1977-2002)



CONCLUSION

In summary, our investigation of the evolution of content analyses from selected marketing journals (1977 to 2002) found trends in authorship, content, sampling, reliability, frequency, inclusion with other statistical methods, and theoretical basis. We found:

1. *The overall contribution of content analyses to the field of marketing.* Despite their limited numbers, the scope of content analyses is broad – from analyzing wealth in comic books to studying major shifts in Chinese culture. Advertising-related topics are of considerable interest to marketing content analysts. Content analysis is an effective tool for assessing the application of research methods.
2. *History.* There has been a qualitative shift in the application of content analyses in marketing literature, from a positivistic paradigm to an interpretive one. The developmental history of content analysis as a research/analytical method shows other distinct trends related to research topics, media studied, and methods used. The lag between Kassarian's article (1977) and the paradigm shift in content analyses suggests that researchers need a significant amount of time to achieve notable improvements in methodological applications.
3. *Methodological rigor.* Researchers' use of content analysis is increasingly rigorous, but it is not yet a highly sophisticated analytical tool in the selected marketing literature. While the theoretical, more qualitative side of research design has flourished, content analysts on the whole have yet to adopt advanced statistical analytical methods.

Clearly, future research should involve a detailed study with a much larger sample to achieve statistically valid inferences. In this article, we do not practice what we preach with regards to advanced statistical reporting, as our present study was limited to only four marketing journals and our sample size was too small to find significant results with anything but simple analyses. However, through inferences gathered from analysis of our research questions, we maintain that this article sheds light on the method of content analysis and its relationship with the marketing literature.

We recommend that marketing researchers continue to integrate other disciplines' (e.g., advertising, mass communications, psychology, economics, management, MIS, sociology, linguistics) knowledge and theoretical bases into every aspect of their research designs. We also maintain that statistical rigor in content analyses must improve in order to establish widespread confidence and acceptance of the method, by researchers and readers alike. A broad scope of inquiry, combined with

rigorous statistical application could transform content analysis into a key that opens many doors for the field of marketing.

REFERENCES

- Alden, Dana L., Wayne D. Hoyer, and Chol Lee (1993), "Identifying Global and Culture-Specific Dimensions of Humor in Advertising: A Multinational Analysis," *Journal of marketing*, 54(April), 64-75.
- Banerjee, Mousumi, Capozzoli, Michelle, McSweeney, Laura, & Sinha, Debajyoti (1999), "Beyond kappa: A review of interrater agreement measures," *Canadian Journal of Statistics*, 27 (1), 3-23.
- Belk, Russell W. and Richard W. Pollay (1985), "Images of ourselves: The good life in twentieth century advertising," *The Journal of Consumer Research* 11 (4), 887-897.
- Belk, Russell W. (1987), "Material Values in the Comics: A Content Analysis of Comic Books Featuring Themes of Wealth," *The Journal of Consumer Research*, 14 (1), 26-42.
- Brennan, Robert L. and Dale J. Prediger (1981), "Coefficient Kappa: Some Uses, Misuses, and Alternatives," *Educational and Psychological Measurement*, 41, 687-699.
- Brewer, John and Hunter Albert (1989), *Multimethod Research: A Synthesis of Styles*, Newbury Park, CA: Sage.
- Bruton, Garry D., J. Kay Keels, and Elton L. Scifres (2002), "Corporate restructuring and performance: An agency perspective on the complete buyout cycle," *Journal of Business Research*, 55 (9), 709-24.
- Budd, Richard W., Robert K. Thorp, and Lewis Donohew (1967), *Content Analysis of Communications*, New York: Macmillan.
- Bunge, Mario (1961), "Kinds and Criteria of Scientific Laws," *Philosophy of Science*, 28 (3), 260-81.
- Daniel Riffe, Stephen Lacy, Frederick G. Fico (1998), *Analyzing Media Messages: Using Quantitative Content Analysis in Research*, Mahwah, New Jersey, L. E. Associates, Inc.
- Dowling, Grahame R. (1980), "Information Content in U.S. and Australian Television Advertising," *Journal of Marketing*, 44(4), 34-37.
- Gilly, Mary C. (1988), "Sex Role in Advertising: A Comparison of Television Advertisements in Australia, Mexico, and the United States," *Journal of Marketing*, 52 (April), 75-85.
- Gross Barbara L., Jagdish N. Sheth (1989), "Time-Oriented Advertising: A Content Analysis of United States Magazine Advertising, 1890-1988," *Journal of Marketing*, 53 (October), 76-83.
- Helgeson, James G.; E. Alan Kluge; John Mager; Cheri Taylor (1984), "Trends in Consumer Behavior Literature: A Content Analysis," *The Journal of Consumer Research*, 10 (4), 449-454.
- Hirschman, Elizabeth C. (1987), "People as Products: Analysis of a Complex Marketing Exchange," *Journal of Marketing*, 51 (Jan), 98-108.
- _____ (1993), "Ideology in consumer Research, 1980 and 1990: A Marxist and Feminist Critique," *Journal of Consumer Research*, 19 (March), 537-555.

- Holbrook, Morris (1977), "More on Content Analysis in Consumer Research," *The Journal of Consumer Research*, 4 (3), 176-177.
- Hubbard, Raymond and Daniel E. Vetter (1996), "An Empirical Comparison of Published Replication Research in Accounting, Economics, Finance, Management, and Marketing," *Journal of Business Research*, 35(2), 153-164.
- Hughes, Marie Adele and Dennis E. Garrett (1990), "Inter-coder Reliability Estimation Approaches in Marketing: A Generalizability Theory Framework for Quantitative Data," *Journal of Marketing Research*, 27 (May), 185-195.
- Hunt, Shelby. (2002), *Foundations of Marketing Theory: Toward a General Theory of Marketing*. M.E. Sharpe: New York. P.1-323.
- Jackson, Donald W. Jr., Stephen W. Brown and Robert R. Harmon (1979), "Comparative Magazine Advertisements," *Journal of Advertising Research*, 19 (December), 21-26.
- Javalgi, Rajshekhar G., Bob D. Cutler, and Naresh K. Malhotra (1995), "Print Advertising at the Component Level: A Cross-Cultural Comparison of the United States and Japan," *Journal of Business Research*, 34, 117-124.
- Kaplan, Abraham (1964), *The Conduct of Inquiry*. Sacranon, PA: Chandler.
- Kassarjian, Harold H. (1977), "Content Analysis in Consumer Research," *Journal of Consumer Research*, 4 (June), 8-18.
- Kolbe Richard H. and Melissa S. Burnett (1991), "Content-Analysis Research: An Examination of Applications with Directives for Improving Research Reliability and Objectivity," *The Journal of Consumer Research*, 18 (2), 243-250.
- Krippendorff, Klaus (1980), *Content Analysis: An Introduction to Its Methodology*, Beverly Hills, CA, Sage.
- Lazer, William (1986), "Soviet Marketing Issues: A Content Analysis of *Pravda*," *Journal of Business Research*, 14, 117-131.
- Lohtia Ritu, Brooks Charlets M., Krapfel Robert E. (1994), "What Constitutes a Transaction-Specific Asset? An Examination of the Dimensions and Types," *Journal of Business Research*, 30, 261-270.
- McQuarrie, Edward F., David Glen Mick (1989), "On Resonance: A Critical Pluralistic Inquiry Into Advertising Rhetoric," *The Journal of Consumer Research*, 19 (2), 180-197.
- Neuendorf, Kimberly A. (2002), *The Content Analysis Guidebook*, Thousand Oaks, California, Sage.
- Perreault, William D., Jr. and Laurence E. Leigh (1989), "Reliability of Nominal Data Based on Qualitative Judgments," *Journal of Marketing Research*, 26 (May), 135-148.
- Peter, Jochen and Edmund Lauf (2002), "Reliability in Cross-National Content Analysis," *J&MC Quarterly*, 79 (4), 815-832.

- Pollay, Richard W. (1986), "The Subsiding Sizzle: A Descriptive History of Print Advertising, 1900-1980," *Journal of Marketing*, 49(3), 24-37.
- Reddy, Srinivas K., Vanitha Swaminathan, and Carol M. Motley. (1998), "Exploring the Determinants of Broadway Show Success," *Journal of Marketing Research*, 35 (August), 370-383.
- Riffe Daniel and Freitag Alan (1998), "A Content Analysis of Content Analyses: Twenty-Five Years of Journalism Quarterly," *J&MC Quarterly*, 74 (4), 873-882.
- Schneider, Kenneth C. and Sharon Barich Schneider (1979), "Trends in Sex Roles in Television Commercials," *Journal of Marketing*, 43(3). 79-84.
- Shoemaker Pamela J. and Reese Stephen D. (1990), "Exposure to What? Integrating Media Content and Effects Studies," *Journalism Quarterly*, 67 (Winter), 649-52.
- Spiggle, Susan (1986) "Measuring Social Values: A Content Analysis of Sunday Comics and Underground Comics," *The Journal of Consumer Research*, 13, (1), 100-113.
- Stevenson, Thomas H. and Linda E. Swayne (1984), "Comparative Industrial Advertising: The Content and Frequency," *Industrial Marketing Management*, 13, 133-138.
- Swayne, Linda E. and Thomas H. Stevenson (1987), "Comparative Advertising in Horizontal Business Publications," *Industrial Marketing Management*, 16, 71-76.
- Tse, David K., Russell W. Belk, and Nan Zhou. (1989), "Becoming a Consumer Society: A Longitudinal and Cross-Cultural Content Analysis of Print Ads from Hong Kong, the People's Republic of China, and Taiwan," *Journal of Consumer Research*, 15(4), 457-472.
- Yale, Laura and Mary C. Gilly (1988), " Trends in Advertising Research: A Look at the Content of Marketing-Oriented Journals from 1976 to 1985," *Journal of Advertising*, 17(1), 12-22.
- Zinkhan, George M., Jae W. Hong, and Robert Lawson. (1990), "Achievement and Affiliation Motivation," *Journal of Business Research*, 20, 135-143.

APPENDIX A

Operational Definitions

Variables	Definition
Coding Rules and procedures	Code “Yes” if the paper provides detailed categories and operational definitions about variables, or cites previous research as the source for rules and procedures.
Independent Coding	Code “Yes” if there is an explicit statement in the paper that judges (coders) are independent or separate. (We consider unclear if authors do not mention anything about judge independence.)
Future Research	Code “Yes” if there is an explicit statement indicating area or idea of research to continue the current study.
Manifest Property Value	Code “Yes” if any of variable’s literal/actual content is used for analysis.
Latent Property Value	Code “Yes” if any variable is measured by subjective judgment.
Coder Training	Code “General” if there is an explicit statement indicating coder training. Code “Specific Training” if the research paper has provided detailed description of training.
Inter-Coder Reliability	Check “Yes” if a researcher reports that something like “we conducted inter-coder reliability test and it was acceptable” without any numeric indicators.
Theory-Driven Research	Check “Yes” if analysts discuss a theory and identify research objectives (hole in the theory of verification), then collect data in hopes of answering the question.
Data-Driven Research	Check “Yes” if analysts collect data and analysis of data generates theoretical implications for the research.
Primary Technique	Check “Yes” if content analysis is only method used, or results from another method are used to support/prove research findings from content analysis.