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Holdings of peace research journals in academic library collections

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ABSTRACT

Peace movements have shaped national and international culture for decades. Although the Cold War is over, conflict-resolution issues continue to dominate headlines and the news. Peace literature holdings are vital to a relatively young but growing peace and conflict studies curricula. This study uses the list of serials abstracted by *Peace Research Abstracts Journal* to examine the holdings rates of peace-oriented journal titles in the Association of Research Libraries (ARL) member libraries. Holdings rates are examined by library, title, and subject category. Their impact on scholars, researchers, and students is discussed. Findings reveal generally strong holdings rates among ARL libraries. The broad nature of peace research, however, results in greater variation in holdings among certain important sub-topics of the literature.

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1. Introduction

Although the Cold War is over, daily headlines remind us that there is widespread unrest in Myanmar, Darfur, Iraq, Afghanistan, and other places around the globe. Dire predictions of nuclear proliferation involving Iran and North Korea also occupy the news.

Issues of peace and conflict interest many individuals and organizations. Various organizations purport to monitor peace or acts of aggression in our world. Some, such as the United Nations and Amnesty International, even issue annual reports about the state of peace in the world. One website concerned with events only in Darfur, Save Darfur (www.savedarfur.org), claims to be a collaboration of more than 100 faith-based, humanitarian, and human rights organizations.

Peace organizations and, even more importantly, peace movements have shaped our society and culture. No one will dispute the impact of one of American history's largest and most contentious peace movement: protesting the Vietnam War. According to Burns (1991), "the Vietnam War did more than any other recent event to stimulate the development of peace (or at least anti-war) publishing in the United States" (p. 8). A strong understanding of peace activism and peace history is indispensable for those aspiring to be peacemakers or conflict mediators (Homan, 1995).

Peace has always seemed an elusive commodity in our world. There may be many reasons for this; one is that peace is defined in terms that are hardly absolute. Burns (1991) explained that "the 'Peace Movement' is not a monolithic, unified force with a single clear objective, but a loose assembly of individual, social, political, and religious movements with diverse concerns" (p. 8). This confusion and

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"loose assembly" is also present in the terminology and literature of peace research.

The terminology of peace research can be puzzling. Peace research, peace studies, peace and conflict studies, and conflict-resolution studies are all common descriptions for essentially the same subject area. It is important to keep in mind the mixed terminology and highly conglomerate nature of peace movements, peace curricula, peace studies, and peace literature.

Peace literature, and therefore holdings rates of the literature, are vital to the fairly young, growing curricula of peace and conflict studies. Luc Reychler (2006), Secretary General of the International Peace Research Association and one of the world's foremost scholars and writers in the field of peace and conflict prevention, underscored the importance of peace research:

Since the end of the Second World War, many scholars have been engaged in the study of war and peace. In the post-Cold War era there has been an increasing demand for peace research, and its findings are now being used by decision-makers and practitioners... There is a need to build structures that support a better exchange of knowledge between the decision-makers, the practitioners in the field, and the research community. (p.1)

American colleges and universities have also recognized the importance of studying peace. Many offer curricula, majors, or even advanced degrees in peace studies and peace and conflict resolution (Homan, 1995). The 34th edition of the *College Blue Book* (2007) shows 81 degree programs offered by U.S. universities under the two subject headings of "conflict resolution and mediation/peace studies" and "peace studies and conflict resolution." This marks a substantial increase from the 61 degree programs at U.S. universities listed in the 31st edition of the *College Blue Book* (2004).

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2. Problem statement

Policy makers, political scientists, sociologists, anthropologists, and social justice advocates can benefit from the research and findings presented in peace research journals – peace research touches on all of those areas. Lack of access to such information could theoretically compromise research into peace and its concomitant subjects, such as social justice, conflict resolution, and refugee studies. Therefore, it is worth investigating how widely peace research journals are held in academic libraries. How well are academic libraries meeting the need for scholarly access to peace journals? In light of the findings from Marinko and Gerhard's study (1998), researchers suspected that peace research titles might be out of the mainstream in terms of status or collection priorities; there might be low holdings rates of peace journals and a strong disparity of holdings among the subject categories into which the titles were placed. This study responds to this issue by examining the holdings of libraries that are members of the Association for Research Libraries (ARL). The researchers will use the holdings information to determine the distribution of peace research journals.

3. Literature review

Along with other principal devises of bibliometrics, circulation statistics, citation counts, and other measurements, holdings analysis (measuring library holdings) is a traditional part of collection analysis. Wallace and Boyce (1989) noted that using holdings data as a measure of value is appealing because large union databases, such as those maintained by the Online Computer Library Center (OCLC), make the holdings data for libraries relatively accessible.

Holdings analyses and other bibliometric measures have been used in numerous studies, primarily in an attempt to prove a correlation between those measures and monograph (or journal) use or value. Wallace and Boyce (1989) summarized the work of Goldhor (1959), Broadbent (1984), and others in conducting such studies. These studies have proven inconclusive, or at best, have demonstrated only weak relationships between holdings rates and other bibliometric measures, and use or value. Wallace and Boyce's study is something of a variation on this theme. Instead of attempting to tie bibliometric measures to journal use or value, they attempted to determine if there was a relationship between easily gathered bibliometric measures, such as holdings analysis and circulation statistics, and less-easily gathered bibliometric indicators of a journal's value, such as publisher circulation figures.

While interlibrary loan (ILL) services, online databases, and electronic indexes make many items outside of a collection available, the ease of use and access is not always the same. For example, in the case of ILL, demand may be constrained by charging users directly or indirectly through some form of internal charge, or by limiting the number of requests a user can make (Blagden, 1996) and access may be delayed.

There are only a few examples of serials holdings analysis done on as large a scale as presented here. Perrault (1994) and Marinko and Gerhard (1998) used ARL libraries in their research to reflect academic libraries in general. Perrault chose ARL libraries in measuring library collecting patterns of non-serial imprints. Marinko and Gerhard used U.S. ARL libraries to examine the holdings rates of alternative press titles. Like the present research, their study also looked at the titles by subject category. They found a "fairly wide variance in holdings among the subject clusters" (Marinko & Gerhard, 1998, p. 368).

Marinko and Gerhard (1998) made an excellent point in their discussion of bias in library collections:

It is impossible to have a meaningful discussion on issues of the day without access to a broad representation of the viewpoints held in society at large. A periodical that brings a specific viewpoint to a collection thus can have a value that cannot be measured by the frequency with which it is cited. (p. 363)

Their study found that alternative press titles were not widely held in ARL libraries, possibly due in part to collection bias, and that certain categories of the literature were particularly underrepresented.

While the current study does not specifically address collection bias, it may be a factor because many of the journals indexed in *Peace* Research Abstracts Journal are published by small and independent presses. Collection bias may influence the under-representation of certain titles in academic libraries. Bias against specialized literature and/or non-corporate presses can lead to decreased diversity of resources and therefore less diverse scholarship and expression. Numerous studies have been published on the topic of collection bias, including those by Harmeyer (1995), Houbeck (1992), and Hupp (1991). Juris Dilevko co-authored a number of relevant studies using holdings analysis to reveal collection bias toward genre (nonmainstream) literature and publications of non-mainstream presses. In "Myth or reality: The absence of evangelical Christian fiction titles in the public libraries of the United States," Dilevko and Atkinson (2002) found a "wide disparity" in number and proportion between mainstream fiction titles and evangelical fiction titles held in public libraries.

In another study, Dilevko and Hayman (2000) examined public libraries' collection development patterns of fiction titles from independent and small presses. That study reviewed the influence of corporate control of the publishing industry and outsourcing of selection activities to corporate vendors. It showed that while Barnes and Noble had significantly increased its buying from small and independent presses, public libraries had not. In a further examination of corporate influence on collection development, Dilevko and Grewal (1997) showed, through an analysis of the holdings of socio-political journals in Canadian academic libraries, that the number of corporate-published titles of such journals greatly surpassed the number of such journals published by independent, small presses.

4. Procedures

This study drew its source list from abstracts in the 2005 *Peace Research Abstracts Journal* (PRAJ). PRAJ was held by 89 of 107 ARL libraries and thus seemed to be a reasonable source for identifying peace journal titles. The latest volume at the time the study began was volume 42, no. 6 (2005). That issue listed 220 titles of magazines and journals. Eighteen general titles were dropped from the study, including *Time*, *USA Today*, and *The New Yorker*. Five other journals were cut because they could not be identified or had ceased publication. Lastly, *Middle East Review of International Affairs* was omitted because it is freely available on the Internet (precluding the authors from knowing exactly which libraries hold or use it). This left 196 journals for the study.

In the back of each December issue of PRAJ is a source list. Beginning in 2005, the source list included both monographs and journals. This study examined only journals. Researchers reviewed each page of the 2005 issues of PRAJ to ensure that the source list was created from journals actually abstracted.

ARL member libraries provided a convenient pool of large, prominent libraries for examining conditions and trends in academic libraries. U.S. ARL libraries represent, for the most part, the largest academic and research libraries in the country. The Membership Criteria Index on the ARL website shows that ARL member libraries are selected by five measures of size that are weighted to arrive at a library's annual index number (Association of Research Libraries, 2006). The measures are: volumes held, volumes added (gross), current serials, total library expenditures, and total professional plus support staff. To be considered for membership, libraries are required to achieve a certain score for the most recent five years. The ARL libraries listed at http://www.arl.org/members.html as of June 2006

formed the basis for this study's holding analysis. Only academic and institutional ARL libraries in the U.S. were used (the study omitted Canadian ARL libraries).

Some member libraries listed on the ARL site are described singularly, such as "University of Arizona Library;" some are described in the plural form, as in "University of Alabama Libraries." In other instances, a particular university campus is specified by location, as in "University of Colorado at Boulder Libraries." For this study, the library and journal holdings of a particular institution were based on the holdings of all its constituent libraries on only the main campus of that institution. For example, "University of Texas at Austin" (as the ARL list denotes the institution) included all libraries on campus at Austin, such as the Tarleton Law Library. It did not include libraries at any of the other University of Texas campuses, such as Dallas or San Antonio. The researchers felt that if a journal was available at any library on campus, then the faculty and student body had access. Electronic versions of journals were also included so as not to discriminate by format. However, microform (microfilm) versions were not counted because they were presumed to be back-up copies rather than a library's primary mode for holding a journal.

Holdings data were acquired through searching OCLC (http://firstsearch.oclc.org/) records by ISSN number and by e-ISSN number if

the journal record showed there was an electronic version. OCLC lists of holding institutions were printed and then marked up to highlight holdings of ARL libraries. Data were compiled using a Microsoft Excel[®] spreadsheet to note which institutions/libraries held which journals.

PRAJ assigns the journals it abstracts to 19 subject categories. Journals may be assigned to as many categories as apply. In order to analyze holdings by subject area, a second Excel spreadsheet was created. This sheet placed each of the 196 titles in the study into the subject categories to which PRAJ assigned it.

Although other utilities, such as Ulrich's and OCLC, also provide subject terms or descriptors for serials, this study used PRAJ categories. The researchers made a number of sample comparisons between Ulrich's and OCLC-assigned subject terms and the subject categories as assigned by PRAJ (see Table 1). PRAJ overwhelmingly tended to apply both more, and more descriptive, subject terms to the peace research journals in the study.

5. Results

Table 2 shows both the number of peace journal titles held by each library and what percentage of the 196 journal titles included in this study that number represents.

Table 1Comparison of subject keywords assigned to PRA| titles

Journal title	Ulrich's subject headings	OCLC descriptors	PRAJ subject categories
Public Opinion Quarterly	Political science Social sciences — Comprehensive works	1) Public opinion	5) Communication, media and the arts Government and politics International conflicts Social issues Theory and method
Annals — American Academy of Political a Social Science	2) Political science Social sciences — Comprehensive works	5) Social sciences Political science Government Politics Social work	8) Communication, media and the arts Domestic law Economic issues Environmental issues Government and politics International relations Social issues Theory and method
Bulletin of the Atomic Scientists	1) Political science — International relations	4) Nuclear energy Nuclear energy—Government policy Government Science	14) Communication, media and the arts Conflict resolution Domestic law Economic issues Environmental issues Government and politics International conflicts International law and legal institutions International relations Military policy and organizations Nation-states Peace research and education Science and technology Social issues
Political Science Quarterly	1) Political science	1) Social sciences	2) Domestic law Government and politics
World Politics	2) Political science — International relations History	5) World politics 20th century World politics 21st century International relations Political conditions World politics	5) Conflict resolution Economic issues Government and politics Internal conflict International conflicts
Journal of Peace Research	1) Political science — International relations	3) Peace Peace research International security	12) Communication, media & the arts Conflict resolution Domestic law Economic issues Foreign policy Government and politics Internal conflicts International conflicts International law and legal institutions International relations Military policy and organizations Nation-states

Table 2 Holdings of peace abstracts journal titles in U.S. ARL libraries by institution

Institution	Number of titles held	Percent held
Arizona State Unive	139	71
Auburn Univ.	126	64
Boston College	136	69
Boston Public Library	19	10
Boston Univ. Brigham Young Univ.	109 124	56 63
Brown Univ.	121	62
Case Western Univ.	101	52
Center for Research Libraries	10	5
Colorado State Univ.	126	64
Columbia Univ. Cornell Univ.	118 159	60
Dartmouth Univ.	110	81 56
Duke Univ.	145	74
Emory Univ.	139	71
Florida State Univ.	131	67
George Washington Univ.	139	71
Georgetown Univ. Georgia Institute of Technology	144 84	73 43
Harvard Univ.	160	82
Howard Univ.	126	64
Indiana Univ.	159	81
Iowa State Univ.	123	63
Johns Hopkins Univ.	111	57
Kent State Univ. Library of Congress	114 175	58 89
Louisianan State Univ.	138	89 70
Massachusetts Institute of Tech.	123	63
Michigan State Univ.	152	78
Natl. Agricultural Library	28	14
Natl. Library of Medicine	19	10
New York Public Library	144 81	73 41
New York State Library New York Univ.	147	75
North Carolina State Univ.	106	54
Northwestern Univ.	138	70
Ohio State Univ.	152	78
Ohio Univ.	128	65
Oklahoma State Univ. Pennsylvania State Univ.	107 140	55 71
Princeton Univ.	145	71 74
Purdue Univ.	129	66
Rice Univ.	118	60
Rutgers Univ.	119	61
Smithsonian Institution Libraries	36	18
Southern Illinois Univ. SUNY Albany	125 105	64 54
SUNY Buffalo	133	68
Stony Brook Univ.	103	53
Syracuse Univ.	131	67
Temple Univ.	114	58
Texas A&M Univ. Texas Tech Univ.	134	68
Tulane Univ.	114 129	58 66
Univ. of Alabama	117	60
Univ. of Arizona	129	66
Univ. of California—Berkeley	149	76
Univ. of California—Davis	124	63
Univ. of California—Irvine	94	48
Univ. of California—Los Angeles Univ. of California—Riverside	153 98	78 50
Univ. of California—San Diego	130	66
Univ. of California—S. Barbara	111	57
Univ. of Chicago	155	79
Univ. of Cincinnati	129	66
Univ. of Connecticut	153	78
Univ. of Connecticut Univ. of Delaware	134 115	68 59
Univ. of Florida	148	75
Univ. of Georgia	146	74
Univ. of Hawaii	120	61
Univ. of Houston	124	63
Univ. of Illinois	160	82
Univ. of Illinois—Chicago Univ. of Iowa	100 143	51 73
OI 10114		7.5

Table 2 (continued)

Institution	Number of titles held	Percent held
Univ. of Kansas	139	71
Univ. of Kentucky	129	66
Univ. of Louisville	112	57
Univ. of Maryland—College Park	144	73
Univ. of Mass.—Amherst	127	65
Univ. of Miami	139	71
Univ. of Michigan	149	76
Univ. of Minnesota—M'polis.	145	74
Univ. of Missouri—Columbia	144	73
Univ. of Nebraska—Lincoln	140	71
Univ. of New Mexico	105	54
Univ. of N. Carolina—Chapel Hill	146	74
Univ. of Notre Dame	137	70
Univ. of Oklahoma	117	60
Univ. of Oregon	137	70
Univ. of Pennsylvania	135	69
Univ. of Pittsburgh	154	79
Univ. of Rochester	113	58
Univ. of South Carolina	126	64
Univ. of Southern California	138	70
Univ. of Tennessee	120	61
Univ. of Texas—Austin	156	80
Univ. of Utah	128	65
Univ. of Virginia	131	67
Univ. of Washington	151	77
Univ. of Wisconsin-Madison	159	81
Vanderbilt Univ.	132	67
Virginia Tech Univ.	135	69
Washington State Univ.	139	71
Washington University	124	63
Wayne State Univ.	112	57
Yale Univ.	157	80

Percentages rounded up to the nearest percent.

The libraries are listed alphabetically. As in all tables, percentages were rounded up to the nearest whole percent. The percentage of titles held by a particular institution varied from 5% at the Center for Research Libraries to 89% at the Library of Congress. Neither of those institutions represent typical academic library systems. Tables 3 and 4 give more detail as to the institutions holding the most and fewest peace journal titles.

Table 3 shows which ARL libraries hold the most peace journals. The table includes libraries holding 147 (75%) or more of the 196 journals in the study. It is no surprise that Library of Congress (LC) is number one—it is the largest library in the world. Because of its mission, it collects almost everything in print in the U.S. Even the LC

Table 3ARL institutions holding the most titles

Institution	No. of titles held	Percentage held
Library of Congress	175	89
Harvard University	160	82
University of Illinois at Champaign-Urbana	160	82
Cornell University	159	81
Indiana University	159	81
University of Wisconsin at Madison	159	81
Yale University	157	80
University of Texas at Austin	156	80
University of Chicago	155	79
University of Pittsburgh	154	79
University of Colorado at Boulder	153	78
University of California—Los Angeles	153	78
Michigan State University	152	78
Ohio State University	152	78
University of Washington	151	77
University of California—Berkeley	149	76
University of Michigan	149	76
University of Florida	148	75
New York University	147	75

Institutions (19) holding 75% or more of 196 peace journals.

Table 4ARL institutions holding the fewest titles

No. of titles held	Percentage held
98	50
94	48
84	43
81	41
36	18
28	14
19	10
19	10
10	5
	98 94 84 81 36 28 19

Institutions (9) holding 50% or less of 196 peace journals.

holds only 175 (89%) of the 196 peace journals. Other than the LC, no library holds more than 160 (82%) of peace journals.

The list includes libraries of public and private institutions from every region of the U.S. They are all libraries at large, well-financed institutions, and their appearance in this table may be indicative only of large budgets for serials.

In contrast to Table 3, Table 4 shows ARL libraries holding the fewest peace journals. It is not surprising that this list includes most of the eight "non-academic" ARL libraries in the study, whose collecting missions differ significantly from academic libraries. Except for LC and the New York Public Library, all the non-academic libraries are represented in this list: Smithsonian Institution Libraries, Center for Research Libraries, National Agricultural Library, National Library of Medicine, Boston Public Library, and New York State Library.

Analysis of the results shown in Tables 3 and 4 indicate that most libraries (79 of 107, or 74%) hold between 51% and 74% of the 196 peace journals included in the analysis. Excluding the eight non-academic ARL libraries, whose collection policies presumably do not favor significant holdings in peace literature, yields an even greater concentration of academic libraries in this range. Only 3 academic libraries hold 50% or fewer peace journals; 18 academic libraries hold 75% or more of peace journals; and 78 of 99 academic libraries (or 79%) hold between 51% and 74% of the titles.

The mean number of holdings of titles for all libraries is 126. One standard deviation (SD), indicating the dispersion of titles held from the mean, is 29. Thus, values representing library holdings of peace journal titles are more closely clustered about the mean than in a normal distribution, which would have an SD of 34. Ninety-three of

the 107 institutions, or 87%, hold a number of PRAJ titles within one SD of the mean Fig. 1.

Only 6 of the institutions holding the most titles lie outside the standard deviation in the upper range: LC, Harvard, University of Illinois–Champaign/Urbana, Cornell, Indiana, and University of Wisconsin–Madison.

Eight institutions fall outside the lower range of the standard deviation: University of California—Irvine, Smithsonian, Georgia Institute of Technology, Center for Research Libraries, Boston Public Library, National Agricultural Library, National Library of Medicine, and New York State Library. Five of these have 36 or fewer of the titles represented in PRAI.

Table 5 shows individual journals' holdings rates. The table shows both the number of libraries holding each title and what percentage of the 107 U.S. ARL libraries that number represents.

Table 6 shows the most frequently held peace journal titles by library. It shows all journals held by 102 (approximately 95%) or more of the 107 U.S. ARL libraries. These titles tend to be either fairly broad in the topics they cover (*The Annals of the American Academy of Political and Social Science*) or particularly well-regarded journals that cover one or only a few subject areas (*The Review of Economics and Statistics*, *The Nation*).

The last column in Table 6 shows the number of subject categories assigned by PRAJ to these most-held journals. The category numbers reveal how the titles of peace journals can be misleading as to the breadth of subject coverage. *Bulletin of the Atomic Scientists*, assigned fourteen categories, and *China Quarterly*, assigned nine categories, clearly cover far more subject areas than their titles might imply.

The data in Table 7 takes the most-held journals from Table 6 and shows how many of those titles are assigned to each of the 19 PRAJ subject categories. Many of the most-held journals cover economic issues, government and politics, and social issues.

Table 8 shows the PRAJ journals held by 11 (10%) or fewer of the 107 U.S. ARL libraries.

The last column of Table 8 shows the number of subject categories assigned by PRAJ to these least-held journals. With the exception of two journals, *Global Change, Peace & Security* (assigned 13 PRAJ subject categories) and *Federalist Debate* (assigned 9 PRAJ subject categories), these least-held journals are assigned fewer subject categories. This indicates that these journals are narrow in scope.

Table 9 shows how many of the least-held titles are assigned to each of the 19 PRAJ subject categories. The least-held journals are assigned fewer subject categories and cover only social issues.

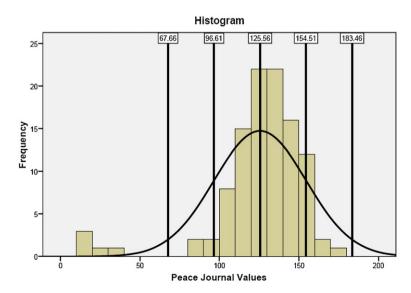


Fig. 1. Standard deviation histogram with distribution curve.

Table 5Holdings in U.S. ARL libraries by journal title

Periodical title Holdin		nge	
renouical title	Holding Total	Percentage	
Administration & Society	97	91	
African Studies Review	100	93	
Alternatives: Global, Local, Political	90	84	
America	101	94	
American Anthropologist American Behavioral Scientist	102 100	95 93	
American Journal of Economics and Sociology	100	93	
American Journal of International Law	102	95	
American Politics Research	98	92	
American Prospect, The American Psychologist	70 101	65 94	
American Spectator, The	86	80	
Annals of the American Academy of Political and Social Sciences, The	104	97	
Arab Studies Quarterly	69	64	
Armed Forces & Society	93	87	
Arms Control Today	67	63	
ASEAN Economic Bulletin Australian Journal of International Affairs	52 67	49 63	
Black Scholar	98	92	
Boston College Third World Law Journal	70	65	
British Journal of Political Science	103	96	
Bulletin of the Atomic Scientists	104	97	
Business & Society	70	65	
Canadian Journal of Political Science Candle, The	96 0	90 0	
Case Western Reserve Journal of International Law	74	69	
China Quarterly	103	96	
Choices	0	0	
Christian Century	93	87	
Chronicle of Higher Education Clinical Supervisor, The	98 49	92 46	
Columbia Journal of Transnational Law	88	82	
Commentary	99	93	
Commonweal	99	93	
Communication Law and Policy	39	36	
Communist and Post-Communist Studies Community Development Journal	91 73	85 68	
Comparative Political Studies	99	93	
Comparative Studies in Society and History	103	96	
Conflict Management and Peace Science	80	75	
Conflict, Security & Development	12 93	11 87	
Contemporary Economic Policy Contemporary Southeast Asia	55 55	51	
Cooperation and Conflict	87	81	
CSSR Bulletin, The	18	17	
Cultural Anthropology	96	90	
Cultural Diversity and Ethnic Minority Psychology	65	61	
Cultural Dynamics Cultural Studies	44 79	41 73	
Current History	99	93	
Cypress Review	20	19	
Defense and Peace Economics	31	29	
Democracy and Nature Development Dialogue	29 58	27 54	
Diplomacy and Statecraft	43	40	
DISAM Journal of International Security	1	<1	
Assistance Management			
Disarmament Forum	31	29	
East Asia	61 75	57 70	
Economic and Industrial Democracy Economic Inquiry	103	96	
Ecumenical Review	88	82	
Employee Assistance Quarterly	44	41	
Ethnicities	24	22	
European Journal of Criminology	5 65	<1 61	
European Journal of International Law European Journal of International Relations	65 67	63	
European Journal of Political Theory	21	20	
Federalist, The	1	<1	
Federalist Debate	4	<1	
First Things	48	45	
Foreign Policy Forum for Applied Research and Public Policy	101 71	94 66	
Geneva Reporter	1	<1	

Table 5 (continued)

Table 5 (continued) Periodical title	Holding	•
renodical title	Holding Total	Percentage
Geographical Review	100	93
Global Change, Peace & Security	9	1
Harvard Journal of Law & Public Policy Harvard Magazine	88 53	82 50
Historical Journal	98	92
History Today	98	92
Holocaust and Genocide Studies Homicide Studies	72 30	67 28
Human Rights Quarterly	96	90
Independent Review: A Journal of Political Economy, The	25	23
Index on Censorship Industrial and Labor Relations Review	89 99	83 93
International Affairs	100	93
International Interactions	80	75
International Journal of Constitutional Law International Journal of Law, Policy and the Family	37 56	36 52
International Journal of Middle East Studies	97	91
International Journal of Peace Studies	11	10
International Journal of Refugee Law International Journal on World Peace	58 70	54 65
International Labour Review	101	94
International Negotiation	43	40
International Political Science Review	85	79 72
International Relations: The Journal of the David Davies Memorial Inst. of Int'l. Studies	77	72
International Relations of the Asia-Pacific	30	28
International Security	101	94
International Social Science Journal International Social Science Review	96 72	90 67
International Studies Review	98	92
Items and Issues	70	65
Javnost-the Public	11	10
Journal for the Scientific Study of Religion Journal of Asian Studies	96 98	90 92
Journal of Child Sexual Abuse	40	37
Journal of Cold War Studies	49	46
Journal of Conflict Resolution Journal of Development Studies	101 100	94 93
Journal of Forensic Psychology Practice	5	<1
Journal of Human Rights	28	26
Journal of Immigrant and Refugee Services Journal of Industrial Economics	7 103	1 96
Journal of Industrial Economics Journal of International Criminal Justice	43	40
Journal of Labor Research	97	91
Journal of Modern African Studies Journal of Muslim Minority Affairs	103	96 49
Journal of Muslim Millority Affairs Journal of Palestine Studies	52 100	93
Journal of Peace Research	102	95
Journal of Police Crisis Negotiations	5	<1
Journal of Political and Military Sociology Journal of Political Marketing	94 6	88 1
Journal of Progressive Human Services	47	44
Journal of Religion and Abuse	8	1
Journal of School Violence Journal of Social Work in Disability and Rehabilitation	12 3	11 0
Journal of Social Work in Bisability and Rehabilitation	19	18
Journal of Southeast Asian Studies	96	90
Journal of Southern African Studies Journal of World-Systems Research	94 39	88 36
Korea and World Affairs: A Quarterly Review	66	62
Latin American Politics and Society	97	91
Legislative Studies Quarterly	101 59	94 55
Leiden Journal of International Law Mennonite Quarterly Review	73	68
Middle East Journal	99	93
Military Officer	1	<1
Military Psychology Muslim World	22 91	21 85
Nation, The	102	95
National Review	100	93
Negotiation Journal Netherlands International Law Review	90 58	84 54
New Republic, The	101	94
New York Review of Books, The	99	93
Nonviolent Activist Orbis: A Journal of World Affairs	19 99	18 93
Orbis. A journal of world Alidits	33	33

Table 5 (continued)

Periodical title	Holding	S
	Total	Percentage
Pacific Affairs	97	91
Peace	7	7
Peace & Change	81	76
Peace and Conflict: Journal of Peace Psychology	31	29
Peace Research	52	49
Peace Studies Bulletin	0	0
Peace Watch	65	61
Ploughshares Monitor	2	<1
Policy Sciences	100	93
Political Science Quarterly	104	97
Political Studies	101	94
Politics & Policy	32	30
Politics & Society	100	93
Polity	101	94
Post-Communist Economics	39	36
Presidential Studies Quarterly	101	94
Progressive, The	100	93
Public Opinion Quarterly	105	98
Public Understanding of Science	57	53
Race & Class	100	93
RAND Journal of Economics, The	103	96
Relations Industrielles (Industrial Relations)	47	44
Religious Studies Review	83	78
Review of Economics and Statistics, The	102	95
Review of International Studies	87	81
Round Table, The	99	93
Science and Global Security	26	24
Science for Democratic Action	0	0
Secolas Annals	46	43
Security Dialogue	68	64
Social Philosophy & Policy	90	84
Social Policy	100	93
Social Policy Journal	7	1
Society	99	93
Sociology of Education	97	91
State and Local Government Review	81	76
Studies in Comparative International Development	100	93
Studies in Conflict and Terrorism	81	76
Third World Quarterly	94	88
U.S. Catholic	57	53
Vanderbilt Journal of Transnational Law	74	69
Vantage Point	41	38
Vital Signs	92	86
Women and Politics	93	87
Work, Employment & Society	56	52
World Development	103	96
World Policy Journal	89	83
World Politics	103	96
WORLD FOREIGN	105	30

Specifically, least-held titles cluster in the subject areas of domestic law; conflict resolution; communication, media and the arts; government and politics; and international organizations and policy.

What types of articles are published in these most- and least-held journals? In 2005, PRAJ abstracted 370 articles from the 18 most-held journals. Those articles were assigned 1125 keywords total, of which 507 were unique keywords. Table 10 shows the keywords most often assigned to articles from the most-held journals.

In 2005, PRAJ abstracted 164 articles from the 17 least-held journals. Those articles were assigned 510 keywords total, of which 263 were unique keywords. Keywords most often assigned to articles from the 17 least-held journals are shown in Table 11.

The most prevalent keywords assigned to the most-held journals are economic and political in nature, corresponding to the subject category strengths of those journals. Sixty-eight of the 507 unique keywords assigned to the most-held journals are economics and/or finance-oriented. Most-held journals, which tend to be broad in their coverage, are also strong in the social sciences (see Table 7). This accounts for prevalent keywords such as "culture" and "social policy."

Table 6 Most-held titles

Journal title	No. of institutions holding this title	No. of subject categories assigned to this title by PRAJ
Public Opinion Quarterly	105	5
Annals of the American Academy	104	8
of Political and Social Science, The		
Bulletin of the Atomic Scientists	104	14
Political Science Quarterly	104	2
British Journal of Political Science	103	3
China Quarterly	103	9
Comparative Studies in Society and History	103	8
Economic Inquiry	103	5
Journal of Industrial Economics	103	3
Journal of Modern African Studies	103	8
RAND Journal of Economics, The	103	3
World Development	103	3
World Politics	103	5
American Anthropologist	102	7
American Journal of International Law	102	3
Journal of Peace Research	102	12
Nation, The	102	2
Review of Economics and Statistics, The	102	2

Journals held by 102 (~95%) or more of 107 U.S. ARL Libraries

Likewise, the most prevalent keywords assigned to least-held journals are social sciences oriented. This reflects the subject category strength of those journals (see Table 9).

The ratio of unique keywords to total keywords assigned approximated 50% for both most-held and least-held journals. This seemed high to the researchers, who decided to investigate how PRAJ assigned the keywords to the articles. Was a controlled vocabulary used? Were the keywords assigned by the authors, the PRAJ editor, or by volunteers? Researchers contacted SAGE Publication via the one phone number given for the United States in copies of PRAJ. Initially no one was able to provide an answer. Further inquiries revealed that the keywords were assigned by an indexer working from a list of a thousand to fifteen-hundred keywords.

During the course of this analysis, the authors noticed that many of the least-held journals were those devoted to society's most powerless and helpless individuals, as well as those least able to advocate for themselves. Among the least-held journals are Journal of Social Work in Disability and Rehabilitation and Journal of Immigrant and Refugee Services (see Table 8). Other journals, including Journal of Child Sexual Abuse (40 libraries), Journal of School Violence (12 libraries), and Journal of Social Work Practice in the Addictions (19 libraries), all fell in the

Table 7Subject category distribution of most-held titles

PRAJ subject category	Most-held titles assigned this subject
Communication, media & the arts	8
Conflict resolution	5
Domestic law	6
Economic issues	14
Environmental issues	7
Foreign policy	1
Government & politics	12
Internal conflicts	3
International conflicts	5
International law & legal institutions	4
International organizations & policy	2
International relations	7
Military policy & organizations	2
Nation-states	4
Peace research & education	2
Science & technology	4
Social issues	11
World economy & trade	2
Theory & method	3

Table 8Least-held titles

Journal title	No. of institutions	No. of subject
	holding this title	categories assigned
		to this title by PRAJ
International Journal of Peace Studies	11	3
Javnost — The Public	11	1
Global Change, Peace & Security	9	13
Journal of Religion and Abuse	8	2
Journal of Immigrant and Refugee Services	7	2
Social Policy Journal	7	3
Journal of Political Marketing	6	2
European Journal of Criminology	5	3
Journal of Forensic Psychology Practice	5	2
Journal of Police Crisis Negotiations	5	3
Federalist Debate	4	9
Journal of Social Work in Disability	3	1
and Rehabilitation		
Ploughshares Monitor	2	3
DISAM Journal of International Security Assistance Management	1	1
Federalist, The	1	2
Geneva Reporter	1	1
Military Officer	1	1

Journals held by 11 (10%) or fewer of 107 U.S. ARL Libraries.

lowest quartile holdings. While these journals have an admittedly narrower scope, their holdings rates do not bode well for the disabled, those in rehabilitation, immigrants, refugees, children (in general), school children (in particular), or the addicted.

Table 10 shows holdings by subject category, illustrating the relative holdings strengths (or lack thereof) among the subject categories. Column (a) gives the number of titles in the subject category. Column (b) gives total title holdings of all titles in a subject category for all 107 U.S. ARL libraries. The maximum possible value for column (b) would be the number of titles in the category multiplied by 107: this would occur only if all 107 libraries owned all journals in the subject category. Column (c) gives an "average" number of titles per library, calculated by the dividing the total title holdings number in column (b) by 107. Column (d) expresses the number in column (c) as a percentage of the titles in the subject category. This last column and calculation is necessary in order to compare numbers across categories. Figures calculated in columns (b) and (c) are functions of the number of titles in a category. By expressing the average number of titles per library as a percentage of the number of titles in a category, researchers can compare all categories Table 12.

Table 9Subject category distribution for least-held titles from Table 8

PRAJ subject category	Least-held titles assigned this subject
Communication, media, & the arts	4
Conflict resolution	4
Domestic law	5
Economic issues	1
Environmental issues	0
Foreign policy	3
Government & politics	4
Internal conflicts	0
International conflicts	3
International law & legal institutions	2
International organizations & policy	4
International relations	2
Military policy & organizations	3
Nation-states	3
Peace research & education	2
Science & technology	0
Social issues	9
World economy & trade	1
Theory & method	2

Table 10Keywords assigned to abstracted articles from most-held journals

Keyword	Number of articles assigned this keyword by PRAJ in 2005
China	39
Economics	26
United States	23
Politics	18
Culture	16
Market economies	16
Africa	15
Voter turnout	11
History	9
War	9
Development	8
Methodology	8
Mobilization	8
Regulation	8
Careers	7
Conflict	7
Democracy	7
Info. & comm. technology	7
Iraq	7
Nuclear programs	7
Religion	7
Security	7
Social policy	7
Work-family balance	7

Table 10 shows a strong clustering in the holdings strengths among the subject categories. Fifteen of the 19 categories show title holdings per library ranging from 62% to 74% of the titles of the category. This clustering is similar to what was seen in the individual library holdings, where 79 of 107 libraries (74%) held between 51% and 74% of peace journals titles.

The strongest holdings by subject categories were foreign policy (95%), science and technology (89%), economic issues (79%), and environmental issues (79%). Weakest holdings by subject category were domestic law (62%), military policy and organization (63%), social issues (63%), and theory and method (63%).

The most important, and somewhat ironic, aspect of holdings rates revealed by Table 10 is that the strongest categories are the most off-topic. Subject categories most closely associated with the underlying or core topics involved in this study – i.e., peace research, peace and conflict, conflict resolution, etc. – are among the weaker categories.

Table 11Keywords assigned to abstracted articles from least-held journals

Keyword	Number of articles assigned this keyword by PRAJ in 2005
United States	12
Psychology	11
Communication	9
Crime	9
Criminal justice system	9
Politics	9
Treatment	7
Disability	6
Media	6
Offenders	6
Political campaigns	6
Social work	6
Europe	5
Foreign policy	5
Juvenile delinquents	5
Juvenile offenders	5
Law enforcement	5
Mental illness	5
Political communication	5
Religion	5

Table 12 Holdings by subject category

Subject category	(a) No. of titles in subject category	(b) Total title holdings, all ARL libraries	(c) Avg. no. of titles held per library	(d) Percent of titles in category that (c) represents
Communication, media & the arts	51	3898	36.4	71
Conflict resolution	52	3583	33.5	64
Domestic law	35	2330	21.8	62
Economic issues	56	4742	44.3	79
Environmental issues	23	1945	18.2	79
Foreign policy	30	3037	28.4	95
Government & politics	97	7626	71.3	74
Internal conflicts	27	2110	19.7	73
International conflicts	37	2765	25.8	70
International law & legal institutions	47	3485	32.6	69
International organizations & policy	30	2044	19.1	64
International relations	48	3462	32.4	68
Military policy & organizations	33	2229	20.8	63
Nation-states	47	3590	33.6	71
Peace research & education	16	1106	10.3	64
Science & technology	10	951	8.9	89
Social issues	91	6143	57.4	63
World economy & trade	28	2112	19.7	70
Theory & method	27	1835	17.1	63

The categories with lower holdings rates include conflict resolution (64%), internal conflicts (73%), international conflicts (70%), international organizations and policy (64%), international relations (68%), peace research and education (64%), and social issues (63%).

6. Discussion

The results did not show the anticipated low holdings rates of peace journal literature. Nor was there a strong disparity of holdings rates among the subject categories the titles are divided into. Instead, the analysis showed relatively strong holdings rates by individual titles and by individual ARL institutions and strongly-clustered holdings by PRAJ subject category. This strong clustering can be seen where most libraries (79 of 107; 74%) hold between 51% and 74% of peace journals; 15 of the 19 categories show title holdings per library ranging from 62% to 74% of the titles of the category.

There are a number of possible reasons for the strong holdings of peace journals in U.S. ARL libraries. Many journals that PRAJ has selected for abstracting are fairly well-known, mainstream social science and political science journals — examples include *Annals of the American Academy of Political and Social Science, Foreign Policy, Orbis: A Journal of World Affairs*, and *World Politics*.

Many of the journals abstracted by PRAJ tend toward broad content coverage. One-third (33%) of the journals included in this study are listed in 5 or more of the 19 subject categories PRAJ uses. The single largest category, measured by number of individual titles it includes, is "government and politics." This category has 97 titles, representing almost 50% of PRAJ titles. The second largest category by number of titles is "social issues," which includes 91 titles. Academic institutions do not have to deliberately seek to hold journals about peace studies in order to hold many of the titles abstracted by PRAJ. Institutions with strong holdings in the more common subject areas of government, political science, economics, and social science will end up holding many of these journals.

Further evidence of the broad nature of peace research, or more specifically, peace research literature, can be found in the *Journal Citation Reports* (JCR) (Thomson ISI, 2005). Using the JCR to examine which journals cite some of the most widely-held peace journal titles (see Table 6), it is evident that peace journals are cited in many disciplines, including history, political science, law, ethics, psychology, behavioral sciences, geography, anthropology, sociology, demographics, economics, and finance.

In his book *The First Fifty Years of Peace Research: A Survey and Interpretation*, Dunn (2005) discussed several factors that have contributed to the broad range of journals in the field of peace research. He described a general trend where a new area of study and new ideas do not always find a congenial home in established journals, leading to a rise in specialist journals.

The Dilevko co-authored articles, in particular, raised many interesting questions concerning collection bias. While outside the scope of this study, they provide a number of possibilities for further research. For example, to what degree does corporate influence, by way of bias against small and independent presses, influence holding of peace journals?

Dilevko and Gottlieb (2003) found that ARL university libraries at institutions with strong African Studies programs had extensive collections of titles published by sub-Saharan African (SSA) publishers. ARL university libraries without such programs had relatively weaker collections of SSA-published titles. To what extent does curriculum strength in the areas of peace studies and conflict resolution influence holdings of peace journals at specific academic institutions? To what degree are libraries implicated in giving a platform to the corporate voice by consciously or unconsciously avoiding small, independent, or foreign presses?

7. Conclusion

The most important finding of this study is the inverse relationship between how peace studies-oriented a journal is and how likely it is to be held in an ARL library.

A study of collection bias in this field is needed. Findings from the Marinko and Gerhard (1998) study, particularly their comments on collection bias, could apply to this study in several respects. PRAJ seems to interpret the field of peace research rather widely, as evidenced by the large representation of journals it abstracts. The editors of PRAJ may feel this is necessary to provide the broad representation needed to include all viewpoints and aspects of the subject. Also, many peace journals include controversial and politically-charged ideas and opinions. Both conditions may contribute to the variance in journal holdings rates. While peace research titles were strongly held in academic libraries in general, some titles and even some subject categories were not. One possible reason for this is collection bias.

In addition, since PRAJ includes many general political science journals, social science and economics journals, and broad coverage journals, it might be enlightening to repeat this study using a pool or sample of peace-related journals selected by experts or scholars in the field.

Appendix A. Supplementary data

Supplementary data associated with this article can be found, in the online version, at doi:10.1016/j.lisr.2007.12.005.

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