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A citation and profiling analysis of pricing research from 1980 to 2010☆

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ABSTRACT

This paper identifies the body of literature related to pricing that exists in 20 marketing or business journals contained in the Social Sciences Citation Index (SSCI) between January 1980 and June 2010. During this 30-year period we found over 38,800 citations were made to 1945 articles that dealt with some aspect of pricing. Based on these data, we identify individual articles, authors, and institutions that have contributed most to this body of literature. We study what subjects within the domain of pricing have received most attention, and how these topics have evolved in three year periods. In addition, we use text mining and information visualization tools to identify networks of researchers who collaborate on pricing articles. We identify institutional affiliations within the networks and highlight most frequent subjects of articles written by researchers in each network. Our results show pricing is an important topic in the marketing domain.

1. Introduction

The marketing discipline has been a constant and significant contributor to literature in the pricing area. Since 1980, there have been over 1900 articles dealing with some aspect of pricing published in the 19 marketing journals included in the Social Sciences Citation Index (SSCI) and by the Journal of Business Research which has also published many articles focused on pricing. Given the importance of pricing in marketing, it seemed appropriate to try to get a more complete understanding of the impact the marketing discipline has had on pricing research by reviewing the body of literature that exists on pricing across these 20 journals included in SSCI. This will be accomplished by: (1) identifying the articles within the marketing discipline related to managerial issues in pricing; (2) investigating how this published literature has evolved over time; (3) identifying individual articles, authors, and institutions that have made the largest contribution to the published literature on pricing based on citations and number of articles written; and (4) identifying scholar networks in pricing.

Along with profiling pricing research using simple counts (e.g. number of articles), the primary metric used in this research is citation counts. Citation analysis is a fairly common (Stremersch et al., 2007) and well-established procedure for examining impact of published articles, as well as, knowledge diffusion (see discussion, for example, in Hood & Wilson, 2001). This is based on the argument that influence can be objectively measured by number of citations of an author, institution or journal—the more citations the greater the influence of that individual, institution or journal. The Institute for Scientific Information (ISI) has reported only about 19% of all articles appearing in the top journals in the physical and biological sciences are cited more than once within five years of publication, and when "bottom tier" journals are included the number drops to only 3% (Begley, 1991; Hamilton, 1991). Similar statistics have been reported by others doing citation research in marketing (Cote et al., 1991). Regarding the 1945 pricing articles used in this paper, 17% (337 articles) had no citations, 9% had only 1 citation, and 48% had 5 or less. Table 1 provides a more complete picture of the drop-off in the number of papers with a large number of cites.

With this as a backdrop, we looked at one specific area—pricing—and investigate a) the influence marketing has contributed to knowledge about pricing and b) what individuals, journals and institutions have contributed the most to this domain.

We will next describe the methodology of our research. The findings are discussed in detail and illustrated using tables and figures. The paper ends with implications and summary.

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Table 1
Distribution of citations of 1945 papers used in this study.

# of Citations	# of Articles	% of Total	Cumulative #	Cumulative%
0	337	17	337	17
1	168	9	505	26
2	138	7	643	33
3	93	5	736	38
4	103	5	839	43
5	90	5	929	48
6	53	3	982	50
7	60	3	1042	54
8	48	2	1090	56
9	48	2	1138	59
10	46	2	1184	61
11–15	163	8	1347	69
16–20	102	5	1449	74
21–25	98	5	1547	80
26–30	54	3	1601	82
31–35	50	3	1651	85
36–40	43	2	1694	87
41–45	35	2	1729	89
46–50	25	1	1754	90
51–75	88	5	1842	95
76–100	34	2	1876	96
101–150	41	2	1917	99
151–200	12	1	1929	99
over 200	16	1	1945	100
Total	1945	100		

2. Methodology

2.1. Data

The focus of this study is all pricing articles published from January, 1980 through June, 2010 across 20 relevant marketing and business journals included in the Social Science Citation Index (SSCI). Table 2 provides a list of journals included along with the date each journal was first published. In addition to the 19 marketing journals, we added a 20th journal—the Journal of Business Research—as it has a high coverage of marketing and especially pricing research (see, for example, the special issues introduced by Estelami & Maxwell, 2003 and Roy & Henry, 1995).

Table 2
Marketing journals included in the study.

Journal title	Journal inception	SSCI Indexing began*
Advances in Consumer Research (ACR)	January 1974	1984
Industrial Marketing Management (IMM)	September 1971	1974
International Journal of Market Research (IJMR)	January 1965	2000
International Journal of Research in Marketing (IJRM)	February 1984	1997
International Marketing Review (IMR)	September 1983	1999
Journal of Advertising (JA)	March 1972	1984
Journal of Advertising Research (JAR)	March 1960	1974
Journal of Business Research (JBR)	June 1973	1973
Journal of Consumer Affairs (JCA)	Summer 1967	1974
Journal of Consumer Research (JCR)	June 1974	1975
Journal of International Marketing (JIM)	March 1993	1995
Journal of Marketing (JM)	July 1936	1974
Journal of Marketing Research (JMR)	February 1964	1974
Journal of Product Innovation Management (JPIM)	January 1984	1984
Journal of Public Policy & Marketing (JPPM)	January 1982	1984
Journal of Retailing (JR)	April 1925	1974
Marketing Letters (ML)	January 1996	2001
Marketing Science (MS)	Winter 1982	1987
Psychology & Marketing (PM)	January 1983	1994

* This is the date that SSCI started indexing the journal. This does not mean that citations to articles published in a journal prior to this period were not tracked and counted. The references in an article published in a journal that is indexed by SSCI are tracked and tabulated. It does mean that the papers referenced in the journal prior to that date were not tracked by SSCI and therefore those citations are not included in the SSCI numbers.

We identified all articles dealing with "price" or "pricing" in the 20 journals for the 30 year period 1980–2010. Unlike other papers that have used citation analysis and simply selected only a sampling of journal volumes and/or articles across time, we conducted a *complete census* of all volumes and all issues across all 20 journals over this period of 30 years. For example, Jobber and Simpson (1988) examined in their citation analysis also a comprehensive base of marketing journals (19), but they selected a sample of 25 articles from each journal. By conducting a census we have removed any possibility of picking up only cyclical results that are truly not indicative of the total history of a journal. Seggie and Griffith (2009) recently generated a census of the publication activity in four leading marketing journals of 337 scholars promoted to associate professor and/or full professor in the top 70 institutions from 1992 to 2006. To our knowledge, this is the first time a paper using citation analysis has conducted a census from all SSCI journals in the discipline (rather than sampling periods and/or articles) in any discipline.

The following procedure was used to identify the set of articles included in this study:

1. We first identified all articles with "price" and/or "pricing" in the title, abstract or as one of the keywords. The main authors and an independent evaluator (PhD student) reviewed all of these articles to verify each article investigated some aspect of pricing. If an article investigated price in any way and made any inference and/or reached any conclusions about price it was included. Therefore, marketing mix articles that included price as one of the variables or promotions articles that investigated price are included in the set of articles if any statements or conclusions about price were made/reached in the article. We did not include editorials, commentaries, replies or book reviews. This process produced 2372 articles.
2. Each of the 2372 articles was reviewed by two fourth year marketing PhD students. After reviewing each article, if both students agreed the articles dealt with some aspect of pricing, the article was included. If they both agreed that the article really did not study some aspect of pricing the article was removed. This led to 336 articles being removed from the initial set of 2372. If there was disagreement between the two students, the authors read the article to verify that it studied some aspect of pricing. This required further review of 141 of the 2036 articles. Out of this group of 141 articles, 50 articles were kept and 91 were removed. This review process produced a final set of 1945 pricing articles ($2036 - 91 = 1945$).
3. The top 100 articles (based on citation counts) were then sent to three (3) leading scholars in the pricing area. They were each asked to review the list of articles and to let us know whether they were aware of any pricing articles that were not on the list that they believed were highly cited. These three scholars brought two (2) articles to our attention that they believed should be included in the top 100 based on citation count. Upon further investigation, these articles were in our data base, but SSCI had multiple spellings for the first named authors of these papers. We then went through every listing to check the spelling of the first name of every author (primary and secondary) to make sure our data included all citations for each author under ALL spellings of the primary author's name. We then gave the same citation credit earned by the primary author to any secondary authors for each article.

For each of the 1945 pricing articles we created a database with: i) article title; ii) author(s) and if multiple authors, whether they were the primary or secondary author of the article; iii) the author's

affiliation at time of publication for each author; iv) the journal the article was published in, as well as, volume, issue, year, starting and ending page numbers; v) up to four keywords for each article taken from the title, abstract, and keyword list for each article; and vi) the citation count for the article as of September 2010 (according to SSCI).

When missing data were encountered (e.g. author's affiliation), this information was found by either (1) using Business Source Premier (for example, for missing affiliations, other articles by the author near the date of the pricing article were identified to find the author's affiliation when the article was published), or (2) by contacting the author or reviewing the author's vitae to find the information for missing or conflicting data about the article.

This process yielded 238,832 total citations for the 1945 articles. The 1945 articles were authored by 2331 authors representing 684 different institutions. The keywords also allowed us to create 105 subject bins. The next sections describe the citation analysis and research profiling which were used to analyze the pricing research identified in this study.

2.2. Citation analysis

Citation analysis has a long tradition in the field of bibliometrics, which is broadly defined as the application of mathematical and statistical methods to books and other media of communication (Hood & Wilson, 2001; Pritchard, 1969). Citation analysis is a process that measures the number of times an article and/or an author has been referenced in articles published by journals included in a citation index. It is assumed the work of a cited author has had impact on the citing author's work (MacRoberts & MacRoberts, 1996), and also "that the number of citations reflects an article's influence, and therefore quality" (Wade, 1975).

Authors, articles and journals with the most citations can be considered to have had more impact or influence versus those with fewer citations. This is why citation analysis has been used to measure research productivity and impact of individual articles, authors, institutions or journals in many domains and for a variety of purposes. Some have argued that when comparing articles appearing in a journal or across journals a problem exists since the number of citations is a function of people working in the area. In this case, since the topic—pricing—stays constant, comparing articles within a domain removes this concern. One might also dispute the period used, but going back to January 1980 provides a fair base point for comparison to articles published in the 20 journals and 30 years is a long period of time.

A number of studies have appeared in the marketing literature reporting citation statistics. These articles have focused on marketing journal diversity (Tellis et al., 1999), progress of marketing literature (Kerin, 1996), publications in major marketing journals (Bakir et al., 2000), analysis of specific journals (Cote et al., 1991; Goldman, 1979; Zinkhan et al., 1992) and analysis of marketing scholars and institutions (Robinson & Adler, 1981).

Citation analysis has advantages and disadvantages as a metric for measuring research productivity and impact. Advantages include citation analysis is a simple, objective, quantifiable and logical measure of quality. Critical reviews of citation analysis have been done by MacRoberts and MacRoberts (1989) and by Vincent and Ross (2000). Problems include: biased citing, self-citing, difficulties in treating citations of multiple authors for articles and books and negative citations of work judged to have serious flaws. Other limitations noted by Baumgartner and Pieters (2003) include: reasons for citing that do not reflect a transfer of knowledge or a true acknowledgment of intellectual indebtedness. Such reasons include: perfunctory mention, review, use/application, affirmation/support and belief that certain authors may be potential reviewers of a manuscript. Stremersch et al. (2007) remark the number of an article's citations is driven by the age of the article, and this should be taken into account in citation comparisons. The present study does not address all limitations noted by these critical reviews. However, along with unweighted counts, this study provides weighted results based on the number of years since publication (e.g. cites per year) and adjustments to recognize the citations of all co-authors of the 1945 articles included.

2.3. Research profiling

Research profiling has been suggested by Porter et al. (2002) as a way to extend traditional literature reviews in several ways. The approach utilizes text-mining and information visualization tools that enable literature to be investigated. There exist several alternative text-mining tools on the market. Some tools are designed for fielded research or patent abstracts imported from scientific or patent databases and some tools transform free-form text into data that can be analyzed for information extraction. In this study we have employed a text-mining tool called VantagePoint (www.thevantagepoint.com), which is designed for discovering knowledge and patterns in structured (fielded) text databases.

Research profiling answers who, what, where and when questions (Porter et al., 2002; Porter & Cunningham, 2005; Watts & Porter, 2007). Who are the prolific authors in pricing research? What are their specific research subjects? Which institutions conduct pricing research? What are the "hot" topics in pricing research? When has pricing research been conducted? How has it evolved over time? The answers are provided using simple frequency lists (e.g. top-25 lists), two-dimensional tables (e.g. subject area counts by 3-year periods) and trend figures (e.g. the number of publications yearly). Also, text-mining tools make it possible to conduct advanced statistical analyses (correlation and factor analyses) with textual data and also to visualize results using multi-dimensional scaling maps. Such visual analyses can help understand, for example, which researcher networks and institutions are contributing to the subjects included in a literature review to "enrich our understanding of a research milieu" (Porter et al., 2002).

Several literature studies have been conducted using research profiling. Related to marketing, Sunikka and Bragge (2008) profiled 2000 articles on personalization or customization. Bragge and Storgårds (2007) examined ISI publications related to digital games. Bragge et al. (2010) profiled all research published in Simulation & Gaming journal during 1970–2009. Porter and his colleagues also reported research profiling studies, primarily in the technology mining domain (see, for example, Watts & Porter, 2007, and Guo et al., 2009).

Research profiling studies have been conducted by marketing scholars, although text-mining was not used as a research method. For example, measures of research productivity of marketing scholars and institutions have focused on articles appearing in specific marketing journals for a specific period of time. Bakir et al. (2000) provide a summary of eight such studies which used numbers of articles (Clark 1985, Marquardt & Murdock, 1983, Moore & Taylor, 1980, Page & Mohr, 1995 and Spake & Harmon, 1997) and numbers of pages (Niemi, 1988).

To summarize, this paper differs from earlier work in: i) number of journals covered, including all marketing journals and one additional business journal indexed by SSCI; ii) extensive time period (30 years); iii) a census was taken rather than simply sampling various periods of time; iv) a specific focus on one subject area within marketing; v) use of citation analysis to identify articles that had the most impact; and vi) use of text-mining tools to determine relationships between networks of researchers in pricing.

2.4. Selection of analyses

The objectives of this study are to identify journals, authors, co-author networks, institutions, subjects and specific articles, which

Table 3a
Journals rank ordered by number of citations.

Rank	Journal	Citations		2007 to 2010	2004 to 2006	2001 to 2003	1998 to 2000	1995 to 1997	1992 to 1994	1989 to 1991	1986 to 1988	1983 to 1985	1980 to 1982
		Count	Percent										
1	Marketing Science (MS)	11,626	29,9%	327	376	992	1931	1753	841	1041	1210	3048	107
2	J Marketing Research (JMR)	7030	18,1%	188	363	628	1291	719	630	1494	1013	353	351
3	J Marketing (JM)	6375	16,4%	70	268	637	801	1086	1008	793	1166	76	470
4	J Consumer Research (JCR)	4835	12,5%	53	179	369	397	495	1279	735	855	277	196
5	J Retailing (JR)	2318	6,0%	211	278	589	464	195	175	107	139	74	86
6	J Business Res (JBR)	1215	3,1%	52	223	215	193	257	112	81	71	7	4
7	J Acad Market Science (JAMS)	947	2,4%	13	35	353	281	36	135	56	32	1	5
8	Int J Res Marketing (IJRM)	815	2,1%	25	76	85	255	93	179	27	35	40	0
9	Marketing Letters (ML)	590	1,5%	17	7	46	141	170	130	79	0	0	0
10	Psychol Market (PM)	493	1,3%	31	175	68	43	60	63	28	24	1	0
11	Ind Market Manag (IMM)	483	1,2%	16	67	116	17	70	38	42	37	25	55
12	Adv Consum Research (ACR)	434	1,1%	0	3	15	11	54	50	59	41	176	25
13	J Consum Affairs (JCA)	377	1,0%	0	51	63	102	3	22	32	21	28	55
14	J Public Policy Mar (JPPM)	326	0,8%	4	10	44	131	11	37	64	1	24	0
15	J Advertising Research (JAR)	313	0,8%	1	0	23	136	5	30	26	36	29	27
16	J Prod Innov Manag (JPPM)	279	0,7%	9	0	30	120	15	41	10	54	0	0
17	J Advertising (JA)	132	0,3%	0	0	28	17	46	7	15	8	0	11
18	J Int Marketing (JIM)	128	0,3%	10	14	57	10	17	20	0	0	0	0
19	Int Market Review (IMR)	108	0,3%	8	1	8	2	25	33	29	0	2	0
20	Int J Market Research (IJMR)	8	0,0%	2	2	4	0	0	0	0	0	0	0
		38,832	100,0%	1037	2128	4370	6343	5110	4830	4718	4743	4161	1392

have made the most impact on marketing knowledge in pricing strategy and tactics. The following tables were developed:

1. Journals—In order to investigate impact of the journals, the number of articles and citations received from January 1, 1980 (or from the journal's inception date if the first issue of the journal was published after January 1, 1980) to June 2010 were tabulated. The article and citation counts were also grouped into ten (10) three year periods for the 30 years.
2. Articles—Two tables were prepared for most highly cited articles. The first table lists 25 most highly cited articles based on total citations. The second lists top 25 articles based on citations per year since publication date to take the age of the article into account.
3. Authors—We tabulated the number of articles and citations for articles authored or co-authored by an individual. We also included these counts adjusted based on number of authors (1/n) for an article. For instance, an article with two authors resulted in citation credit being divided equally between the authors. This weighting (1/n) is typical in citation research (see, for example, Lowry et al., 2007, and Clark et al., 2009) and many business schools use this weighting when evaluating an individual faculty member's number of articles published. In addition, we conducted auto-correlation analyses of top authors to identify possible co-author networks. The results are graphically represented as multi-dimensional maps.
4. Institutional affiliations—In order to investigate which universities had the most impact, the affiliation for each primary or secondary author as stated when the paper was published was recorded. This gives credit to the institution where the individual was at the time the article was published since that institution was supporting the individual (and their research). Institutional credit was calculated in two ways in the identical manner as author credit. First, if the author or any co-author was affiliated with an institution, the institution received credit for the article. Therefore, if a paper had three (3) co-authors from three (3) institutions, each institution received credit for the article. Second, an adjusted count was made so institutions received credit for articles based on number of

Table 3b
Journals rank ordered by number of articles.

Rank	Journal	Articles		2007 to 2010	2004 to 2006	2001 to 2003	1998 to 2000	1995 to 1997	1992 to 1994	1989 to 1991	1986 to 1988	1983 to 1985	1980 to 1982
		Count	Percent										
1	Marketing Science	352	18,1%	124	21	36	42	41	25	18	26	15	4
2	Journal of Marketing Research	211	10,8%	56	29	23	28	17	14	16	11	7	10
3	Journal of Business Research	184	9,5%	39	32	32	18	25	11	8	9	4	6
4	Journal of Retailing	175	9,0%	37	28	27	23	16	11	6	10	5	12
5	Advances in Consumer Research	136	7,0%	22	7	16	9	18	14	10	6	19	15
6	Journal of Consumer Research	135	6,9%	21	19	12	7	12	18	9	15	10	12
7	Journal of Marketing	115	5,9%	27	11	13	9	11	8	8	7	7	14
8	Marketing Letters	91	4,7%	16	6	7	9	23	19	11			
9	International Journal of Research in Marketing	87	4,5%	21	15	11	13	8	11	3	2	3	
10	Psychology & Marketing	80	4,1%	22	8	17	5	11	8	4	4	1	
11	Industrial Marketing Management	79	4,1%	12	11	10	4	7	10	7	5	5	8
12	Journal of Consumer Affairs	67	3,4%		6	6	8	1	7	9	5	15	10
13	Journal of the Academy of Marketing Science	54	2,8%	14	6	6	6	4	5	4	3	2	4
14	Journal of Advertising Research	42	2,2%	6		5	5	4	3	6	4	6	3
15	Journal of Public Policy and Marketing	40	2,1%	4	4	6	9	4	4	4	2	3	
16	Journal of Product Innovation Management	23	1,2%	7		2	5	2	2	2	3		
17	International Marketing Review	22	1,1%	4	1	1	1	5	4	5		1	
18	Journal of Advertising	21	1,1%	2		4	2	2	2	2	2	1	4
19	Journal of International Marketing	20	1,0%	2	3	9	1	3	2				
20	International Journal of Market Research	11	0,6%	7	1	3							
		1945	100,0%	443	208	246	204	214	178	132	114	104	102

co-authors who were at the institution at time of publication. For instance, if an article had three authors and two were at the same institution at time of publication, the institution got 2/3 credit for that article and 2/3 credit for citations received by the article. In addition, we illustrate the institutional affiliations of the top authors and their co-authors in a multi-dimensional map.

5. Subjects—Subjects were cataloged into 105 bins. The bins were created using the 32 current American Marketing Association topics used to categorize articles and books. In addition, another 73 pricing subjects were identified from article titles, abstracts and keywords. Each article was identified as containing one to four keywords. A table was created to list subjects most often included in articles and to depict their development in 3-year periods. In addition, we show subjects of top authors and co-authors in a multi-dimensional map.

3. Findings

3.1. Journals

Table 3a shows the 20 journals rank ordered by total citation counts of pricing articles they published as of September 2010.

Table 4a
Top 25 most highly cited articles based on total citations.

Rank	Citat.	Article title	Authors	Journal	Institutions	Volume, issue	Year	Citat./year
1	910	Consumer perceptions of price, quality, and value—a means-end model and synthesis of evidence	Zeithaml VA	JM	North Carolina	52(3)	1988	41,36
2	817	Mental accounting and consumer choice	Thaler RH	MS	Chicago	4(3)	1985	32,68
3	552	A logit model of brand choice calibrated on scanner data	Guadagni PM Little JDC	MS	MDS Inc MIT	2(3)	1983	20,44
4	515	Customer satisfaction, market share, and profitability—findings from Sweden	Anderson EW Fornell C Lehmann DR	JM	Michigan Michigan Columbia	58(3)	1994	32,19
5	403	Interactive home shopping: consumer, retailer, and manufacturer incentives to participate in electronic marketplaces	Alba JW Janiszewski C Lutz R Lynch JG Sawyer AG Weitz BA Wood S	JM	Florida Florida Florida Florida Florida Florida Florida	61(3)	1997	31,00
6	372	Managing channel profits	Jeuland AP Shugan SM	MS	Chicago Chicago	2(3)	1983	13,78
7	344	Effects of price, brand, and store information on buyers product evaluations	Dodds WB Grewal D Monroe KB	JMR	Boston College Miami Virginia Tech	28(3)	1991	18,11
8	336	A probabilistic choice model for market segmentation and elasticity structure	Kamakura WA Russell GJ	JMR	Pittsburgh Toronto	26(4)	1989	16,00
9	322	Optimal pricing and return policies for perishable commodities	Pasternack BA	MS	Cal State-Fullerton	4(2)	1985	12,88
10	301	Work and or fun—measuring hedonic and utilitarian shopping value	Babin BJ Darden WR Griffin M	JCR	Southern Mississippi LSU LSU	20(4)	1994	18,81
11	284	Impact of sales promotions on when, what, and how much to buy	Gupta Sunil	JMR	Columbia	25(4)	1988	12,91
12	232	A reference price model of brand choice for frequently purchased products	Winer RS	JCR	Vanderbilt	13(2)	1986	9,67
13	225	Service quality delivery through Web sites: A critical review of extant knowledge	Zeithaml VA Malhotra A Parasuraman A	JAMS	North Carolina Miami Miami	30(4)	2002	28,13
14	221	Long-term manufacturer supplier relationships—do they pay off for supplier firms	Kalwani MU Narayandas N	JM	Purdue Harvard	59(1)	1995	14,73
15	212	The price knowledge and search of supermarket shoppers	Dickson PR Sawyer AG	JM	Ohio State Florida	54(3)	1990	10,60
16	209	The effect of price, brand name, and store name on buyers perceptions of product quality	Rao AR Monroe KB	JMR	Minnesota VirginiaTech	26(3)	1989	9,95
17	192	Price-induced patterns of competition	Blattberg RC Wisniewski KJ	MS	Chicago AC Nielson	8(4)	1989	9,14
18	187	Defensive marketing strategies	Hauser JR Shugan SM	MS	MIT Chicago	2(4)	1983	6,93
19	186	On the profitability of long-life customers in a noncontractual setting: an empirical investigation and implications for marketing	Reinartz WJ Kumar V	JM	INSEAD Houston	64(4)	2000	18,60
20	184	Effects of relationship marketing on satisfaction, retention, and prices in the life insurance industry	Crosby LA	JMR	Arizona State	24(4)	1987	8,00
21	183	Wine online: Search costs affect competition on price, quality, and distribution	Lynch JG Ariely D	MS	Duke MIT	19(1)	2000	18,30
22	177	The chain of effects from brand trust and brand affect to brand performance: The role of brand loyalty	Chaudhuri A Holbrook MB	JM	Fairfield Columbia	65(2)	2001	19,67
23	173	The moderating effect of prior knowledge on cue utilization in product evaluations	Rao AR Monroe KB	JCR	Minnesota Virginia Tech	15(2)	1988	7,86
24	171	The effects of price-comparison advertising on buyers' perceptions of acquisition value, transaction value, and behavioral intentions	Grewal D Krishnan R Monroe KB	JM	Miami Illinois Illinois	62(2)	1998	14,25
25	168	A dynamic model of customers' usage of services: Usage as an antecedent and consequence of satisfaction	Bolton RN Lemon KN	JMR	Maryland Harvard	36(2)	1999	15,27

Table 3b shows the 1945 articles distributed across the 20 journals and provides a rank order summary by number of articles published in the journal. The tables show how these numbers have changed over 30 years by allocating the citations or articles across ten 3-year periods. The findings show the 1945 pricing articles were cited 38,832 times. Marketing Science had most articles and largest number of citations, with 352 articles (18.1%) and 11,626 citations (29.9%). Based on both measures, Marketing Science has been the most influential contributor to the pricing literature.

While Marketing Science tops the list, over 86% of all citations were accounted for by Marketing Science, Journal of Marketing Research, Journal of Marketing, Journal of Consumer Research, Journal of Retailing and Journal of Business Research. These six journals also accounted for 60% of articles on "price" and "pricing" for the 20

Table 4b
Top 25 most highly cited articles based on citations per year.

Rank	Citat./year	Article title	Authors	Journal	Institutions	Volume, issue	Year	Citat
1	41,36	Consumer perceptions of price, quality, and value—a means-end model and synthesis of evidence	Zeithaml VA	JM	North Carolina	52(3)	1988	910
2	32,68	Mental accounting and consumer choice	Thaler RH	MS	Chicago	4(3)	1985	817
3	32,19	Customer satisfaction, market share, and profitability—findings from Sweden	Anderson EW Fornell C Lehmann DR	JM	Michigan Michigan Columbia	58(3)	1994	515
4	31,00	Interactive home shopping: consumer, retailer, and manufacturer incentives to participate in electronic marketplaces	Alba JW Janiszewski C Lutz R Lynch JG Sawyer AG Weitz BA Wood S	JM	Florida Florida Florida Florida Florida Florida Florida	61(3)	1997	403
5	28,13	Service quality delivery through Web sites: a critical review of extant knowledge	Zeithaml VA Malhotra A Parasuraman A	JAMS	North Carolina Miami Miami	30(4)	2002	225
6	20,44	A logit model of brand choice calibrated on scanner data	Guadagni PM Little JDC	MS	MDS Inc MIT	2(3)	1983	552
7	19,67	The chain of effects from brand trust and brand affect to brand performance: the role of brand loyalty	Chaudhuri A Holbrook MB	JM	Fairfield Columbia	65(2)	2001	177
8	18,81	Work and or fun—measuring hedonic and utilitarian shopping value	Babin BJ Darden WR Griffin M	JCR	Southern Mississippi LSU LSU	20(4)	1994	301
9	18,60	On the profitability of long-life customers in a noncontractual setting: an empirical investigation and implications for marketing	Reinartz WJ Kumar V	JM	INSEAD Houston	64(4)	2000	186
10	18,30	Wine online: Search costs affect competition on price, quality, and distribution	Lynch JG Ariely D	MS	Duke MIT	19(1)	2000	183
11	18,11	Effects of price, brand, and store information on buyers product evaluations	Dodds WB Grewal D Monroe KB	JMR	Boston College Miami Virginia Tech	28(3)	1991	344
12	16,11	Consumer perceived value: The development of a multiple item scale	Sweeney JC Soutar GN	JR	Western Australia Western Australia	77(2)	2001	145
13	16,00	A probabilistic choice model for market segmentation and elasticity structure	Kamakura WA Russell GJ	JMR	Pittsburgh Toronto	26(4)	1989	336
14	15,50	Value-based differentiation in business relationships: gaining and sustaining key supplier status	Ulaga W Eggert A	JM JM	European School of Management Paderborn	70(1)	2006	62
15	15,27	A dynamic model of customers' usage of services: Usage as an antecedent and consequence of satisfaction	Bolton RN Lemon KN	JMR	Maryland Harvard	36(2)	1999	168
16	14,73	Long-term manufacturer supplier relationships—do they pay off for supplier firms	Kalwani MU Narayandas N	JM	Purdue Harvard	59(1)	1995	221
17	14,25	The effects of price-comparison advertising on buyers' perceptions of acquisition value, transaction value, and behavioral intentions	Grewal D Krishnan R Monroe KB	JM	Miami Illinois Illinois	62(2)	1998	171
18	13,80	No pain, no gain: A critical review of the literature on signaling unobservable product quality	Kirmani A Rao AR	JM	SMU Minnesota	64(2)	2000	138
19	13,78	Managing channel profits	Jeuland AP Shugan SM	MS	Chicago Chicago	2(3)	1983	372
20	12,91	Impact of sales promotions on when, what, and how much to buy	Gupta Sunil	JMR	Columbia	25(4)	1988	284
21	12,88	Optimal pricing and return policies for perishable commodities	Pasternack BA	MS	Cal State Fullerton	4(2)	1985	322
22	12,00	Consumer choice between hedonic and utilitarian goods	Dhar R Wertenbroch K	JMR	Yale INSEAD	37(1)	2000	120
22	12,00	Does quality win? Network effects versus quality in high-tech markets	Tellis GJ Niraj R Yin E	JMR	USC USC Cambridge	46(2)	2009	12
24	11,60	Implications of loyalty program membership and service experiences for customer retention and value	Bolton RN Bramlett MD Kannan PK	JAMS	Oklahoma Maryland Oklahoma	28(1)	2000	116
25	11,55	Consumer socialization of children: a retrospective look at twenty-five years of research	John DR	JCR	Minnesota	26(3)	1999	127

journals from 1980 to 2010. This finding is consistent with citation findings from past studies in other areas that found only a few journals dominate in influence. If one looks at cites per article, Journal of Marketing is #1 with 55.4 cites per article (6375 cites/115 articles), followed by Journal of Consumer Research (35.8 = 4835 cites/135 articles), Journal of Marketing Research (33.3 = 7030 cites/211 articles), and Marketing Science (33.0 = 11,626 cites/352 articles). No other journal had twenty or more cites per article.

Since the first year Marketing Science was published (1982) the number of articles published each year has increased over time. If one looks at the number of articles appearing in Marketing Science since 1992 on pricing (289) and compares that to what other journals have done since 1980 Marketing Science would still be ranked #1 above the Journal of Marketing Research which had 211 articles published since 1980. Clearly, Marketing Science has been a major contributor over the 30 year time period investigated. Several other journals have established strong positions in the last fifteen years (1995–2010), most notably Journal of Marketing Research (with 153 articles), Journal of Business Research (with 146 pricing articles), and Journal of Retailing (with 131 articles). Marketing Science published 264 pricing articles during the same time period.

3.2. Articles

Table 4a and 4b show the most highly cited pricing articles. Table 4a includes 25 articles with highest total citations and Table 4b shows articles with highest citations per year since publication. This measure recognizes more recently published articles which have received high citation counts in a short period of time. Tables 4a and 4b contain 18 common articles.

In looking at both Table 3a and Table 4a note the top two cited Marketing Science articles account for 11.8% of the journal's total citations and the top three articles account for 15.0% of the citations. That means the remaining 349 articles on pricing published in Marketing Science account for 85.0% of the citations. For the Journal of Marketing Research the top three articles account for 13.7% of citations and for Journal of Marketing the top three articles account for 28.7% of citations. Overall, as shown in Table 4a, the top 25 articles (1.3% of all articles) account for 20.3% of the citations. As reported in Table 1, 26% of the articles were not cited or cited only once. Taken together, these statistics indicate a small number of articles in the pricing area have had a proportionately much larger impact on the discipline.

3.3. Authors

Table 5 shows authors with most articles and citations both unweighted (i.e. full credit given to an author whether single authored or multiple authored papers) and weighted per author contribution. 2331 authors co-authored at least one of the 1945 articles. Table 5 shows 26 authors with the most pricing articles and citations in the 20 journals. The cutoff value for this table was eleven articles or 474 citations. Kent Monroe authored or co-authored 37 articles which received 1513 citations which ranked #1 on both lists. Dhruv Grewal had 37 articles also and 1083 citations which ranks 3rd.

Table 5 also shows adjusted articles and adjusted citations based on co-authorship of articles included in this study. The adjustments recognize the contribution of co-authors. The percentage of article and citation credit in this ranking is based on number of co-authors for each article in the study. For example, if an article was co-authored by three authors and the article received 33 citations, each author received credit for 1/3 of an article and 11 citations. Table 5 shows Kent Monroe has the highest number of adjusted articles, taking into account presence of co-authors who contributed to the 37 articles authored or co-authored by Monroe with 17.78 weighted articles. Dhruv Grewal was second with 15.17 weighted articles. Valarie Zeithaml topped the weighted citations list with 1064.17 and Richard Thaler was second with 825. Thaler's articles were all single-authored. Note several authors moved up on the weighted citation list due to the fact they had single authored articles and/or fewer co-authors.

Table 5

Top 26 Authors—Total (unweighted)						Top 26 Authors—Weighted					
Total articles authored or co-authored			Total citations for articles authored or co-authored			Total articles by article contribution			Total citations by article contribution		
Rank	Author	Total Articles	Rank	Author	Total Citations	Rank	Author	Articles/ Contribution	Rank	Author	Citations/ Contribution
1	Grewal D	37	1	Monroe KB	1513	1	Monroe KB	17,78	1	Zeithaml VA	1064,17
1	Monroe KB	37	2	Zeithaml VA	1204	2	Grewal D	15,17	2	Thaler RH	825,00
3	Burton S	20	3	Grewal D	1083	3	Tellis GJ	10,33	3	Monroe KB	641,75
3	Chintagunta PK	20	4	Lehmann DR	980	4	Schindler RM	10,00	4	Tellis GJ	572,00
5	Bearden WO	19	5	Gupta Sunil	887	5	Chintagunta PK	9,08	5	Gupta Sunil	522,33
6	Lichtenstein DR	18	6	Thaler RH	825	6	Krishna A	7,50	6	Moorthy KS	432,00
6	Urbany JE	18	7	Tellis GJ	805	7	Bearden WO	7,42	7	Winer RS	421,56
8	Mela CF	17	8	Shugan SM	775	8	Urbany JE	7,33	8	Shugan SM	395,67
9	Tellis GJ	16	9	Lynch JG	761	9	Burton S	7,33	9	Grewal D	385,92
10	Biswas A	15	10	Little JDC	688	10	Gupta Sunil	7,00	10	Lehmann DR	336,50
10	Gupta Sunil	15	11	Sawyer AG	644	10	Lichtenstein DR	7,00	11	Little JDC	333,83
10	Lehmann DR	15	12	Rao AR	633	12	Biswas A	6,67	12	Pasternack BA	322,00
13	Gerstner E	14	13	Alba JW	625	13	Gerstner E	6,58	13	Rao AR	320,00
13	Schindler RM	14	14	Anderson EW	592	14	Parker PM	6,50	14	Simonson I	316,83
15	Krishna A	13	15	Fornell C	568	15	Shugan SM	6,33	15	Bolton RN	282,83
15	Kumar V	13	15	Winer RS	568	16	Ratchford BT	6,33	16	Jeuland AP	277,83
17	Mazumdar T	12	17	Jeuland AP	560	17	Walters RG	6,17	17	Guadagni PM	276,50
17	Pauwels K	12	18	Guadagni PM	553	18	Pauwels K	6,00	18	Lal R	244,83
17	Ratchford BT	12	19	Kamakura WA	498	19	Winer RS	5,94	19	Narasimhan C	241,00
17	Srinivasan K	12	20	Urbany JE	497	20	Mela CF	5,93	20	Kamakura WA	235,83
21	Bucklin RE	11	21	Bolton RN	494	21	Lal R	5,83	21	Russell GJ	228,33
21	Krishnamurthi L	11	22	Bucklin RE	492	22	Bolton RN	5,67	22	Hauser JR	221,17
21	Neslin SA	11	23	Lichtenstein DR	491	23	Sivakumar K	5,58	23	Bucklin RE	218,50
21	Padmanabhan V	11	24	Simonson I	490	24	Papatla P	5,50	24	Lynch JG	215,90
21	Shugan SM	11	25	Bearden WO	487	25	Bayus BL	5,50	25	Anderson EW	213,33
21	Wittink DR	11	26	Blattberg RC	474	26	Sarvary M	5,33	26	Urbany JE	209,50

In addition, we conducted an auto-correlation analysis to identify networks of pricing scholars within the top 33 researchers. Four author networks emerged from this analysis. Twenty-one of 33 pricing scholars with ten or more articles are in four networks shown in Figs. 1, 2, 3, and 4. Those 21 authors were included in our analysis that had at least two co-authored articles with other top 33 authors. From the remaining twelve

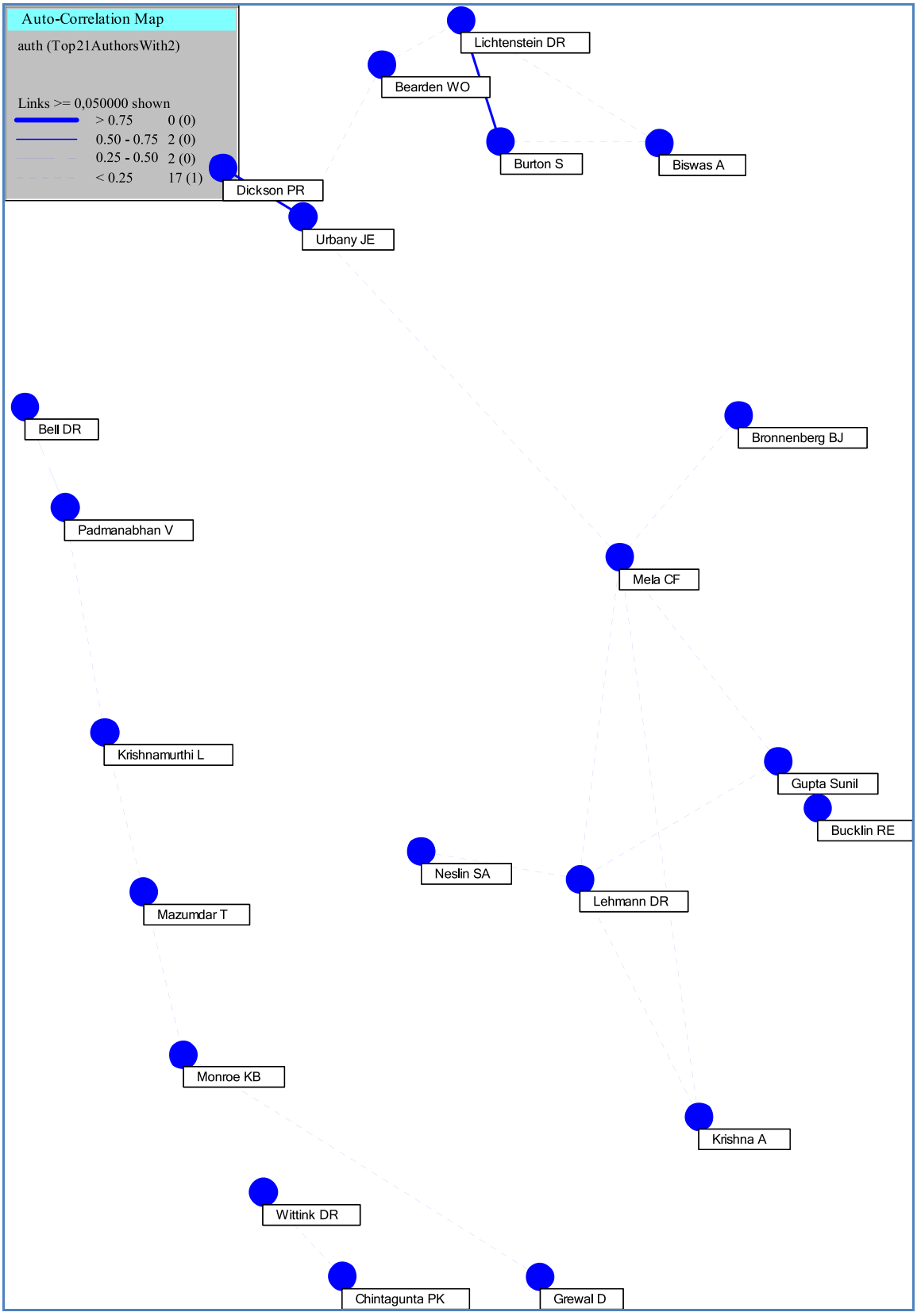

Fig. 1. Auto-correlation map of top-21 authors.

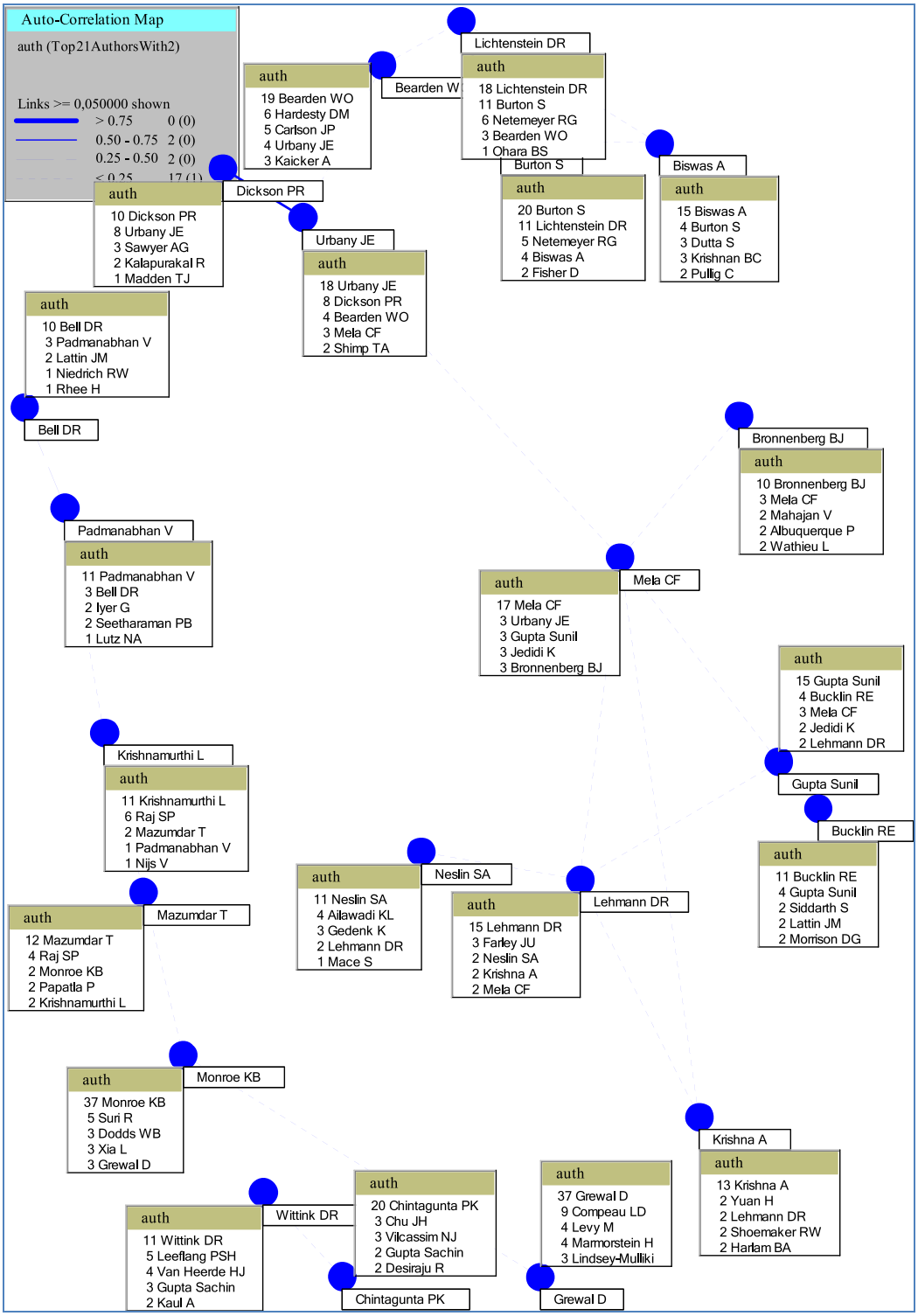

Fig. 2. Auto-correlation map of top-21 authors with co-author information.

authors, three authors (Kumar, Pauwels and Winer) had one co-authored article, and nine had zero co-authored articles with other top 33 authors.

- One network includes Lichtenstein, Burton, Bearden, Biswas, Dickson and Urbany.
- A second network includes Monroe, Grewal, Mazumdar, Krishnamurthi, Padmanabhan and Bell as pricing scholars who co-authored articles in the data set.
- The third network has eight scholars: Mela, Lehmann, Neslin, Krishna, Gupta, Bucklin, Bronnenberg, and Urbany. Urbany is the only pricing scholar included in two of the four networks. His work with Mela puts him in network three and his work with Bearden puts him in network one.
- The fourth network includes Chintagunta and Wittink, who co-authored two pricing articles and met the ten article requirement for being in the list for research profiling analysis.

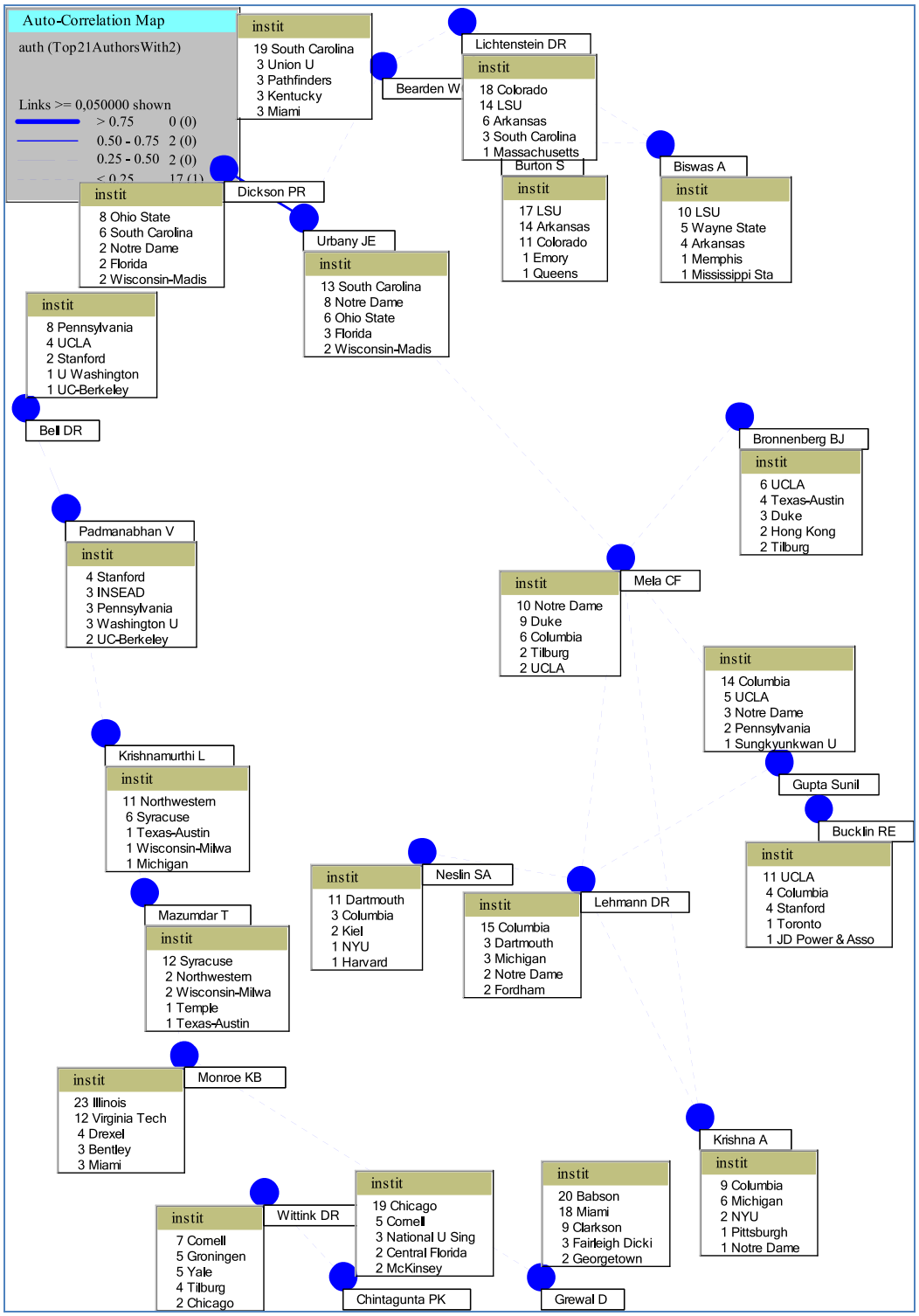

Fig. 3. Auto-correlation map of top-21 authors with institution information of authors and co-authors.

The lines in the autocorrelation maps reflect a measure of similarity between author nodes, which is a number between 0 and 1 as indicated in the legend (Pearson's r correlation). The thickness (or pattern) of the line is related to the number of articles authored together. Figs. 2–4 present additional information related to each author node. Fig. 2 shows five most frequent co-authors of each author in the map. Fig. 3 shows institution names and frequency counts of the author and his co-authors and Fig. 4 shows the most common pricing subjects of the author and co-authors.

There are many reasons why scholars might be in the same network. For examples: Lehmann and Gupta shared time together at Columbia, Dickson and Urbany were on the faculty at Ohio State, and Grewal was Monroe's student at Illinois. Nine of the top 33 pricing scholars had no co-authored papers with any other of the top 33 scholars. It appears there are opportunities for more collaboration in

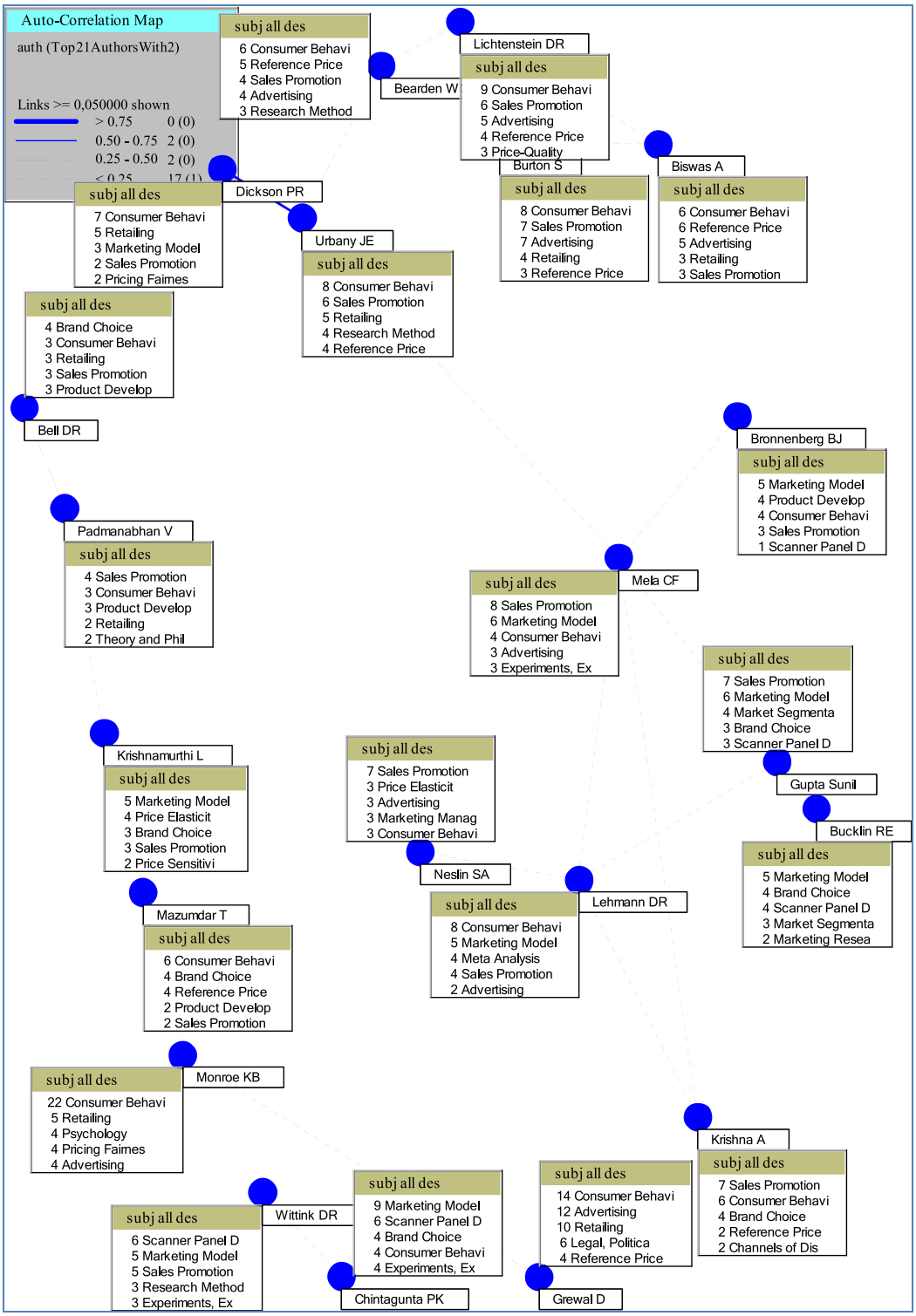

Fig. 4. Auto-correlation map of top-21 authors with subject area information of authors and co-authors.

pricing research than has been the case from 1980 through 2010. In order to peruse the broader networks of the top 21 scholars, we have produced one additional map that brings in all their co-authors with whom they have written at least 3 articles together, although the co-authors would not be on the top 33 author list. That sums up to 47 authors (see Fig. 5). If we would lower the threshold to two co-authored articles, the network size would grow to 86 authors. For presentational clarity, we present here the network with 47 author nodes.

3.4. Institutional affiliations

Table 6 presents a summary of author and co-author affiliations at time of publication of each article in this study. The table shows total number of instances a particular institution was mentioned as an author affiliation. While many of the authors are no longer at the same institution, looking at the institution at the time of publication provides some indication of which institutions have been most influential in contributing knowledge to the pricing area.

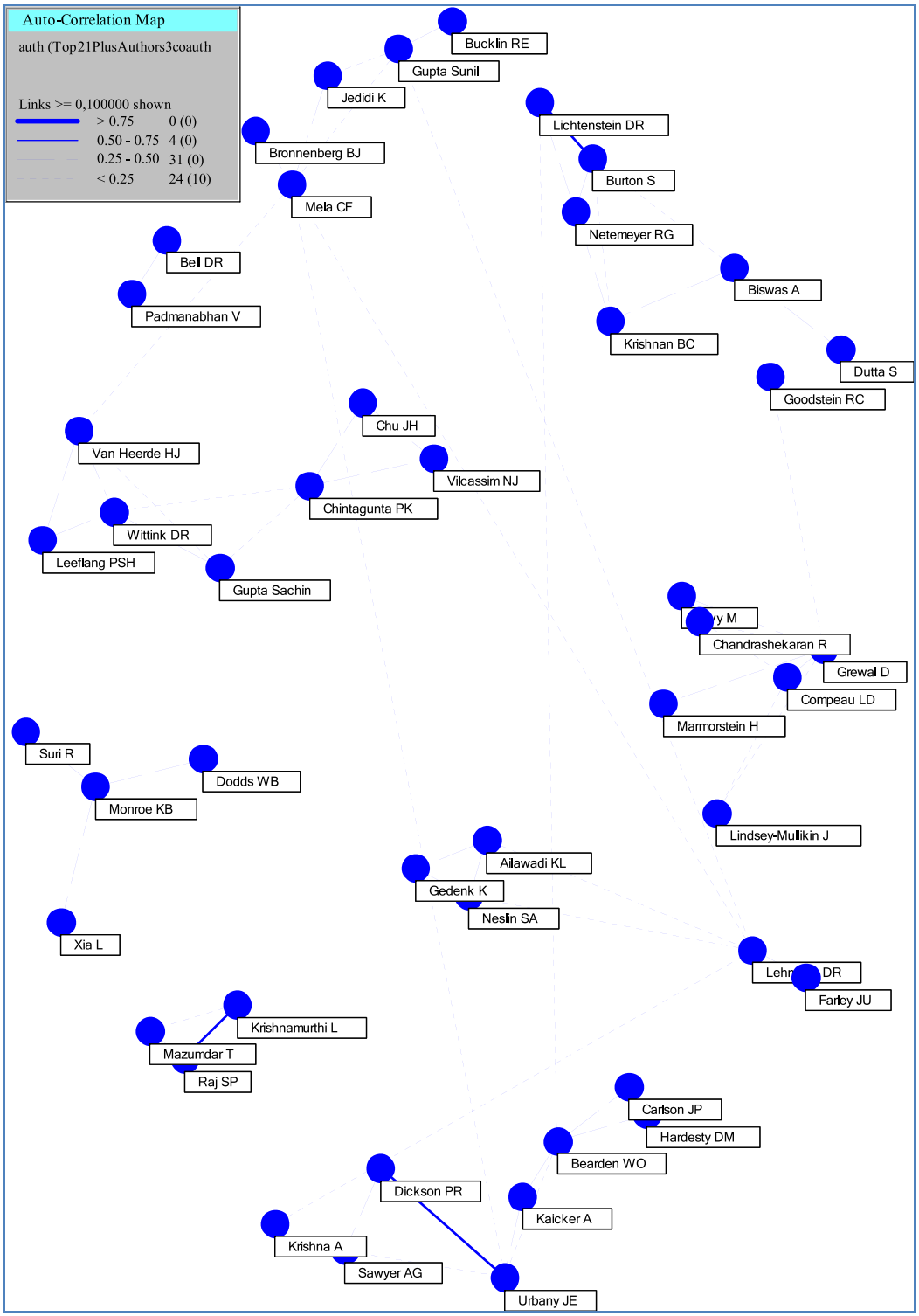

Fig. 5. Auto-correlation map of top-21 authors with their co-authors (min. 3 co-authored articles).

The first column of Table 6 shows number of articles which had at least one co-author affiliated with that institution when the article was published. The second column shows citations received by all articles included in column one. The University of Chicago had the highest number of articles and citations of 684 institutions represented in this study with 73 articles and 4366 citations. Florida was number two on the total citation list with 4284. Notice the number of citations for Chicago was almost one-and-a-half times the number three institution, Columbia, which had 3004. University of Chicago has made a huge contribution and has greatly influenced pricing knowledge over this 30 year period. While Chicago tops the list, a large number of institutions have played a critical role in contributing to pricing knowledge.

The third and fourth columns in Table 6 present adjusted counts for articles that had co-authors from more than one institution. The adjusted measures divided credit for an article and the citations received by the article by the number of co-authors. The credit for intellectual contribution was added up for articles which had one or

Table 6

Top 31 Institutions—Total (unweighted)						Top 31 Institutions—Weighted					
Total articles			Total citations			Total articles by author contribution			Total citations by author contribution		
Rank	Institution	Total articles	Rank	Institution	Total citations	Rank	Institution	Total Author contribution	Rank	Institution	Total citations by author contribution
1	Chicago	73	1	Chicago	4366	1	Chicago	42,92	1	Chicago	2474,33
2	Pennsylvania	71	2	Florida	4284	2	Columbia	36,80	2	Columbia	1371,73
3	Columbia	66	3	Columbia	3004	3	Pennsylvania	36,33	3	North Carolina	1140,25
4	UC-Berkeley	58	4	Pennsylvania	2135	4	UC-Berkeley	32,64	4	Florida	1077,10
5	Duke	55	5	Texas-Austin	2014	5	USC	30,58	5	Pennsylvania	934,12
5	Texas-Austin	55	6	Miami	1998	6	UCLA	30,35	6	MIT	913,83
7	NYU	51	7	UCLA	1848	7	Texas-Austin	29,17	7	UC-Berkeley	901,97
7	USC	51	8	MIT	1785	8	Duke	28,65	8	Texas-Austin	870,17
9	Illinois	50	9	Harvard	1568	9	Florida	28,24	9	UCLA	860,10
9	Northwestern	50	10	LSU	1566	10	Northwestern	27,28	10	Harvard	855,31
9	UCLA	50	11	Michigan	1552	11	NYU	26,54	11	Rochester	804,60
12	Miami	47	12	South Carolina	1537	12	Miami	23,89	12	Stanford	737,60
13	Florida	46	13	North Carolina	1485	13	Harvard	23,69	13	Miami	693,07
14	LSU	42	14	UC-Berkeley	1474	14	Illinois	23,48	14	Yale	686,33
15	Maryland	40	15	Stanford	1457	15	Maryland	23,23	15	Iowa	666,07
16	Stanford	39	16	Duke	1382	16	LSU	22,79	16	South Carolina	660,25
17	Cornell	38	17	Virginia Tech	1335	17	INSEAD	22,75	17	Duke	651,65
17	South Carolina	38	18	Illinois	1294	18	Rutgers	22,42	18	Minnesota	604,50
19	INSEAD	37	19	Northwestern	1206	19	Iowa	21,64	19	Virginia Tech	587,50
20	Harvard	36	20	INSEAD	1153	20	South Carolina	21,33	20	INSEAD	581,75
21	Indiana	35	21	NYU	1151	21	Cornell	21,28	21	LSU	578,71
21	Rutgers	35	22	Carnegie Mellon	1116	22	Stanford	21,10	22	Michigan	557,06
23	Carnegie Mellon	34	23	Minnesota	1099	23	Indiana	19,87	23	NYU	527,67
23	Ohio State	34	24	Ohio State	1093	24	MIT	18,58	24	Northwestern	519,15
25	MIT	33	25	Rochester	1074	25	Ohio State	18,44	25	Carnegie Mellon	502,77
26	Dartmouth	31	26	USC	1052	26	Minnesota	18,19	26	Ohio State	489,22
26	Iowa	31	27	Yale	994	27	Syracuse	17,50	27	USC	477,58
28	Minnesota	30	28	Iowa	961	28	Rochester	17,10	28	Illinois	472,72
29	Colorado	29	29	Cornell	931	29	Dartmouth	16,98	29	Purdue	421,17
30	Michigan	27	30	Dartmouth	910	30	Carnegie Mellon	16,77	30	Cornell	400,80
30	Syracuse	27	31	Purdue	865	31	U Washington	15,75	31	Rutgers	397,08

more co-authors for an article. University of Chicago topped the adjusted lists with the highest number of weighted articles (42.92) and weighted citations (2474.33). Weighted citations were almost double the number two institution, Columbia, which had 1371.73 weighted citations.

Fig. 3 shows pricing scholar networks further defined by institutional affiliations of 21 pricing scholars and their co-authors. The figure depicts five most common institutions of each pricing author and all co-authors. If there are two or more authors from the same institution for a single article, only one contribution count is added for that institution.

3.5. Subjects

Table 7 shows the subjects included in keywords for each article included in the study for each three (3) year period from 1980 through 2010. Note that the last period contains 3.5 years. Each article was coded with at least one keyword, and could have up to four keywords. This table shows subjects within the domain of pricing which received the most research attention in the 20 journals for the 30 years covered by the study. The table shows the percentage of all articles for each subject in the keyword list. For instance, consumer behavior was a subject term for 28.3% of articles included in the study and marketing models was a subject term for 15.1%. Totals for this column add to more than 100% since each article could have up to four keyword terms.

Fig. 4 shows most frequent pricing subjects for articles authored or co-authored by each scholar in each network. The network which includes Lichtenstein, Burton, Biswas, Bearden, Urbany and Dickson most often had the following subjects for their pricing articles: consumer behavior (30), sales promotion (19), reference prices (15), advertising (14), and retailing (13). The network which includes Mela, Lehmann, Neslin, Krishna, Gupta, Bucklin, Bronnenberg, and Urbany most often had sales promotion (31), consumer behavior (29), marketing models (21), brand choice (16) and advertising (10) as subjects. The network which includes Monroe, Grewal, Mazumdar, Krishnamurthi, Padmanabhan and Bell most often had: consumer behavior (44), retailing (20), advertising (18), sales promotion (14), product development, brand management (13), marketing models (11), reference prices (11) and brand choice (11). The network which includes Wittink and Chintagunta most often had subjects: marketing models (12), scanner panel data (10) and sales promotion (7).

4. Implications

The results reported can be used in a variety of ways. These findings can help researchers, managers, educators, students and others who are interested in pricing decide on what journals to read and/or subscribe and which author's work(s) to search out. The most highly cited articles, or "citation classics" (see e.g. Walstrom & Leonard, 2000), would provide an excellent starting point in identifying high impact research in the pricing area for someone who is teaching an MBA course on pricing or a PhD seminar with a pricing component. For someone conducting research in a specific pricing subject area, the articles identified in this research would serve as a excellent starting point for a literature review for research in any of the 105 subject areas identified by the keyword indicators found in the titles and abstracts for the 1945 articles in this study. In fact, one of the authors made this database available to student teams in an MBA marketing class and they used the articles classified within the subject area they were assigned as the foundation for a term paper which reviewed that topic.

If one looks at pricing areas that have recently gained interest based on the trend in the number of articles published over time as

Table 7
Top 20 subjects within pricing research.

Total articles												
Rank	Subject	Articles	Percent of all articles	2007 to 2010	2004 to 2006	2001 to 2003	1998 to 2000	1995 to 1997	1992 to 1994	1989 to 1991	1986 to 1988	1983 to 1985	1980 to 1982
1	Consumer behavior	550	28,3%	70	81	84	59	55	61	33	31	37	39
2	Marketing models	294	15,1%	47	21	43	49	41	39	21	17	10	6
3	Retailing	243	12,5%	48	39	28	29	26	15	17	11	13	17
4	Sales promotion	233	12,0%	31	24	43	26	41	26	22	12	4	4
5	Advertising	205	10,5%	22	22	25	20	22	23	23	16	15	17
6	Product development, brand management	180	9,3%	38	18	30	19	19	19	9	12	10	6
7	Research methodology	167	8,6%	80	3	14	17	14	19	5	6	6	3
8	Brand choice	126	6,5%		13	13	22	25	25	16	2	2	8
9	Price–quality	112	5,8%	19	4	11	17	16	14	8	5	11	7
10	Experiments, experimental, empirical	111	5,7%	10	3	16	19	23	13	5	10	6	6
11	Pricing strategy, pricing policy	104	5,3%	59	5	11	7	10	4	1	3	1	3
12	Marketing management, planning, strategy	100	5,1%	41	10	4	7	6	8	5	9	5	5
13	Market structure, competitive environment	95	4,9%	49	6	7	9	6	6	6	3	3	
14	Electronic marketing, e-commerce, internet marketing	91	4,7%	28	20	29	11	2					1
15	Channels of distribution	88	4,5%	41	4	7	14	10	5	3	1	3	
16	Theory and philosophy of science	83	4,3%	29	1	8	7	17	6	3	1	6	5
17	Legal, political, economic issues	81	4,2%	13	4	6	11	9	11	6	9	8	4
18	General marketing	77	4,0%		35	2	5	1	3	7	15	2	7
19	Reference prices	74	3,8%	10	11	10	8	11	10	8	3	2	1
20	International and comparative	69	3,5%	11	2	15	9	11	9	6	1	4	1

* Since an article can have up to four (4) subjects, these percentages sum to a number greater than 100%.

shown in Table 7, it is clear the internet has been more heavily studied in the last few years versus previous years. In only the last few years the topic of electronic marketing and e-commerce grew from no articles to 91 articles.

Table 7 also shows the areas that have recently declined in research interest over the same time period. While the reasons are not known, the areas that have been under-researched on pricing (based on number of articles) and where knowledge appears to be lacking (based on citations) more research is needed in the areas such as product line pricing, business to business pricing and especially in the area of how to strategically manage pricing. By looking at the number of articles published across the various topics in Table 7 and observing what is happening in the marketplace one can identify several specific areas in the pricing domain and identify research questions that need to be addressed. For example, there is a move in practice (especially in B2B environments) from "one size fits all" to pricing based on customer value (e.g. "free to fee"). How do you manage customer relationships in this changing environment? Given the growth of store brands and the power of the retailers in today's business environment, how should manufacturers protect their pricing positions? Similarly, if a manufacturer is faced with a decision concerning making a retailer's private label which will sell against their name brand, how would that affect pricing for their own line of products?

5. Summary

This study has used citation and profiling analysis to identify and categorize published research in pricing. The frame for analysis was articles published in 20 most relevant marketing or business journals indexed by the SSCI from January 1980 through June 2010. The tables show the quantity of articles on pricing research for each journal, and the top 25 (and ties) citations record for journals, articles, institutions (weighted and unweighted), authors (weighted and unweighted), and development of subjects. The figures illustrate the author networks in the pricing area. The results provide insight into what articles, individuals, and institutions have had an impact on pricing research in the marketing area.

Clearly, pricing remains one of the most important topics in the marketing domain. Unlike some research areas in marketing (i.e. logistics, quality management, and to some degree services) that have been usurped by other disciplines (i.e. operations or management science), marketing appears to be on solid ground with respect to the pricing domain.

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