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Tracing the Social Work Literature: Exploring Connections to Allied Health through Citation Analysis

Caitlin Bakker[1]

Abstract

Social work is a complex and multidisciplinary field drawing on a wide range of literature in terms of format, age, and discipline. Librarians in both collections and public services must be aware of this diversity in order to serve this rapidly growing field. This study was designed to identify core journals in the social work field, the most commonly cited formats and the age of citations, to assess the use of non-social work journals in the social work literature, and to draw comparisons to results in allied health and social science disciplines. The ultimate goal of this work is to provide librarians supporting social work programs with data which can contribute to their assessment of collections, both for maintenance and accreditation, and which can allow them to have a broader understanding of the field and a more effective approach to instruction. 28,269 citations from 567 source articles were examined. Journal articles were the most commonly cited format (69.90%), followed by books (17.69%). Over 91% of all citations came from materials published after 1990 and over 50% of citations came from materials published in the last ten years. Of the 2,520 journals cited, 32 top journals (1.27%) accounted for 6,612 (33.46%) of all citations to journals. Of those 32 journals, six were assigned to the field of social work. The remaining core journals came from the fields of psychology, public health, psychiatry, family and gender studies, pediatrics, and medicine. Format distribution and citation age were found to be similar to that of psychology, health care management, health education, and nurse practitioners. There was little similarity with the fields of addictions treatment and sociology. Practical implications for librarians are discussed.

Keywords: Social Work; Bibliometrics; Citation Analysis; Allied Health; Social Science

1. Introduction

There is little consistency in the roles and activities of social workers. Their work may be carried out in a particular setting, as it is with school social work or social work in a correctional facility, with a certain group, as in gerontological social work or child welfare, or to address particular issues, such as social workers specializing in substance abuse or trauma and disaster. Underlying this range of activities is an equally broad mandate, to "help society work better for people and help people function better within society" (Segal, Gerdes, & Steiner, 2012, p. 2). Such a diverse and multidisciplinary field may well pose challenges for librarians both in collections and in public service.

The field of social work will undergo rapid growth over the next decade. According to the Bureau of Labor Statistics, employment opportunities are projected to increase 18.8% between 2012 and 2022, compared to the 11% average in the United States (U.S. Department of

[1] Bio-Medical Library, University of Minnesota, USA
E-mail: cjbakker@umn.edu

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Labor, Bureau of Labor Statistics, 2014). These numbers are only slightly more modest in Canada at 16.4% according to the Canadian Occupational Projection System (Employment and Social Development Canada, 2011). Both agencies report that the majority of these positions will be filled by new graduates of Bachelor or Master of Social Work programs. These demands are not unique to North America, as the Government of China has announced the need for three million social workers by 2020 (Leung, 2013, p. 181). Given the expected growth in employment opportunities worldwide, academic libraries should anticipate the need to support existing and expanding social work education programs to meet this demand.

The following study is a citation analysis which aims to act as a reference point for librarians working in this field. While it has been said that "no measure of journal use other than one derived from a local-use study is of any significant practical value to libraries" (Line, 1978, p. 313), it should also be noted that citation analysis is not undertaken solely for purposes of collection development and maintenance, although it may be useful in this regard. An understanding of the scope of relevant resources contributes to more effective library instruction and result consultations, and citation analyses serve as useful reference points for accreditation and reaccreditation, during which local use data may be insufficient.

2. Literature Review

In 1915, Abraham Flexner questioned whether social work is "a professional or an amateur occupation" (Flexner, 1915, p. 901). His finding was that it was the latter, in part due to the lack of a separate and robust body of literature produced in the field. Criticism levied one hundred years ago may seem to lack potency today. However, since Flexner's assertion that "[t]o some extent the evolution of social work towards the professional status can be measured by the quality of publication put forth in its name" (p. 911), attempts to assert and define a discrete knowledge base have been ongoing. Despite this, there are continued difficulties in articulating knowledge unique to this field (Taylor & White, 2006; Trevithick, 2008). Studies have shown the prevalence of non-social work journals within the discipline, both as avenues for publication and as sources of information.

In a study of approximately 3,000 articles published by social workers between 1990 and 1997, Green, Kvarfordt, and Hayden (1999) uncovered that 44% of those articles appeared in non-social work journals. This supported previous findings that over half of the peer-reviewed articles from top social work researchers were published in journals outside of the discipline (Green & Secret, 1996). Berman and Eaglstein (1994) examined five core social work journals and found that 29.5% of all citations were to non-social work journals, compared to 16.8% to social work journals. These findings were supported by Strothmann (2010), who divided social work citation data into quartiles. Strothmann found that in the first quartile, nine of twelve journals were from the discipline of social work, but that this decreased with every quartile, moving to 32% in the second, 21% in the third, and 9% in the final quartile. These findings would indicate that, while social work journals remain valuable sources of information, the scope of research is far beyond that of social work alone.

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Social work citation analyses have often existed in isolation, examining their role in promotion and tenure (Holden, Rosenberg, & Barker, 2005), assessing the scholarly output and productivity (Green & Hayden, 2001; Shardlow & Harlow, 2010), or tracing the patterns of a single journal (Rosenberg, Holden, & Barker, 2005), but not connecting or comparing results to trends in related fields. This may be due to the challenge of defining the profession of social work in relation to other fields.

Social work is sometimes considered to fall under this broad category of allied health, although this has typically been limited to medical or psychiatric social workers rather than the whole of the field (Donini-Lenhoff, 2008). Similarly, social work's relationship to social science seems somewhat ambiguous. Klein and Bloom (1994) offer an excellent analysis of social work publications from 1870 to 1990, mapping what they consider to be a repositioning of social work within the social sciences. Despite these movements towards inclusion in larger categories, neither standard definitions of social sciences nor allied health professions include reference to social work.

This study was inspired by a large-scale citation mapping project undertaken Nursing and Allied Health Resources Section of the Medical Library Association, the aim of which was to identify core journals in the allied health fields. Beyond ranking journals, this approach looks to format and age of publication as well, offering a more robust picture. Through citation analysis, this paper attempts to not only describe the literature of the field but to draw comparisons to similar findings in studies of allied health and social science disciplines.

In conducting this citation analysis, several questions are being addressed: What formats are social work researchers citing and how do these findings compare to other disciplines? What is the average age of citation and how does this vary between formats? And, finally, what are the most heavily cited journals and are these journals predominantly from the field of social work?

The Nursing and Allied Health project produced a series of studies, focusing on a diverse range of professions including nurse practitioners (Shams, 2006), health education (Burtis & Taylor, 2010), health care management (Taylor, Gebremechiael, & Wagner, 2007) and addictions treatment (Blobaum, 2013). In all of the aforementioned studies, there was a strong tendency towards the use of journal publications, which accounted for an average of 72.6% of all citations studied within those projects. The studies also showed a tendency towards the use of current resources, with 68.6% of citations in health care management and 72.1% of nurse practitioner citations being to resources being to materials less than eight years old.

By contrast, in the social sciences, it has been found that monographs tend to receive far more citations than other media such as journal articles. Uçak and Al (2009) found that books were the most frequently cited format in the social sciences, although with notable differences between disciplines. In sociology, for example, only 19.2% of citations were to journal articles while that rate increases to 66.6% in Psychology. On average in the social sciences, they found that books were cited 62.7% of the time, journal articles 25.4%, electronic sources only 0.7%, and the remainder in miscellaneous sources such

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as theses and conference proceedings. These findings are support previous work by Glanzel and Schoepflin (1999), Lindholm-Romantschuk and Warner (1996) and Nederhof, Zwaan, De Bruin, and Dekker (1989) and have been reinforced in sociology (Chi & Dinkel, 2013; Zafrunnisha, 2012) and political science (Chi & Dinkel, 2013; Knapp, 2013).

It is hypothesized that format distribution will show greater similarity to the allied health fields rather than the social sciences. Within social sciences, it is expected that there will be greater similarity with sociology and psychology rather than disciplines such as economics or political science. It is also expected that the age of citations will be similar to those in the allied health fields and that there will not be a large variation between formats. In keeping with previous findings in the literature, it is anticipated that the majority of core journals will be from outside of the social work discipline.

These hypotheses are based on consideration of social work in the larger context of helping professions, "[t]hose professions established to serve the common good through the provision and administration of services to promote individual human welfare.... They all serve people, individual by individual, in the interest of their welfare—physical, mental, intellectual, spiritual, or social" (Towle, 1954, p. 3). Helping professions include medical, allied health, and social science professions such as psychologists, counselors, therapists, occupational therapists, and social workers. While social work may draw from social science theory and practice, it is expected that the connections to those fields associated with the helping professions, including allied health, will be stronger than connections to other disciplines. The association between the helping professions and allied health was strengthened by the work of Grimmer et al. (2014), who included both social work and psychology in allied health professions on the basis of the types of activities undertaken in those fields.

3. Methodology

A listing of Social Work journal titles was compiled using data gathered from Sellers, Mathiesen, Perry, and Smith (2004), Thyer (2005), Hodge and Lacasse (2010), and the Social Science Citation Index (SSCI). This produced a total of 74 titles for consideration. These articles were chosen due to their high citation counts and the reputation of the authors. This differs from the methodology established Nursing and Allied Health Resources Section, in which faculty members were surveyed to identify titles. As social work is diverse field which is often strongly connected to its immediate context, there was concern that generating results from one university would not create a representative sample of social work literature. Beginning with the literature was considered a means of identifying a wider range of titles. It cannot be argued that these titles represent the entire knowledge base of social work or that they are exclusively social work journals. As Thyer (2002) notes, "there is no generally agreed upon set of criteria defining such outlets" (p. 103). However, this list does offer a broader sample of titles than that represented in SSCI alone.

Nine of these 74 journals were identified for citation analysis. Five bibliometrics were considered when selecting journals: impact factor, five-year impact factor, h-index (Note

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1), SCImago Journal Rank (SJR), and Source Normalized Impact per Paper (SNIP). These metrics were taken from Web of Science's Journal Citation Reports, Scopus's Journal Analyzer, and the SCImago Journal Rank and Country portal. The five most highly ranked journals were chosen from each group and the list compiled. This strategy may seem unnecessarily complicated. However, each metric offers a perspective rather than a complete picture. To consider only impact factor or five-year impact factor, for example, would exclude *British Journal of Social Work*, a title very highly ranked by both SJR and SNIP.

Following the methodology of the aformentioned Nursing and Allied Health Resources Section, reference lists from all articles published in these nine journals in 2013 were accessed via library subscription and the references were entered into a citation management tool before being exported into Microsoft Excel. Complete citations were gathered as it was found to be necessary to verify and correct the information due to occasional errors. More extensive discussion of citation errors in social work journals and their impact on citation analysis can be found in Spivey and Wilks (2004).

Cited resources were divided into five publication formats: books, journal articles, reports, websites, and miscellaneous. Journal articles include government-sponsored serials but exclude newspapers and magazines. For journals which had undergone a title change, the most recent title was used and citations of the previous work were consolidated under this heading. Reports were broadly considered as government documents, including those from organizations such as the United Nations, as well as white papers and technical reports. Miscellaneous items include conference posters and presentations, unpublished theses and dissertations, and computer software, among other formats. Websites did not include journal articles, reports, or other formats which were made available electronically.

Bradford's Law of Scattering was used to identify core titles among those cited by the nine selected journals. Bradford's Law is based on the principle that all articles in a field could be divided into thirds. One-third of these articles would be produced by a select group of core titles, another one-third by a larger group of slightly less relevant titles, and the final one-third of articles being produced by a very large number of journals peripheral to the subject. Bradford's Law was applied to the journal citations found in the references of the nine source journals. Examination of subject was limited to Zones 1 and 2, the core and slightly less relevant journals which account for two-thirds of all citations.

At the time of writing, Journal Citation Reports included 39 titles under the heading of Social Work. This study found references to over 2,500 journals. As a result, consideration of the disciplinary areas of these journals was necessary. Journals in zones 1 and 2 were categorized into a single discipline based on Library of Congress classification, as determined by Ulrich's Web. When LC was unavailable, Dewey Decimal Classification was used to assign the journal to the appropriate subject area. Some of the classifications assigned through Library of Congress could be subject to debate, for example, the assignation of the *Journal of the American Academy of Child and Adolescent Psychiatry* to Pediatrics rather than Psychiatry. However,

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reclassification was considered outside the scope of this study.

4. Results

The citation analysis of the nine journals yielded 28,269 citations referenced in 567 source articles. Book reviews were not included as source articles. The frequency of articles published is as follows: *American Journal of Community Psychology* (*Am J Community Psychol*: 14.26%, n=4,030), *British Journal of Social Work* (*Br J Soc Work*: 13.91%, n=3,932), *Child Abuse and Neglect* (*Child Abuse Negl*: 21.93%, n=6,199), *Child Maltreatment* (*Child Maltreat*: 4.86%, n=1,373), *Family Relations* (*Fam Relat*: 10.61%, n=2,999), *Journal of Community Psychology* (*J Community Psychol*: 11.28%, n=3,188), *Journal of Social Work* (*J Soc Work*: 5.48%, n=1,548), *Research on Social Work Practice* (*Res Soc Work Pract*: 10.61%, n=2,999), and *Trauma, Violence & Abuse* (*Trauma Violence Abuse*: 7.08%, n=2,001).

4.1 Format

Table 1 represents the format of cited items. Journal articles are the most commonly cited format (69.9%), followed by books (17.69%), reports (8.48%), and websites (1.75%). Miscellaneous items account for the remaining 2.19%.

4.2 Date

The distribution of materials by year of publication is shown in Table 2. Materials published in or after 2010 totaled 5,259 citations, or 18.6% of all citations. The period of 2000 to 2009 yielded 15,463 citations (54.7%). 6,458 (41.76%) of these were from between 2000 and 2004 and the remaining 9,005 (58.24%) were from 2005 to 2009, meaning that over 50% of all citations were published within the last ten years. 1990 to 1999 comprised of 5,139 citations (18.18%) and the remaining 8.52% of citations were published prior to 1989 or undated.

4.3 Core journals

Bradford's Law of Scattering was applied to determine core titles within the 2,520 journals cited in this study. Zone 1 includes 32 journals which account for 6,612 or 33.46% of the total citations, followed by 191 journals in Zone 2 with 6,593 or 33.34% of citations, and finally by Zone 3 which includes 2,297 journals accounting for 6,555 citations, or 33.17% of citations. Zone 1 journals are listed in the appendix.

4.4 Journal disciplines

After assigning all journals in Zones 1 and 2 to a subject area as determined through Library of Congress classification or Dewey Decimal classification, there were found to be 18 distinct subject areas, six of which were collapsed into Social Science (Misc.) and Science (Misc.). This was to account for single heavily-cited journals which were published in unique subject areas such as Mathematics or Demography.

Both the number of journals and the number of citations to those journals were considered. The hypothesis that the majority of core journals would be from outside of the field of social work was supported with 27.66% of citations and 21.97% of journals being attributed to the social work discipline. Comparing Zone 1 and Zone 2, there was a slight increase in the number of journals from 6 of 32 (18.75%) to 44 of 191 (23.04%). However, there was a decrease in the

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Table 1. Frequency of Cited Format Types by Source Journal

	Books		Articles		Reports		Websites		Misc.	
	n	%	n	%	n	%	n	%	n	%
Am J Community Psychol	700	17.37	2,928	72.66	208	5.16	97	2.41	97	2.41
Br J Soc Work	1,119	28.46	2,006	51.02	626	15.92	81	2.06	100	2.54
Child Abuse Negl	579	9.34	4,851	78.25	603	9.73	65	1.05	101	1.63
Child Maltreat	173	12.60	1,051	76.55	114	8.30	16	1.17	19	1.38
Fam Relat	655	21.84	2,123	70.79	131	4.37	43	1.43	47	1.57
J Community Psychol	549	17.22	2,303	72.24	211	6.62	70	2.20	55	1.73
J Soc Work	460	29.72	824	53.23	159	10.27	25	1.61	80	5.17
Res Soc Work Pract	538	17.94	2,027	67.59	267	8.90	83	2.77	84	2.80
Trauma Abuse Neglect	227	11.34	1,647	82.31	77	3.85	14	0.70	36	1.80
Total	**5,000**	**17.69**	**19,760**	**69.90**	**2,396**	**8.48**	**494**	**1.75**	**619**	**2.19**

Table 2. Cited Format Types by Publication Period

	Books		Articles		Reports		Websites		Misc.		Total	
	n	%	n	%	n	%	n	%	n	%	n	%
2010-	586	11.72	3,562	18.03	634	26.46	292	59.11	185	29.89	5,259	18.60
2000-2009	2,287	45.74	11,347	57.42	1,364	56.93	169	34.21	296	47.82	15,463	54.70
1990-1999	1,197	23.94	3,538	17.90	302	12.60	10	2.02	92	14.86	5,139	18.18
1980-1989	481	9.62	946	4.79	64	2.67	0	0.00	24	3.88	1,515	5.36
1970-1979	263	5.26	261	1.32	8	0.33	0	0.00	9	1.45	541	1.91
1960-1969	113	2.26	74	0.37	2	0.08	0	0.00	3	0.48	192	0.68
Pre-1960	69	1.38	29	0.15	5	0.21	0	0.00	4	0.65	107	0.38
N/A	4	0.08	3	0.02	17	0.71	23	4.66	6	0.97	53	0.19
Total	**5,000**	**100.00**	**19,760**	**100.00**	**2,396**	**100.00**	**494**	**100.00**	**619**	**100.00**	**28,269**	**100.00**

number of citations that these journals represented, moving from 2,061 of 6,612 (31.17%) to 1,651 of 6,593 (25.04%). As Bradford's Law predicts exponentially diminishing returns, that the number of journals attributed to the social work discipline would increase while the number of citations would decrease is not unexpected.

These findings were somewhat less dramatic than Strothmann (2010), who found that 75% of core journal titles belonged to the field of social

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Table 3. Distribution of Cited Journal and References by Zone

	Cited journals		Cited journal references		Cumulative total
	n	%	n	%	
Zone 1	32	1.27	6,612	33.46	6,612
Zone 2	191	7.58	6,593	33.34	13,205
Zone 3	2,297	91.15	6,555	33.17	19,760
Total	**2,520**	**100.00**	**19,760**	**100.00**	

Table 4. Distribution of Journals by Subject Area

	Zone 1				Zone 2				Totals			
	Journals		Citations		Journals		Citations		Journals		Citations	
	n	%	n	%	n	%	n	%	n	%	n	%
Social Work	6	18.75	2,061	31.17	44	23.04	1,651	25.04	50	22.42	3,712	28.11
Psychology	8	25.00	1,175	17.77	26	13.61	784	11.89	34	15.25	1,959	14.84
Public Health	5	15.63	1,123	16.98	24	12.57	626	9.50	29	13.01	1,749	13.25
Psychiatry	5	15.63	813	12.30	40	20.94	1,458	22.11	45	20.18	2,271	17.20
Family & Gender Studies	4	12.50	784	11.86	11	5.76	406	6.16	15	6.77	1,190	9.01
Pediatrics	2	6.25	409	6.18	12	6.28	547	8.30	14	6.28	956	7.24
Medicine	2	6.25	247	3.74	5	2.62	249	3.78	7	3.14	496	3.76
Business & Management	-	-	-	-	8	4.19	260	3.94	8	3.59	260	1.97
Sociology	-	-	-	-	5	2.62	197	2.99	5	2.24	197	1.49
Education	-	-	-	-	4	2.09	89	1.35	4	1.79	89	0.67
Social Science (General)	-	-	-	-	4	2.09	101	1.53	4	1.79	101	0.76
Science (General)	-	-	-	-	3	1.57	103	1.56	3	1.35	103	0.78
Science (Misc.)	-	-	-	-	3	1.57	77	1.17	3	1.35	77	0.58
Social Science (Misc.)	-	-	-	-	2	1.05	45	0.68	2	0.90	45	0.34
Total	**32**	**100.00***	**6,612**	**100.00**	**191**	**100.00**	**6,593**	**100.00**	**223**	**100.00***	**13,205**	**100.00**

* Percentages do not total 100 due to rounding.

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work. In the present study, only 18.75% of top journals were found to belong to the social work discipline. It is believed that this distinction may be based on dividing the citations in accordance with Bradford's Law of Scattering rather than by dividing into quartiles. If Strothmann's methodology were followed, the quartiles in this study would include approximately 4,940 citations each. The first quartile would include 18 journals accounting for 4,920 citations. Of these, 6 journals (33.33%) representing 2,061 citations (41.89%) would belong to the discipline of social work. While these findings are more in line with Strothmann's, they still seem to indicate a more multidisciplinary picture of core journals. While these differences may be based on further methodological differences, it is more likely due to the differences in sample journals. As previously discussed, the initial pool of 74 journals from which 9 were selected cannot be considered the entirety of or exclusively social work literature. It is acknowledged that a pool of titles developed from different sources may yield different results.

5. Discussion

The hypothesis that format distribution would be similar to psychology and sociology was only partially upheld. With a 69.9% frequency of journal citation, social work seems to be most closely correlated to psychology, which shows estimates of journal citation rates at approximately 62.2% (Glanzel & Schoepflin, 1999) and 66.6% (Uçak & Al, 2009). Findings in citation analyses of sociology and political science showed less alignment with non-journal citation frequency, which was found to be 30.1% in social work. Non-journal citation frequency was reported between 67.0% and 80.8% in sociology (Chi & Dinkel, 2013; Uçak & Al, 2009; Zafrunnisha, 2012) and 59.7% and 76.0% in political science (Chi & Dinkel, 2013; Knapp, 2013).

The hypothesis that format distribution would align with allied health fields is generally supported, although there is variation within the fields of allied health. The findings of this study are closely aligned to those of health education and health care management, and only slightly less so than those of nurse practitioners. The differences are marginal for books (17.69% vs. 14.84%) and journals (69.9% vs. 72.08%). The distribution shows only a minimal resemblance to that of addictions treatment, which has a much higher citation frequency of journals (82.5%). Table 5 compares the format distributions in four allied health citation analyses and that of social work to the average distribution.

The most striking difference is found in the use of internet resources. With the exception of addictions treatment, social work appears to have the lowest frequency of citing web resources (1.75% vs. an average of 4.15% excluding social work). Given that the publications examined in this study are the most recent, one may have expected higher rates of website usage as compared to earlier citation analyses.

A recent survey of social work practitioners found that 66% were accessing online resources (Pope, Rollins, Chaumba, & Risler, 2011). These findings support previous studies of information seeking behavior among social work practitioners that have found very high usage of online resources to meet professional needs (Horder, 2007), which would indicate that there is a disconnect between information

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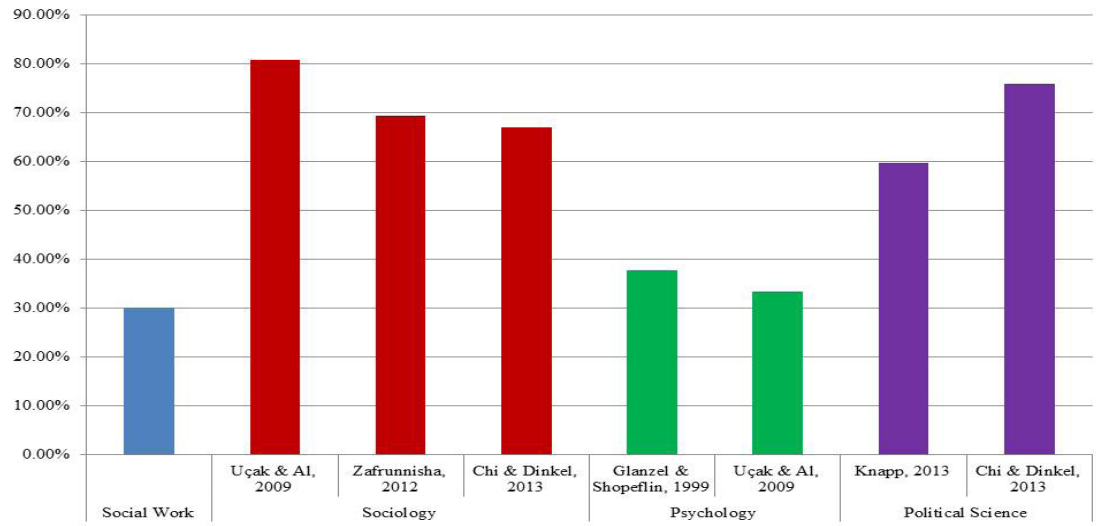


Figure 1. Non-journal Citation Frequency in the Social Sciences

Table 5. Distribution of Cited Format Types in Social Work and Allied Health Fields

	Books (%)	Articles (%)	Reports (%)	Websites (%)	Misc. (%)
Social Work	17.69	69.90	8.48	1.75	2.19
Health Care Management (Taylor et al., 2007)	16.50	62.80	8.40	8.90	3.40
Nurse Practitioners (Shams, 2006)	20.40	72.00	2.10	4.00	1.50
Health Education (Burtis & Taylor, 2010)	11.40	73.20	8.70	3.20	3.50
Addictions Treatment (Blobaum, 2013)	8.20	82.50	3.90	0.50	4.90
Average	**14.84**	**72.08**	**6.32**	**3.67**	**3.10**

seeking in practice and information sources in an academic context. This may in part be due to the limited access to subscription journals for many practitioners. Librarians focusing on instruction for social work students should consider the importance of training students to critically interpret information found online. While use of these resources does not appear to be reflected in the literature, they are a central tool in social work practice. Discussion of high quality and freely available online resources would be highly beneficial.

Both collections and public service librarians should consider the importance of grey literature, such as unpublished manuscripts and dissertations. Within the miscellaneous category, 66.14% of citations were to grey literature. While this is a very small percentage of citations overall

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(approximately 1.45%), librarians, particularly those working with Masters-level programs and researchers, should take note of this finding. As grey literature is not available through traditional publishing channels and is unlikely to be indexed or catalogued, it poses challenges to discovery. Reports pose similar difficulties in that, while they may be catalogued, this is not always the case. Efforts should be made not only to make these materials available but also to teach students and faculty the diverse search strategies necessary to uncover these resources.

While the overall order of formats used remains consistent between journals, nevertheless there is quite a wide range of differences. Journal articles account for 82.31% of citations found in *Trauma, Violence & Abuse* but represent only 51.02% of citations found in the *British Journal of Social Work*. Although still the most commonly cited format, the difference is not insignificant. Distinctions in format distribution and citation age between journals may prove interesting ground for further study.

Age of citation by publication format largely coincided with expected outcomes, as websites were the most recent and books the least recently published. The overall trend of the age of citation, beginning to gradually increase in the 1990s to come to a peak in the late 2000s, is similar to patterns found in the selected allied health studies, which also reflect similar variations of age between formats. All citation analyses considered from allied health disciplines showed the majority of publications cited to have been published no more than eight years prior.

Alignment was also found when first considering the median half-life of Social Work resources, which was found to be 10 years, comparable to both sociology and psychology (Uçak & Al, 2009). However, considering the average age alone paints a misleading picture. The mean year of publication was found to be 1997 for books and 2002 journal articles. This is surprising given that 91.48% of all citations came from materials published after 1990. The difference between mean and mode, particularly in the case of books, journal articles, and miscellaneous items (8.16 years, 6.17 years, and 7.35 years difference between the means and modes), may indicate that the means are influenced by outlying historical items. It should be noted that although the vast majority of the citations were from after 1990, there was usage of materials dating back to the 19th and early 20th centuries. From a collections perspective, this would emphasize that, although currency is very important, libraries need to maintain historical collections and may wish to consider the viability of purchasing backfiles in order to meet demand.

The results of this study indicate a very diverse pool of journals from which researchers are drawing. Assessment of social work collections must also include an assessment of related fields, particularly psychology, psychiatry, public health, pediatrics, family and gender studies, and medicine. Considering both Zones 1 and 2, these subject areas represent 64.58% of journal titles and 65.29% of citations. Collection development and maintenance drawing solely from those titles included in SSCI's Social Work category is unlikely to meet research needs, as those titles ultimately represent only 3,641 (27.57%) of the citations to journals. Furthermore, only 28 of the 39 journals (71.80%) listed in the Journal Citation Report are found in Zones 1

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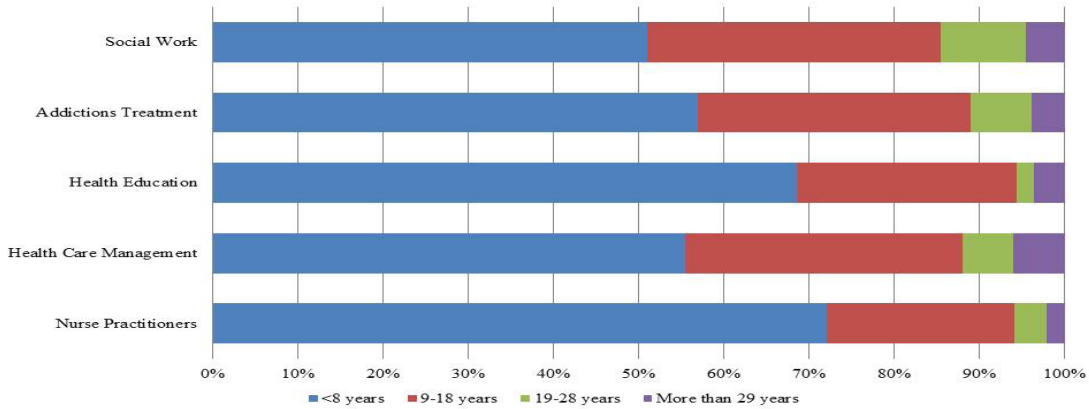


Figure 2. Distribution of Cited Materials by Age in the Allied Health Literature

or 2, indicating that the others may have less significant impact for researchers than SSCI inclusion alone would imply.

Librarians providing instruction should not only consider the necessary skills in searching for and retrieving articles in these various categories, but also the different skills which may be necessary to read those articles effectively. Students in social work may not be equally adept at reading materials from both family and gender studies and medicine, as the literature in these fields is distinct. While it is important for a social work liaison to be aware of the variety of resources available in different disciplines, it is not realistic to expect that librarian to be an expert in all of those resources. Co-teaching with librarians specializing in other fields may provide a useful perspective for both the social work librarian and the users.

6. Conclusion

The overall findings of this study supported the image of social work as a diverse and multidisciplinary field. Based on these findings, libraries supporting social work programs should considering offering access to and instruction in the use of resources in psychology, psychiatry, public health, family and gender studies, and health sciences, as well as social work resources. Librarians should be aware not only of core journals and book titles, but also the variety of grey literature and web resources that social work practitioners will be called upon to use.

Notes

Note 1 Although h-index is typically applied to an individual researcher, in this case it refers to the total number of articles in the journal (h) which have received h or more citations.

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Appendix

	Title	Citations	
		n	%
1	*Child Abuse & Neglect*	841	12.72
2	*American Journal of Community Psychology*	540	8.17
3	*British Journal of Social Work*	384	5.81
4	*Child Development*	306	4.63
5	*Journal of Community Psychology*	265	4.01
6	*Pediatrics*	260	3.93
7	*Journal of Consulting and Clinical Psychology*	236	3.57
8	*Children and Youth Services Review*	235	3.55
9	*Child Maltreatment*	226	3.42
10	*Journal of Marriage and Family*	212	3.21
11	*Journal of Interpersonal Violence*	209	3.16
12	*Development and Psychopathology*	200	3.02
13	*American Journal of Public Health*	181	2.74
14	*Developmental Psychology*	174	2.63
15	*Research on Social Work Practice*	166	2.51
16	*Family Relations*	162	2.45
17	*Psychological Bulletin*	162	2.45
18	*American Psychologist*	161	2.43
19	*Social Science & Medicine*	157	2.37
20	*Journal of the American Academy of Child and Adolescent Psychiatry*	149	2.25
21	*Journal of the American Medical Association*	135	2.04
22	*American Journal of Orthopsychiatry*	133	2.01
23	*Journal of Traumatic Stress*	130	1.97
24	*Journal of Child Psychology and Psychiatry*	120	1.81
25	*Journal of Personality and Social Psychology*	120	1.81
26	*American Journal of Preventive Medicine*	112	1.69
27	*The Lancet*	112	1.69
28	*Archives of General Psychiatry*	110	1.66
29	*American Journal of Psychiatry*	108	1.63
30	*Journal of Youth and Adolescence*	104	1.57
31	*Journal of Clinical and Adolescent Psychology*	102	1.54
32	*Journal of Family Psychology*	100	1.51
	Total	**6,612**	**100.00**

Note. These figures include self-citations. Removal of self-citations results in the following amounts: *American Journal of Community Psychology*: 161; *British Journal of Social Work*: 102; *Child Abuse & Neglect*: 260; *Child Maltreatment*: 100; *Family Relations*: 30; *Journal of Community Psychology*: 126; *Journal of Social Work*: 137; *Research on Social Work Practice*: 44; *Trauma, Violence and Abuse*: 31.

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社工文獻引文分析：以引用分析法探討其與協聯健康文獻之關聯

Tracing the Social Work Literature: Exploring Connections to Allied Health through Citation Analysis

Caitlin Bakker[1]

摘　要

本研究的目標是在辨識出社工領域的核心期刊、最常被引用的資料類型與引文年齡，以評估社工文獻引用非社工領域期刊的情形，並進一步比較協聯健康引文及一般社會科學引文的狀況。研究最終目的是希望產出值得參考的數據，以支援社工圖書館館員的館藏評鑑工作，並讓館員對社工領域知識有更進一步的瞭解，能更有效率地提供圖書館指導服務。本研究檢驗28,269筆引文，共計來自567篇論文。研究結果發現，期刊論文（69.90%）是最常被引用的格式，專書（17.69%）次之；超過91%的引文是1990年之後出版的，且超過50%的引文是10年內出版的文獻。在2,520種被引期刊中，有32種最常被引的期刊（1.27%），合計被引了6,612次（33.46%）；且在這32種期刊中，僅有6種是屬於社工領域，其它則來自不同的學科領域，包括心理學、公共衛生、精神醫學、家庭與性別研究、兒童醫學、醫學領域。再者，社工文獻的引文類型和引文年齡分布，與心理學、醫務管理、衛生教育、及護理學領域非常雷同，與成癮治療和社會學領域文獻則相差甚大。基於研究結果，本文也討論了對圖書館實務工作的啟發。社工是一個複雜和跨領域的學科，其引用文獻類型、引文年齡、及引用學科都非常的廣，圖書館員在進行館藏工作與讀者服務時，需要特別注意社工領域的多元特質，以服務這個快速成長的學科領域。

關鍵字：社會工作、書目計量學、引文分析、協聯健康、社會科學

[1] 美國明尼蘇達大學生物醫學圖書館
Bio-Medical Library, University of Minnesota, USA
E-mail: cjbakker@umn.edu

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