

**Trend Analyses of Major Contributions
in *The Counseling Psychologist* Cited
From 1986 to 1996:
Impact and Implications**

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This study commemorates the 30th anniversary of The Counseling Psychologist (TCP), the official publication of Division 17 since 1969. The investigation analyzes trends in the professional citations of the Major Contribution articles from the inception of TCP in 1969 through 1995. Results indicate (a) the impact factors and citation half-life statistics for Major Contribution articles for the years 1986 to 1996, (b) that citations of Major Contributions have increased over the past 11 years, (c) that Major Contribution articles are cited across a diverse range of disciplines, (d) that the number of Major Contribution articles in an issue is negatively related to the average number of citations for an issue, (e) the top 10 most frequently cited Major Contribution articles, (f) the percentages of Major Contributions published by men and women, and (g) emerging topic areas from citations of Major Contributions published from 1991 to 1995. Implications of the results are discussed with regard to professional issues, TCP, and future research.

This year, *The Counseling Psychologist (TCP)* celebrates the 30th anniversary of its inception as the official journal of Division 17. The journal's creator and first editor, John Whiteley, developed a unique journal format consisting of a major treatise (i.e., Major Contributions) on a topic of importance to the theory, research, and practice of counseling psychology, followed by a set of reactions. This format is the most distinguished feature of *TCP* and, as Gelso and Fretz (1992) suggested, "has clearly withstood the test of time" (p. 41). The objective of this investigation was to commemorate the history of the journal by investigating the relative performance of Major Contributions over the past decade (more than a third of *TCP*'s lifetime).

According to White and White (1977), "the importance of a journal is determined by the overall quality of the articles it carries" (p. 301). Although several different approaches have been used to measure such quality (Koulack & Keselman, 1975; Mace & Warner, 1973), many of these are influenced heavily

by subjective biases. For instance, Mace and Warner (1973) analyzed the responses of 48 psychology department chairpersons who were asked to rate 64 journals on a 5-point Likert-type scale of excellence. This method was criticized for only including psychology chairpersons, which was limited by their knowledge of journals (Boor, 1973; Gynther, 1973; Hohn & Fine, 1973). This limitation resulted in lower journal ratings for those journals with which the chairpersons were not familiar. Another approach by Koulack and Keselman (1975) attempted to rectify this problem by soliciting 863 APA members to rank the 10 best journals in the field and to indicate those journals in which they would like to be published. This approach is still bound by the respondents' subjective opinions about journals, journal quality, and their specialty in psychology.

A different approach that seems to stand out above the rest is analyzing citations (Garfield, 1972); "because an article's influence can be measured in terms of the frequency with which it is cited in subsequently published articles and books, citations per article is clearly an appropriate index of the impact of a journal article" (White & White, 1977, p. 301). Blackburn (1990) noted that this approach has a rich history in the "hard" sciences but has been used less by social scientists. Citation analysis has been characterized by its ability to highlight how information moves within and from a scientific discipline (Hoffman & Holbrook, 1993). Although this approach clearly has its own limitations, several studies have used this approach to evaluate journals or articles within journals (Bentler, 1992; Blackburn, 1990; Cotton & Anderson, 1973; Garfield, 1972; Heesacker, Heppner, & Rogers, 1982; Hoffman & Holbrook, 1993; Howard & Curtain, 1993; Myers & DeLevie, 1966; Rushton, & Roediger, 1978; White & White, 1977). This approach is less influenced by subjective biases because it looks directly at how frequently articles are being used by other professionals in the field. This includes citations in journals from other disciplines with which departmental chairs and members of APA might be unfamiliar.

Understanding the impact of professional publications is important to the understanding of any discipline (LeUnes, 1974). Previously, investigations of professional citations have increased the profession's understanding of important research contributors (e.g., Cotton & Anderson, 1973; Howard & Curtain, 1993; Myers & DeLevie, 1966), the relative proportions of types of published articles (e.g., Remer & Barclay, 1978), the most common article topics (e.g., Tyron, 1981), journal rankings (Everett & Pecotich, 1993; Rushton & Roediger, 1978), and classic articles in the field (Heesacker et al., 1982). These analyses not only provided useful information for analyzing the history of the profession and its publications but also provided a rich source of

data that could potentially influence the future definition of the field of counseling psychology.

Previously, Harmon and Harker (1987) reflected on the history of *TCP* during the first 15 years of the journal. This article will again “hold up the mirror” by analyzing trends in the professional citations of the Major Contributions in *TCP* during the past 11 years. The 11-year time span will provide a better understanding of Major Contribution use in the past decade and represents the years of data accessible through the computerized format of the Social Science Citation Index (SSCI; 1986-1995) at the time of our data collection. Because of the large number of individual data searches, the computerized version of SSCI was the most feasible option. In essence, our goal was to analyze the citations not only to identify the impact of the Major Contributions but also to enhance the understanding of the field of counseling psychology as reflected in *TCP*. In analyzing the citations, we were interested particularly in identifying the most frequently cited Major Contributions in the past 11 years; such information most likely would suggest critically important topics in the profession as well as provide clues as to the type of articles (e.g., critical reviews, new conceptualizations, applications of theory or research) that serve the profession well. More specifically, the following questions guided the primary analyses: (a) What are the impact factors and half-life figures for *TCP* Major Contribution articles? This information would provide insight into the influence and the citation longevity of Major Contributions. (b) Is the number of citations of Major Contributions increasing or decreasing over time? (c) To what extent are Major Contributions being cited within and outside the profession of psychology, what journals are citing them, and what articles are being cited? Such information would provide some information about the breadth of the use of *TCP*. (d) Is the number of articles constituting a Major Contribution associated with the number of citations? This information can inform future editors of *TCP* as well as our scholars in understanding how the structure of *TCP* is related to the use of Major Contribution articles. (e) What are the most frequently cited Major Contribution articles across the 11-year time span investigated and within each year? (f) What are the comparative percentages of Major Contributions first-authored by men and women? Such information is useful in evaluating our profession’s quest to integrate the perspectives of different members of our division. (g) What are the emerging topics based on frequency of citations for articles published since 1990? Because recently published articles are at a disadvantage to articles that could be cited longer, this will allow them to be compared among articles published within a similar shorter time frame. This information will facilitate projection of which articles may have the most impact within the profession in the future.

METHOD

Sample and Retrieval Mechanism

The sample consisted of all Major Contribution articles ($N = 429$) from the inception of *TCP* in 1969 through 1995. Citation data for each Major Contribution article were collected through the Institute for Scientific Information's (ISI's) SSCI (1986-1996), which includes approximately 1,700 journals across 50 disciplines. The SSCI includes information about how many times an article has been cited and the full reference of the citation article. The SSCI exists in computerized and book formats. In the computerized format, data are stored on compact discs by year of citation and include the years 1986 to 1996.

Because we were interested in looking at the citation trends of a large number of articles, the computerized format of SSCI was the most feasible option. Therefore, the focus of this citation analysis for all the 429 Major Contribution articles was across the 11-year time span that ISI began to store SSCI data on compact discs (1986-1996).

Data Collection

The Major Contribution articles were reviewed by year beginning with the 1986 compact disc. This resulted in 4,729 individual database searches. Two methods of data collection were used to ensure the accuracy of the citation analysis. First, a spreadsheet was created that contained the title, first author name, year, volume number, issue number, and page number of each Major Contribution article. Parenthetically, because several authors had multiple publications, this information allowed the researchers to identify the exact Major Contribution article being sought. After each computer search of a Major Contribution article, the number of citations the article received was recorded on the spreadsheet. Second, the SSCI citation data were saved to floppy disks. This yielded a list of the Major Contribution articles receiving citations and the corresponding reference information for the article citing the Major Contribution. This step provided reference information about where the Major Contributions had been cited and allowed for a second check of the citation data recorded on the spreadsheet.

Data Coding and Entry

Coding was completed by the research team. Data were coded in the following manner for each citation of each Major Contribution article: (a) Major Contribution article identification number, (b) *TCP* volume and issue numbers, (c)

the journal in which the citation appeared, (d) the year of the citation, (e) self or other citation, and (f) the citation number (because some articles were cited numerous times in 1 year). Thus, if an article received four citations in a single year, the data for that article had to be coded four times along all six of the aforementioned variables. In this way, no data were lost if all four of the citations were made in four different journals. Furthermore, articles that received zero citations in a year were also coded.

A seventh variable was added later, the content domain of journals containing citations (counseling, psychology specialties, other disciplines, and international). The senior researcher with expertise and extensive knowledge in research and publication categorized the 376 journals in which *TCP* Major Contribution articles were cited. Those journals that did not clearly fall into one of these groups were researched at the library to ascertain their publisher and target audience. After data were entered, several checks of the data were performed to ensure accuracy of coding.

RESULTS

Across the time span investigated in this study, Major Contribution articles were cited a total of 2,688 times. Of the 429 Major Contributions published before 1996, 75% ($n = 323$) received at least 1 citation from 1986 to 1996. The mean, median, mode, and range of citations were calculated for all 429 Major Contribution articles over the 11-year period. The mean was 6.3, the median was 2, the mode was 0; the range was 0 to 100. The vast majority of the articles not receiving any citations were articles published from 1969 to 1979. Table 1 contains the mean number of citations per Major Contribution article per year.

Impact Factor and Citation Half-Life of Major Contributions

A journal's impact factor is computed annually and is "the ratio between the number of citations to a journal and the number of citable articles published by that journal" (Blackburn, 1990, p. 286). To calculate an impact factor for a single year, the performance of articles published in the preceding 2 years is taken into account. For example, when calculating the impact factor for 1996, the total number of citations received in 1996 by articles published in 1994 and 1995 would be divided by the total number of articles published in those 2 years. This formula is accepted universally for computing journal impact factors and is used by the ISI's SSCI (Blackburn, 1990; Stamps & Fehr, 1980). The mean impact rating for Major Contribution articles across the 11-year time span was 1.333.

TABLE 1: Mean Number of Citations Per Major Contribution Article From 1986 to 1996

<i>Year</i>	<i>Cumulative</i>	<i>Mean</i>
1986	323	1.96
1987	331	1.57
1988	337	1.85
1989	352	1.96
1990	357	1.69
1991	371	1.26
1992	380	1.32
1993	397	1.44
1994	408	1.44
1995	415	1.44
1996	429	1.55

NOTE: Cumulative refers to all Major Contribution articles since 1969.

Half-life, on the other hand, refers to the length of time a journal's article remains in active citation. A journal's half-life is calculated for a given year by finding the age of the article that accounts for the median citation during that year. Thus, a journal with a higher half-life figure contains older articles that are currently being cited. The mean half-life figure for Major Contributions across the 11-year time span was 7.3 years. Table 2 contains the impact factor and citation half-life statistics for Major Contribution articles during the years 1986 to 1996.

Frequency of Major Contribution Citations by Year

Figure 1 depicts a graphical representation of the number of times Major Contributions were used each year by other scholars in their published writings. The frequencies indicate that the number of total citations of the *TCP* Major Contributions was relatively stable during the years 1986 to 1990, ranging from 180 to 211. A rather sharp increase occurred in 1991 (294 citations), with a relatively stable rate the next 5 years (275 to 289 citations).

Where Have TCP Major Contribution Articles Been Cited?

Results indicate that Major Contribution articles have been cited across a diverse range of journals ($n = 376$). Across the 11-year span, 58.5% ($n = 1571$) of the citations of Major Contribution articles were found in counseling journals, 26.2% ($n = 704$) were found in psychology specialty journals, 10.5% ($n = 281$) were cited in journals across other disciplines, and 4.8% ($n =$

TABLE 2: Impact Factor and Citation Half-Life of Major Contribution Articles for 1986 to 1996

TCP Year	Impact Factor	Citation Half-life (in years)
1986	1.200	6
1987	1.765	7
1988	1.643	9
1989	1.238	7
1990	1.350	7
1991	2.737	6
1992	1.130	6
1993	1.192	7
1994	0.500	7
1995	1.389	7
1996	0.523	11

NOTE: Impact factor = the ratio between the number of TCP's Major Contribution citations received in a year and the number of Major Contribution articles published in the preceding 2 years. Half-life = the age of the Major Contribution article that accounts for the median citation during a given year.

128) were located in international journals. Although there were some small differences when these percentages were examined by year, for the most part, the percentages were fairly stable across the 11-year period.

The specific journals in the counseling category that cited Major Contribution articles most frequently were as follows: *TCP* (34.6%, $n = 543$), *Journal of Counseling and Development* (23.4%, $n = 368$), and *Journal of Counseling Psychology* (21.3%, $n = 334$). These three journals comprised 79.2% of the citations of the counseling journals and 46.3% of all citations in the 11-year span. The frequencies of the next group of counseling journals was as follows: *Journal of College Student Development* (4.8%, $n = 76$), *Career Development Quarterly* (4.8%, $n = 76$), and *Journal of Vocational Behavior* (3.4%, $n = 53$).

Of those citations in the counseling journals ($n = 1571$), the articles receiving the most citations were the following: Gelso's (1980) article on counseling research (5%, $n = 78$); Gelso and Carter's (1985) article on the therapeutic relationship (3.6%, $n = 57$); Astin's (1984) model of women's career development (3.1%, $n = 49$); and Loganbill, Hardy, and Delworth's (1982) supervision model (3.1%, $n = 48$).

The journal in the psychology specialties category that cited Major Contribution articles most frequently was *Professional Psychology: Research and Practice* (21.6%, $n = 152$). Others citing Major Contribution articles with less frequency included *Psychotherapy* (8.7%, $n = 61$), *Annual Review of Psychology* (4.5%, $n = 32$), *The American Psychologist* (4%, $n = 28$), and

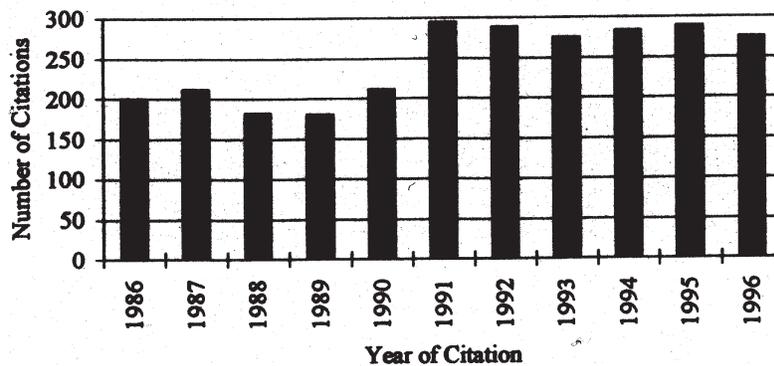


Figure 1. Total number of Major Contribution citations for the years 1986 to 1996.

Journal of Consulting and Clinical Psychology (3%, $n = 21$). These five journals comprise 41.8% of citations found in other psychology journals and 10.9% of all citations in the 11 years. Of these five journals, three are APA journals, and one is an APA divisional journal. The remaining citations ($n = 410$) were distributed across 105 other psychology journals, each of which garnered less than 3% of the total number of citations in this category. Thus, the majority of the citations in psychology specialty journals occur in a very broad range of psychology journals. Of all the citations occurring in psychology specialty journals, 35.5% ($n = 250$) were in APA journals.

Of those citations in the psychology specialty journals ($n = 704$), the articles receiving the most citations were the following: Kitchener's (1984) article on ethics (4.3%, $n = 30$); Loganbill et al. (1982) supervision model (4.1%, $n = 29$); Gelso and Carter's (1985) article on the therapeutic relationship (3.7%, $n = 26$); and McCann, Sakheim, and Abrahamson's (1988) article on trauma and victimization (3.4%, $n = 24$).

The two journals in the other disciplines category citing Major Contribution articles with the most frequency were *Journal of Marital and Family Therapy* (3.9%, $n = 11$) and *Family Relations* (3.6%, $n = 10$). These two journals comprised 7.5% of citations found in journals from other disciplines and 0.8% of all citations in the 11 years. Although no other specific journal represented more than 3% of the total citations, 133 other journals contained at least one citation of a Major Contribution article. These journals represented a large number of disciplines, ranging from occupational therapy, family law, nursing, business and management, head and neck surgery, criminal justice,

orthopsychiatry, pharmaceutical education, neurological rehabilitation, education, theology, Black studies, library science, sociology, exercise and sport, and communications. Thus, the overwhelming majority of citations in journals from other disciplines are spread across a very broad range of disciplines.

Of those citations in the journals from other disciplines ($n = 281$), the articles receiving the most citations were the following: Rogers's (1977) article on empathy (5%, $n = 14$), Schlossberg's (1981) model on adaptation (5%, $n = 14$), Astin's (1984) model on women's career development (4.6%, $n = 13$), and Loganbill et al. (1982) supervision model (3.9%, $n = 11$).

International journals that cited Major Contributions most frequently were the *International Journal for the Advancement of Counselling* (17.2%, $n = 22$), *International Journal for the Advancement of Psychology* (8.6%, $n = 11$), *Australian Psychologist* (6.3%, $n = 8$), and *Contemporary Family Therapy* (6.3%, $n = 8$), an international journal published in the United States. These four journals comprised 38.3% of the citations of international journals, and 1.8% of all citations in the 11 year span. Forty-five other international journals represented the remaining citations ($n = 79$) from countries such as Canada, Britain, Germany, Norway, Scandinavia, and New Zealand. Thus, the majority of international citations occur in a very broad range of international journals.

Of those citations in the international journals ($n = 128$), the articles receiving the most citations were the following: Matheny, Aycock, Pugh, Curlette, and Cannella's (1986) article on coping with stress (5.5%, $n = 7$); Heppner and Krauskopf's (1987) article on problem solving (3.1%, $n = 4$); Gelso and Carter's (1985) article on the therapeutic relationship (3.1%, $n = 4$); and Astin's (1984) model on women's career development (3.1%, $n = 4$).

Is There a Relationship Between the Number of Major Contribution Articles in an Issue of TCP and the Number of Citations Those Articles Received?

Prior to conducting the correlational analysis between the number of Major Contribution articles per issue and the number of citations that issue received from 1986 to 1996, several preliminary analyses were calculated. All issues of *TCP* since its inception in 1969 were grouped according to the number of Major Contribution articles they contained. For instance, all issues with one Major Contribution article were tallied, all issues with two Major Contribution articles were tallied, and so on through an issue that contained 28 Major Contribution articles. Next, the citations for each group of issues were summed, and a mean number of citations per article was calculated. Table 3 presents these means.

TABLE 3: Mean Number of Citations Per Article for Each Major Contribution Group

<i>Number of Articles in the Major Contribution</i>	<i>N</i>	<i>Total Citations</i>	<i>Mean</i>
<i>TCP issues published from 1969 to 1995</i>			
1	43	924	21.5
2	7	208	14.9
3	3	91	10.1
4	6	146	6.1
5	5	214	8.6
6	7	327	7.8
7	7	281	5.7
8	1	30	3.8
10	1	3	0.3
11	2	111	5.1
12	3	143	4.0
15	2	56	1.9
18	1	31	1.7
20	1	12	0.6
25	1	18	0.7
26	1	49	1.9
28	1	45	1.6
<i>TCP issues published from 1982 to 1991</i>			
1	19	637	33.5
2	3	125	20.8
3	2	83	13.8
4	1	59	14.8
5	4	184	9.2
6	4	214	8.9
7	4	216	7.7
11	1	99	9.0
12	1	14	1.2

The number of Major Contribution articles in an issue of *TCP* and the number of citations per issue were highly correlated, $r = -.73$, $p < .001$. It is possible that the time at which a *TCP* issue was published biased this correlation (e.g., issues published prior to 1980 might be cited less frequently, thus disadvantaging the earlier years). To reduce the possibility of time confounding this analysis, we conducted a similar analysis on citations for articles published between the years 1982 and 1991. This allowed each issue an optimal chance of being cited within the time frame investigated. Results indicated a similar correlation, $r = -.81$, $p < .01$ between the number of Major Contribution articles in an issue of *TCP* and the number of citations received for articles in that issue. Thus, there is a significant relationship between the number

TABLE 4: The 10 Major Contributions Most Frequently Cited During the Years 1986 to 1996

<i>Author</i>	<i>Article Title</i>	<i>Year</i>	<i>Volume</i>	<i>Issue</i>	<i>Number of Citations</i>
Gelso	Research in Counseling: Methodological and Professional Issues	1980	8	3	100
Gelso & Carter	The Relationship in Counseling and Psychotherapy: Components, Consequences, and Theoretical Antecedents	1985	13	2	90
Loganbill, Hardy, & Delworth	Supervision: A Conceptual Model	1982	10	1	90
Astin	The Meaning of Work in Women's Lives: A Sociopsychological Model of Career Choice and Work Behavior	1984	12	4	80
Hoshmand	Alternate Research Paradigms: A Review and Teaching Proposal	1989	17	1	61
Kitchener	Intuition, Critical Evaluation and Ethical Principles: The Foundation for Ethical Decisions in Counseling Psychology	1984	12	2	58
Heppner & Krauskopf	An Information-Processing Approach to Personal Problem Solving	1987	15	3	46
Schlossberg	A Model for Analyzing Human Adaptation to Transition	1981	9	2	43
Katz	The Sociopolitical Nature of Counseling	1985	13	4	42
Mahoney	Recent Developments in Cognitive Approaches to Counseling	1988	16	2	41

of citations and the number of articles comprising a Major Contribution; the more articles in a Major Contribution, the fewer the citations per article.

The top 10 most frequently cited Major Contribution articles (see Table 4) were reviewed separately in terms of the number of Major Contribution articles in the issue in which these top 10 articles were published. It is interesting to note that the top 5 most frequently cited articles were the only Major Contribution article in their respective issues. Furthermore, 7 of the top 10 were in issues of *TCP* that contained 1 Major Contribution article, 1 was in an issue with 2 Major Contribution articles, and 2 were in issues with 6 or 7 Major Contribution articles.

Which Major Contribution Articles Have Had a "Major" Impact?

Table 4 lists the 10 most frequently cited Major Contribution articles within the 11-year period investigated in this study. These articles account for 23.8 % ($n = 651$) of the total number of citations ($N = 2,731$) received by all *TCP* Major Contribution articles from 1986 to 1996. Of these top 10 articles, 60 % of the first authors were women and 40 % were men. Overall, 62% of Major Contribution articles published from 1969 to 1995 were first authored by men, 36% were first authored by women, and the sex of 2% of the first authors were unidentified. These percentages remain almost identical for the Major Contribution articles published in the past 10 years (62.3% and 37.7%, respectively) as well as those published in the past 5 years (62.1% and 37.9%, respectively).

The top 10 articles were reviewed to assess the types of articles (e.g., conceptual, empirical, application of theory or research, or critical reviews) that had been most successful in terms of citations. Given the focus of *TCP*, it is not surprising that all 10 of these articles were conceptual as opposed to empirical articles. Some of the articles' conceptual focus was on research training models (Gelso, 1980; Hoshmand, 1989), theoretical models (Astin, 1984; Loganbill et al., 1982; Schlossberg, 1981), and new applications of theory (Heppner & Krauskopf, 1987; Mahoney, 1988). The remaining articles were new conceptualizations about counseling (Gelso & Carter, 1985; Katz, 1985; Kitchener, 1984).

In addition, we also tallied the most frequently cited Major Contributions each year. Table 5 presents a list of the most frequently cited Major Contributions for each year from 1986 to 1996. It is rather striking to note that the top ranking Major Contributions per year accounted for 12.6% to 26% of the total number of *TCP* citations for those respective years. In each of the years, at least 40% of the highest ranking Major Contribution articles had a woman as the first author, at times garnishing 50% or higher in 7 of the 11 years.

What Are the Emerging Major Contributions?

Following the same procedure used by Heesacker et al. (1982), emerging topics were identified. Citations of Major Contribution articles published since 1990 were tallied to determine the topics receiving the most citations in the field. For this analysis, citation data for the years 1991 to 1996 were included to provide a more current perspective of the citation trends. Cutting-edge subject areas as assessed by the number of citations include counseling lesbian and gay clients ($n = 59$), counseling centers in the 1990s ($n = 34$), multicultural training ($n = 28$), counseling psychology and health

TABLE 5: Ranking of Most Frequently Cited TCP Major Contribution Articles for Each Year

<i>Rank</i>	<i>Article</i>	<i>Number of Citations</i>	<i>Year</i>
1	Gelso, C. J. (1980). Research in Counseling: Methodological and Professional Issues.	20	1986
2	Loganbill, C., Hardy, E., & Delworth, U. (1982). Supervision: A Conceptual Model	10	1986
3	Rogers, C. R. (1977). Empathic: An Unappreciated Way of Being.	8	1986
4	Schlossberg, N. K. (1981). A Model for Analyzing Human Adaptation to Transition.	6	1986
1	Gelso, C. J. (1980). Research in Counseling: Methodological and Professional Issues.	10	1987
2	Neugarten, B. L. (1978). Adaptation in the Life Cycle.	5	1987
3	Banikiotes, P. G. (1979). The Training of Counseling Psychologists.	5	1987
4	Schlossberg, N. K. (1981). A Model for Analyzing Human Adaptation to Transition.	5	1987
5	Fretz, B. R. (1982). Perspectives and Definitions.	5	1987
6	Loganbill et al. (1982). Supervision: A Conceptual Model.	5	1987
7	Astin, H. S. (1984). The Meaning of Work in Women's Lives: A Sociopsychological Model of Career Choice and Work Behavior.	5	1987
1	Gelso, C. J. (1980). Research in Counseling: Methodological and Professional Issues.	8	1988
2	Schlossberg, N. K. (1981). A Model for Analyzing Human Adaptation to Transition.	5	1988
3	Loganbill et al. (1982). Supervision: A Conceptual Model.	5	1988
4	Howard, G. S., Nance, D. W., & Meyers, P. (1986). Adaptive Counseling and Therapy: An Integrative, Eclectic Model.	5	1988
1	Astin, H. S. (1984). The Meaning of Work in Women's Lives: A Sociopsychological Model of Career Choice and Work Behavior.	14	1989
2	Gelso, C. J., & Carter, J. A. (1985). The Relationship in Counseling and Psychotherapy: Components, Consequences, and Theoretical Antecedents.	11	1989
3	Loganbill et al. (1982). Supervision: A Conceptual Model.	8	1989
4	Gelso, C. J. (1980). Research in Counseling: Methodological and Professional Issues.	7	1989
5	Heppner, P. P., & Krauskopf, C. J. (1987). An Information-Processing Approach to Personal Problem Solving.	7	1989
1	Gelso, C. J., & Carter, J. A. (1985). The Relationship in Counseling and Psychotherapy: Components, Consequences, and Theoretical Antecedents.	12	1990
2	Loganbill et al. (1982). Supervision: A Conceptual Model.	9	1990
3	Astin, H. S. (1984). The Meaning of Work in Women's Lives: A Sociopsychological Model of Career Choice and Work Behavior.	9	1990

(continued)

TABLE 5 Continued

<i>Rank</i>	<i>Article</i>	<i>Number of Citations</i>	<i>Year</i>
4	Gelso, C. J. (1980). Research in Counseling: Methodological and Professional Issues.	7	1990
5	Heppner, P. P., & Krauskopf, C. J. (1987). An Information-Processing Approach to Personal Problem Solving.	7	1990
1	Hoshmand, L.L.S.T. (1989). Alternative Research Paradigms: A Review and Teaching Proposal.	12	1991
2	Gelso, C. J. (1980). Research in Counseling: Methodological and Professional Issues.	11	1991
3	Gelso, C. J., & Carter, J. A. (1985). The Relationship in Counseling and Psychotherapy: Components, Consequences, and Theoretical Antecedents.	10	1991
4	Loganbill et al. (1982). Supervision: A Conceptual Model.	9	1991
5	Kitchener, K. S. (1984). Intuition, Critical Evaluation and Ethical Principles: The Foundation for Ethical Decisions in Counseling Psychology.	9	1991
6	Parham, T. A. (1989). Cycles of Psychological Nigrescence.	9	1991
1	Hoshmand, L.L.S.T. (1989). Alternative Research Paradigms: A Review and Teaching Proposal.	10	1992
2	Loganbill et al. (1982). Supervision: A Conceptual Model.	9	1992
3	Kitchener, K. S. (1984). Intuition, Critical Evaluation and Ethical Principles: The Foundation for Ethical Decisions in Counseling Psychology.	9	1992
4	Dowd, E. T., & Milne, C. R. (1986). Paradoxical Interventions in Counseling Psychology.	8	1992
5	Heppner, P. P., & Krauskopf, C. J. (1987). An Information-Processing Approach to Personal Problem Solving.	8	1992
6	Mahoney, M. J., & Lyddon, W. J. (1988). Recent Developments in Cognitive Approaches to Counseling and Psychotherapy.	8	1992
7	Stone, G. L., & Archer, J., Jr. (1990). College and University Counseling Centers in 1990s: Challenges and Limits.	8	1992
1	Gelso, C. J. (1980). Research in Counseling: Methodological and Professional Issues.	12	1993
2	Gelso, C. J., & Carter, J. A. (1985). The Relationship in Counseling and Psychotherapy: Components, Consequences, and Theoretical Antecedents.	11	1993
3	Hoshmand, L.L.S.T. (1989). Alternative Research Paradigms: A Review and Teaching Proposal.	11	1993
4	Astin, H. S. (1984). The Meaning of Work in Women's Lives: A Sociopsychological Model of Career Choice and Work Behavior.	9	1993
5	Gallessich, J. (1985). Toward a Meta-Theory of Consultation.	9	1993
6	Kitchener, K. S. (1984). Intuition, Critical Evaluation and Ethical Principles: The Foundation for Ethical Decisions in Counseling Psychology.	8	1993

TABLE 5 Continued

<i>Rank</i>	<i>Article</i>	<i>Number of Citations</i>	<i>Year</i>
1	Ridley, C. R., Mendoza, D. W., & Kanitz, B. E. (1994). Multicultural Training: Reexamination, Operationalization, and Integration.	14	1994
2	Gelso, C. J., & Carter, J. A. (1985). The Relationship in Counseling and Psychotherapy: Components, Consequences, and Theoretical Antecedents.	11	1994
3	Hoshmand, L.L.S.T. (1989). Alternative Research Paradigms: A Review and Teaching Proposal.	10	1994
4	Loganbill et al. (1982). Supervision: A Conceptual Model.	8	1994
5	McCann, I. L., Sakheim, D. K., & Abrahamson, D. J. (1988). Trauma and Victimization: A Model of Psychological Adaptation.	8	1994
1	Loganbill et al. (1982). Supervision: A Conceptual Model.	12	1995
2	Gelso, C. J., & Carter, J. A. (1985). The Relationship in Counseling and Psychotherapy: Components, Consequences, and Theoretical Antecedents.	12	1995
3	Astin, H. S. (1984). The Meaning of Work in Women's Lives: A Sociopsychological Model of Career Choice and Work Behavior.	10	1995
4	McCann et al. (1988). Trauma and Victimization: A Model of Psychological Adaptation.	9	1995
5	Stone, G. L., & Archer, J., Jr. (1990). College and University Counseling Centers in 1990s: Challenges and Limits.	9	1995
6	Heppner, P. P., & Krauskopf, C. J. (1987). An Information-Processing Approach to Personal Problem Solving.	8	1995
7	Parham, T. A. (1989). Cycles of Psychological Nigrescence.	8	1995
1	Parham, T. A. (1989). Cycles of Psychological Nigrescence.	10	1996
2	Loganbill et al. (1982). Supervision: A Conceptual Model.	9	1996
3	Stone, G. L., & Archer, J., Jr. (1990). College and University Counseling Centers in the 1990s: Challenges and Limits.	9	1996
4	Kitchener, K. S. (1984). Intuition, Critical Evaluation and Ethical Principles: The Foundation for Ethical Decisions in Counseling Psychology.	8	1996
5	Gelso, C. J., & Carter, J. A. (1985). The Relationship in Counseling and Psychotherapy: Components, Consequences, and Theoretical Antecedents.	8	1996
6	Hoshmand, L.L.S.T. (1989). Alternative Research Paradigms: A Review and Teaching Proposal.	8	1996

applications ($n = 23$), and counseling the HIV-infected client ($n = 15$). In addition, a Major Contribution on the delayed memory debate received 14 citations in the 2 years following its publication.

DISCUSSION

Before discussing the implications of the findings, it is important to provide a context by discussing some shortcomings of citation analyses. First, an analysis of citations depends solely on the tool being used to gather the citation data. In the process of gathering the data for this study, we noticed that there were errors in some of the citation entries (e.g., incorrectly cited references, incomplete author information such as a middle initial resulting in an omitted citation). Although efforts were made to correct for this, it is likely that some citations were missed. Moreover, the citation analyses were based on journals included in the SSCI; although this provides the most relevant database for *TCP*, some journals in which Major Contributions were cited may not be included in the index. A second limitation of citation analyses is that they do not provide information regarding how or why specific works were cited (Everett & Pecotich, 1993; Hoffman & Holbrook, 1993). For example, authors may simply cite a reference without having read the original source, because they have observed the citation in other works on the same topic, or the work may be getting criticized because of its shortcomings. Third, although the number of years in which citations were analyzed in this study included more than one third of *TCP*'s life span, citation trends from the first 16 years of the journal were not analyzed. Therefore, it is important to restrict conclusions to the time frame (1986-1996) of the study. It is likely that articles published in the earlier years and most recent years of *TCP* were at a disadvantage, as half-life figures for Major Contributions ranged from 6 to 11 years. Finally, it is also important to note that this study only focused on one index of utility, citations in professional periodicals. Other indices of utility (e.g., textbook citations or surveys of training directors and practitioners) might reveal different patterns for the Major Contribution articles in *TCP*.

Despite these limitations, the use of citation analyses has been regarded as at least one objective measure for mapping intellectual trends within a discipline and ranking journals, articles, or authors (Bentler, 1992; Blackburn, 1990; Cotton & Anderson, 1973; Garfield, 1972; Hoffman & Holbrook, 1993; Howard & Curtain, 1993; Myers & DeLevie, 1966; Rushton, & Roediger, 1978; White & White, 1977). Clearly, although citation analyses have some shortcomings, they remain useful in gaining a better understanding about the use of our professional publications.

The results of the study indicate that the impact of *TCP* Major Contributions, as noted by the number of citations, has increased since 1986 to the present. Specifically, since 1991, there has been a dramatic increase in the frequency of citations of *TCP* Major Contributions. These results speak well of the growing professional use of *TCP*. It is difficult to ascertain exactly why

TCP has enjoyed increased prominence as measured by citations. One possibility noted by Everett and Pecotich (1993) and Rushton and Roediger (1978) could be attributed to changes in editorship and editorial policy. Although this may shed light on the performance of *TCP*, we are hesitant to offer this as a prime reason behind the dramatic increase in the use of the journal. Consideration of the half-life of journal articles and the number of Major Contributions in an issue may be important when considering this change. There are also other variables that could influence an increase in citations, such as a possible increase in availability and accessibility of *TCP* in more educational institutions could make it more likely to be used and therefore cited. Additionally, there may be many more journals in which authors can publish that would increase the possibility of any work being cited. Finally, the entire counseling profession might have had more research productivity in recent years, leading to more publications and citations; in turn, recognition and respect of counseling and *TCP* may have increased, leading to broader usage of our research. Because of the complex nature of all of these issues, a simple causal interpretation of these data is not possible.

Moreover, the results also indicate that Major Contribution articles have been cited widely across a variety of psychological and international journals as well as a broad range of other disciplines. As *TCP* is a specialized journal focusing specifically on counseling and is the official journal of Division 17 of APA, one might expect to find citations of its articles to occur overwhelmingly in counseling journals. However, this was not the case. Although the majority of citations did occur in counseling journals, slightly more than a quarter of all citations were found in psychology specialty journals, and about 10% were in journals from other disciplines. It is clear that as Harmon and Harker (1987) suggested, "In one sense *The Counseling Psychologist* is a means of communication among counseling psychologists, and in another sense it is a means of communication from counseling psychology to the rest of the helping professions" (p. 531). Our analyses support this statement by showing that *TCP*, indeed, is being used by and exposed to not only counseling professionals but also to other psychologists, social workers, paraprofessionals, educators, and medical professionals. Although our data do not indicate the authors' discipline in citing Major Contributions in journals from other disciplines, the knowledge base from *TCP* is being disseminated into other professions' journals. This increases the likelihood that *TCP* Major Contributions will be accessed by allied professionals when they examine references printed in articles from their own journals. The fact that so many citations of Major Contribution articles occurred in APA journals (41.9%) coupled with a vast range of journals from other disciplines provides not only an indication of the quality of scholarship published in *TCP* but also the broad appeal of the journal.

Beyond the suggestion of Harmon and Harker (1987), our investigation indicates that *TCP* is also serving as a communication tool from American counseling psychologists to helping professionals and scholars around the world. Approximately 5% of the citations were in international journals. Although previous efforts have not been made to specifically address the needs of an international audience, these data support the addition and increased commitment to the International Forum as a regular forum of *TCP* (see Heppner, 1997). *TCP* could play an important role as a conduit of communication among counseling psychologists throughout the world. Future research might investigate whether the expansion of International Forum in 1997 is related to a significant increase in international citations of *TCP* and in which journals the international articles in this forum are cited.

All of the top 10 most frequently cited Major Contribution articles were conceptual and theoretical articles published in the 1980s. This finding highlights the importance of having a journal that encourages the submission of such articles and values the use of quality conceptual articles. These Major Contribution articles in *TCP* most likely reflect high-quality articles that have had an impact within the counseling profession and outside our profession. Moreover, these articles probably also reflect ideas that were timely and played a role in the evolving conceptualizations within and outside the profession during this time period. Of the top 10 most frequently cited articles in this study, 2 topics dealt with research design and methodology in counseling psychology research. Both challenged the field to incorporate the multiplicity of research approaches into our understanding and practice of science (Gelso, 1980; Hoshmand, 1989). Parenthetically, the high usage of these two articles probably reflects a strong interest in empirical work. Two of these articles focused on working with members of populations inadequately included in our research in the past. One dealt with women as an increasing presence in the world of work by articulating a career development model for women (Astin, 1984). The other article conceptualized the historical presence of counseling as being an expression of White culture and highlighted the importance of delivering better quality services to racially/ethnically diverse clientele (Katz, 1985). These articles represent a shift away from an exclusive focus on the experiences of White men to a more inclusive view of members of our society. Loganbill et al. (1982) provided a stimulating conceptualization of clinical supervision, a topic that was not heavily researched previously, and has developed into an active research focus. Heppner and Krauskopf (1987), Schlossberg (1981), and Mahoney (1988) provided new conceptualizations of problem solving, coping with stressful events, and cognitive psychology, topics that also mushroomed in the 1980s. Likewise, Kitchener's (1984) article was part of a national focus, that was not only on ethics but that also responded to a larger need of training newer members of

the profession in ethical decision making; her article provided a clear articulation of the meaning of ethical dilemmas and an organized roadmap of ethical thinking. Meanwhile, Gelso and Carter (1985) stimulated a declining area of research with their contribution by highlighting the importance of the counseling relationship, which also mushroomed in the 1980s. In short, these articles probably not only reflect a high level of scholarship but also are timely in terms of the zeitgeist and social needs during this time period.

For articles published since 1990, several topics emerged that appear to also shed light on the evolving interests, roles, and values of counseling psychology. These included a larger growth of issues involving cultural diversity, such as counseling lesbian and gay clients and multicultural training. The increased publication and citation of these articles is consistent with the acknowledgement of “multiculturalism as a fourth force in counseling” (*Journal of Counseling & Development*, 1991). Topics also included increased understanding of human health, such as applications of health psychology and counseling HIV-infected individuals. Finally, the role of counseling centers in the last decade of the millennium emerged as another frequently cited topic, as did the topic of delayed memory. These types of articles probably suggest the role of a changing society and marketplace for counseling psychology.

The contribution of women scholars is noteworthy in the overall top 10 most frequently cited Major Contribution articles in *TCP*. In terms of base rates, when all articles were analyzed regardless of the number of citations they received, male first-authors were published more frequently than female first-authors at a rate of nearly 2 to 1. Conversely, it was striking to find that 60% of the most frequently cited articles from 1986 to 1996 were female first-authors. Moreover, in a yearly analysis, women first authored the most frequently cited articles at the same rate or higher than men. Clearly, women are making important contributions in the scientific advancement of the field of counseling psychology during the 1980s and 1990s.

The results clearly indicate that Major Contributions with fewer articles are cited more often than those composed of many articles. As previously mentioned, there may be several ways of assessing a Major Contribution's impact on the profession. Nonetheless, the citation rates may suggest that the general use of Major Contributions in *TCP* is diluted as the number of articles increases and particularly as the number of articles become very large (e.g., 28). For example, one or two comprehensive pieces in a topical area might be more useful for other scholars than multiple but restricted articles on the same topic. This information can be useful both to editors considering the structure of the journal as well as individuals submitting proposals for Major Contribution topics. Additional examination of the structure of the journal, and the relative number of citations across different types of articles (i.e., Reactions

or Forum articles) is warranted. For example, we analyzed citation patterns for 2 years of articles that were Reactions to the Major Contributions. The results revealed that the mean number of citations was .20, a relatively small citation rate. Thus, at least based on this preliminary analysis, the Reaction articles have considerably less impact as reflected in citations than the Major Contributions.

The results of this study point to several future research avenues. The scope of this project included only Major Contributions in *TCP*. Clearly, without similar data from other counseling journals or articles published in those journals, it is only possible to compare the relative influence of Major Contributions among themselves. If other counseling journals will undertake similar analyses, it would be possible to make comparisons of scholarship between journals rather than focusing entirely on the work within one journal.

Future research could also investigate the performance of journals, articles, or individuals using different citation analysis techniques. For instance, cocitation analysis would allow investigators to explore "linkage" between two pieces of research that are cited jointly in more than one article (Hoffman & Holbrook, 1993). Counseling psychologists could use this method to explore how intellectual ideas are paired and used together throughout different subspecialties in the field. Another technique that has been used is citation analysis mapping (Everett & Pecotich, 1993) in which journals are plotted along two axes based on the journals' relative importance and topical location. Finally, more in-depth historical analyses of the professional evolution of counseling psychology could be obtained through a content analysis of articles appearing in a journal.

Future researchers may benefit by increasing technology in citation databases and search tools. For instance, the Institute of Scientific Information (1998) has announced plans for compiling 5-year SSCI compact disks and, for the first time, will include information prior to 1986. This would greatly enhance the process by allowing searches of 5-year time periods instead of the currently available 1-year compact disk searches. Future researchers could also gather citation trends of *TCP* Major Contributions from 1969 to 1985. This would allow for a more complete historical analysis of the performance of the journal and of the counseling profession. Additional research projects could investigate the performance of articles comprising the different forums in *TCP*. Although such research would most likely be revealing, we want to acknowledge the resource costs of such research projects, as this project was an enormous undertaking in terms of data collection, coding, entry, and analysis.

In spite of the limitations of this study, the analysis of citations of the Major Contributions in *TCP* not only "holds up the mirror" for the journal but

also provides reflection of the counseling psychology profession. The analysis indicates a strong and growing use of the journal, as the number of citations of Major Contributions has increased in the past 11 years. Moreover, the citations in the past 11 years indicate that *TCP* is a means of communication not only within counseling psychology but also across almost 90 journals within psychology, more than 120 from a wide range of other disciplines, and almost 50 from international journals. In essence, the citations provide a clear indication of the high quality of scholarship published in the Major Contributions of *TCP*. In addition, an analysis of the most frequently cited Major Contributions reflects a profession focused on research, theory, and the increasing inclusion of different cultural perspectives. In some ways, the citation analysis provides a glimpse into the topics of interest during the past decade within counseling psychology, as well as other specialty areas and disciplines. In this manner, the citations provide an interesting perspective of the recent history of counseling psychology. Almost 30 years since Whiteley's inception of the journal, *TCP* seems to continue to be a useful journal in the professional literature.

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