

The Diffusion of Core Publications in American Sociology: A Replication

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Abstract

This research explores the role of articles published in three core general sociological journals during 1960 and 1973. It is suggested that citations from subsequently published articles indicate the extent to which publications play an integrating role in the discipline. Citations from the three core journals and seven specialty journals for a period of ten years were recorded. The research raises questions concerning the extent to which core journal articles are relevant to publications in specialty journals and the extent to which professional rewards should be attached to publishing in the *American Sociological Review*, *American Journal of Sociology* and *Social Forces*.

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¹WILSON, F. D., SMOKE, G. L. and MARTIN, J. D. (1973). The replication problem in sociology: A report and a suggestion. *Sociological Inquiry*, 43, 141–149. GASTON, J. (1979). The big three and the status of sociology. *Contemporary Sociology*, 8, 789–824.

²FRIEDRICH, R. W. (1970). *A Sociology of Sociology*. New York: Free Press. GOULDNER, A. W. (1970). *The Coming Crisis of Western Sociology*. New York: Basic Books. WRONG, D. (1971). New wine in old bottles—A review of two books. *The American Sociologist*, 6, 249–253.

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Although a number of sociologists and philosophers of science have stressed the significance of replication in the development of a cumulative social science, few replication studies appear in sociological journals.¹ In the present research I report findings of a replication study of the integrating role of core sociological journals and the articles appearing in them.

The original study was conducted on articles published during 1960, and the replication study on articles published during 1973. A number of writers have suggested that the 1960–73 period was a time of change in American sociology.² This change involved a shift from the near hegemony of structural-functional theory and analysis to a state of theoretic pluralism, and a shift in the dominance of the Harvard, Chicago, and Columbia departments to a more pluralistic distribution of influence and influentials. Among its other contributions, the present research provides insight into the role of the discipline's core journals during this period of change.

Sociologists publish in a variety of journals: more prestigious and less prestigious journals, sociological and non-sociological journals, academic and non-academic journals, national and regional journals, and general and specialized journals. The increasing specialization of the discipline has been paralleled by an increase in the number of journals. Starr has recently argued that 'specialization has been dysfunctional for the coherence and progress of the discipline'.³ Shils, however, points out that specialization has its limits, and that:

Specialization in sociology has not yet progressed to the point, nor is it likely to do so in the foreseeable future, where one field cuts itself off entirely from its intellectual neighbors or from the sociological family as a whole.⁴

For Shils, phenomena such as the general nature of sociological education, exposure to 'classics' and major theorists, and the broad teaching experience of academic sociologists act as unifying processes within the discipline. Patel⁵ has argued that along with the growth of differentiation and specialization, the discipline has experienced a growth in the 'reintegration' processes of individual and collaborative research and publication.

Finally, Crane has pointed to the integrating role of core journals in the face of specialization and the development of research areas:

If all the literature on a particular subject were so scattered and if the scientists themselves were not in communication with one another, it would be almost

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³STARR, J. M. (1983). Specialization and the development of sociology: Differentiation or fragmentation? *Qualitative Sociology*, 6, 69.

⁴SHILS, E. (1970). Tradition, ecology, and institution in the history of sociology. *Daedalus*, 99, 817.

⁵PATEL, N. (1973). Collaboration in the professional growth of American sociology. *Social Science Information*, 12, 77–92.

⁶CRANE, D. (1972). *Invisible Colleges: Diffusion of Knowledge in Scientific Communities*, pp. 113–114. Chicago: University of Chicago Press.

⁷LIN, N. and NELSON, C. E. (1969). Bibliographic reference patterns in core sociological journals, 1965–1966. *The American Sociologist*, 4, 47–50. LIN, N. (1974). Stratification of the formal communication system in American sociology. *The American Sociologist*, 9, 199–206. BAUGHMAN, J. C. (1974). A structural analysis of the literature of sociology. *Library Quarterly*, 44, 293–308. PERITZ, B. C. (1983). Are methodological papers more cited than theoretical or empirical ones? The case of sociology. *Scientometrics*, 5, 211–218.

⁸SATARIANO, W. (1978). Journal use in sociology: Citation analysis versus readership patterns. *Library Quarterly*, 48, 293–300.

⁹GLENN, N. D. and VILLEMEZ, W. (1970). The productivity of sociologists at 45 American universities. *The American Sociologist*, 5, 244–252. GLENN, N. D. (1971). American sociologists' evaluation of sixty-three journals. *The American Sociologist*, 6, 298–303. NELSON, T. M., BUSS, A. R. and KATZKO, M. (1983). Rating of scholarly journals by chairpersons in the social sciences. *Research in Higher Education*, 19, 469–497.

¹⁰LIN, *op. cit.* Ref. 7, 205.

¹¹GASTON, J., LANTZ, H.R. and SNYDER, C.R. (1975). Publication criteria for promotion in Ph.D. graduate departments. *The American Sociologist*, 10, 239–242.

¹²COLLINS, R. (1972–73). Surveying the sociology journals. *Change*, 4, 70.

¹³STEWART, J.A. (1983). Achievement and ascriptive processes in the recognition of scientific articles. *Social Forces*, 62, 166–189.

¹⁴TEEVAN, J. J. (1980). Journal prestige and quality of sociological articles. *The American Sociologist*, 15, 109–112.

¹⁵OROMANER, M. (1977). The diffusion of core publications in American sociology. *Journal of the American Society for Information Science*, 28, 34–37.

¹⁶Research notes were also included.

impossible for scientists to build on each other's work. The existence of a 'core' of journals in the literature and of scientists in the research area provides a kind of repetition in scientific communication insuring that certain ideas will be repeated and emphasized sufficiently so that the scientists who are interested in these problems will be sure of receiving at least some of the currently important messages and therefore continue to do research on these problems.⁶

Although Crane refers to research areas, most analysts agree with Shils that specialization in sociology is not as well developed as it is in a number of other disciplines, and that there are core integrating elements at the level of the discipline. One of the most significant elements is the existence of core general journals.

There is a sizeable literature documenting the role and position of three general core sociological journals—*American Sociological Review* (*ASR*), *American Journal of Sociology* (*AJS*) and *Social Forces* (*SF*). These journals are found consistently to be the top three journals, or at least among the top four, in terms of:

1. Citations.⁷
2. Reading habits of sociologists.⁸
3. Rankings of journals according to perceived value to the discipline.⁹

Lin has proposed that 'Contribution to prestigious journals should bring higher rewards to the contributors'.¹⁰ Gaston, Lantz and Snyder have documented the importance of publication in these journals for promotion in graduate departments,¹¹ and Collins has argued: 'To publish an article here (*ASR* or *AJS*) makes a considerable difference in one's career'.¹²

In place of studying the direct career rewards associated with publishing in one of the core journals, I am interested in the impact of such publications on other publications within the mainstream of the discipline. Citations, the measure of this impact, are indirect rewards. The importance of the article rather than the individual or organization as the appropriate level of analysis for an understanding of influence in science has been pointed to by Stewart.¹³ Finally, Teevan has supported the quite obvious but often forgotten observation that less than highly regarded articles appear in highly ranked sociological journals.¹⁴

Sample of articles

The data are based on two samples, Oromaner's 1960 sample¹⁵ and the 1973 sample selected for replication purposes.

All full-length articles appearing during 1960 and 1973 in the three core journals were selected for analysis. Exceptions were presidential addresses and articles in a special issue of the *AJS* devoted to one topic, 'Changing women in a changing society'. In place of the latter, articles appearing in the preceding issue of the *AJS* were included. The 1960 sample comprises 145 articles (*SF*—50, *AJS*—48, *ASR*—47), and the 1973 sample comprises 149 articles (*SF*—41, *AJS*—52, *ASR*—56). Once the articles were selected, citations to them from full-length articles in ten sociological journals for a period of ten years were recorded.¹⁶ For the 1960 sample the ten years included 1961–70, and for the 1973 sample the ten years included 1974–83. In addition to the fact that 1960–73 represents a period of change in the discipline, 1973 was chosen as the replication year because it was the most recent year to permit a

postpublication period of ten years (1974–83) to elapse.

The ten citing journals include the three core journals plus seven specialty journals—*Social Problems*, *Sociometry* (*Social Psychology Quarterly*), *Journal of Marriage and the Family*, *Rural Sociology*, *Administrative Science Quarterly*, *Sociology of Education* and *Journal of Health and Social Behavior*. Sociological articles are published and referred to in a broader spectrum of journals; however, this sample does represent a number of the discipline's mainstream journals and specialties. If the content of articles in core journals is central to the sociological enterprise, one would expect it to be more relevant to articles in the sampled journals than to articles in other journals. Contributions of these articles to other aspects of that enterprise, e.g., teaching, consulting, book publishing, are beyond the interest of this research. This is also true of the role of other channels, e.g., textbooks, monographs, in the diffusion of disciplinary contributions.¹⁷

Results

Each article was given one credit regardless of the number of times it was cited in any particular article. Self citations have been eliminated.

The data in Table 1 indicate that approximately one-third (1960) and one-fifth (1973) of the articles published in the core journals failed to receive even one citation from the ten citing journals during the first decade in their postpublication careers. At the other extreme, only 13 per cent (1960) and 10 per cent (1973) of the articles were cited in five or more journals. The concentration of citations among a small number of publications is a well-established finding and is expressed in a number of bibliometric laws or axioms.¹⁸ The mean number of citing journals for all articles is 2.0 (1960) and 1.9 (1973).

These data are also consistent with analyses of the standing of the

¹⁷OROMANER, M. (1969). The audience as a determinant of the most important sociologists. *The American Sociologist*, 4, 332–335. SHILS, *op. cit.*, Ref. 4, 810–814.

¹⁸BENSMAN, S. J. (1982). Bibliometric laws and library usage as social phenomena. *Library Research*, 4, 279–312. GARFIELD, E. (1980). Bradford's law and related statistical patterns. *Current Contents*, 19, 12 May, 5–12.

Table 1. Percentage of articles in core publishing journals (1960 and 1973) referred to in citing journals

Citing journals	Core publishing journals*						Total	
	1960 [†]			1973			1960	1973
	SF	AJS	ASR	SF	AJS	ASR		
0	56.0%	27.1%	14.9%	39.0%	23.1%	8.9%	33.1%	22.1%
1	22.0	16.7	21.3	31.7	30.8	25.0	20.0	28.9
2	8.0	12.5	12.8	17.1	17.3	26.8	11.0	20.8
3	6.0	20.8	14.9	2.4	11.5	14.3	13.8	10.1
4	2.0	8.3	17.0	4.9	7.7	10.7	8.9	8.0
5	6.0	8.3	2.1	2.4	3.9	8.9	5.5	5.4
6	—	2.1	6.4	—	1.9	3.6	2.8	2.0
7	—	4.2	4.3	2.4	1.9	1.8	2.8	2.0
8	—	—	4.3	—	1.9	—	1.4	0.7
9	—	—	2.1	—	—	—	0.7	—
10	—	—	—	—	—	—	—	—
Total %	100.0	100.0	100.1	99.9	100.0	100.0	100.0	100.0
Total articles	50	48	47	41	52	56	145	149
Total articles cited	(22)	(35)	(40)	(25)	(40)	(51)	(97)	(116)
% Cited	(44.0)	(72.9)	(85.1)	(61.0)	(76.9)	(91.1)	(66.9)	(77.9)

**Social Forces*, *American Journal of Sociology*, *American Sociological Review*.

[†]Adapted from Oromaner (Ref. 15, p. 35, Table 1).

three core journals—*ASR*, *AJS*, *SF*. For each time period, articles in *SF* were the least likely to be cited and those in the *ASR* the most likely. Finally, articles in each of the journals in 1973 were more likely to be cited than were those in the particular journal in 1960. This is most pronounced in the case of *SF* (61 per cent vs. 44 per cent). However, although the range of means for citing journals (1960—*SF* 0.9, *AJS* 2.2, *ASR* 2.9; 1973—*SF* 1.2, *AJS* 1.9, *ASR* 2.4) is consistent with the rank order among the core publishing journals, articles in *SF* were the only ones to have a higher mean number of citing journals during 1973.¹⁹ The existence of meaningful differences in the quality of articles published in these journals has been questioned by Gaston.²⁰ The interest in differences among journals may be an example of what Freud referred to as 'the narcissism of minor differences', that is, '... the phenomenon that it is precisely communities with adjoining territories, and related to each other in other ways as well, who are engaged in constant feuds and in ridiculing each other ...'.²¹

The citations from each of the ten citing journals to the 97 cited articles from the 1960 sample and the 116 cited articles from the 1973 sample appear in Table 2.

In each period, a larger number of sampled articles were cited in the three core journals than in the seven specialty journals. The means for the 1960 sample are 50.7 for core journals and 19.7 for specialty journals, while the comparable means for the 1973 sample are 56.7 and 16.4. A comparison of individual journals suggests that articles in core journals are most likely to be cited in core journals and least likely to be cited in the four most interdisciplinary journals examined—*Sociometry*, *Sociology of Education*, *Journal of Health and Social Behavior* and

¹⁹The mean number of citing articles for the 1973 sample is also consistent with the rank order of core journals (*SF* 2.0, *AJS* 4.2, *ASR* 4.8). The mean for the total is 3.8.

²⁰GASTON, *op. cit.*, Ref. 1.

²¹FREUD, S. [1930] (1961). *Civilization and Its Discontents*. J. STRACHEY, trans. and ed., p. 61. New York: W. W. Norton and Co.

Table 2. Citations from core and specialty citing journals to articles in core publishing journals (1960 and 1973)

Citing journals [†]	Core publishing journals									
	1960*					1973				
	Articles cited	Citations		Mean number of citations per article cited	Articles cited	Citations		Mean number of citations per article cited		
	N	%			N	%				
Core	(152)	(326)	(51)	(2.1)	(170)	(379)	(67)	(2.2)		
<i>SF</i>	56 (39)**	108	17	1.9	57 (38) [‡]	126	22	2.2		
<i>ASR</i>	50 (34)	118	18	2.4	66 (44)	152	27	2.3		
<i>AJS</i>	46 (32)	100	16	2.2	47 (31)	101	18	2.1		
Specialty	(138)	(316)	(49)	(2.3)	(115)	(188)	(33)	(1.6)		
<i>RS</i>	26 (18)	46	7	1.8	21 (14)	32	6	1.5		
<i>JM&F</i>	25 (17)	95	15	3.8	21 (14)	43	8	2.0		
<i>SP</i>	24 (17)	43	7	1.8	21 (14)	30	5	1.4		
<i>SOCIOM</i>	22 (15)	48	7	2.2	12 (8)	16	3	1.3		
<i>SOC OF ED</i>	17 (12)	33	5	1.9	10 (7)	13	2	1.3		
<i>JH&SB</i>	12 (8)	30	5	2.5	13 (9)	19	3	1.5		
<i>ASQ</i>	12 (8)	21	3	1.7	17 (11)	35	6	2.0		
Total	290	642	100	2.2	285	567	100	2.0		

*Oromaner (Ref. 15, p. 36, Table 2).

[†]*Social Forces*, *American Sociological Review*, *American Journal of Sociology*, *Rural Sociology*, *Journal of Marriage and the Family*, *Social Problems*, *Sociometry (Social Psychology Quarterly)*, *Sociology of Education*, *Journal of Health and Social Behavior*, *Administrative Science Quarterly*.

**Percentage of all articles (N=145).

[‡]Percentage of all articles (N=149).

Administrative Science Quarterly. The three remaining journals—*Rural Sociology*, *Journal of Marriage and the Family* and *Social Problems*—are intermediate to the core journals and the interdisciplinary journals in the extent to which core journal articles are cited. However, it is quite clear that the major division is between core and specialty journals. Although there is no difference in the percentage of core articles cited in the *AJS* or *SF* during the two time periods, such articles were more likely to be cited in the *ASR* during 1974–83 (44 per cent) than during 1961–70 (34 per cent). At the same time, five of the seven specialty journals cited a larger percentage of core journal articles during 1961–70 than during 1974–83.

The 1960 articles were cited in 642 articles, while the 1973 articles were cited in 567 articles. The source of these citations also suggests the relative decline in importance of core journal articles for specialized journals. For instance, although citing articles were almost equally likely to be found in core (51 per cent) and specialty (49 per cent) journals for the 1960 sample, two-thirds (67 per cent) of the citing articles for the 1973 sample appeared in the core journals. In addition, each of the core journals accounted for a larger percentage of the citations to the 1973 sample than to the 1960 sample, while *Administrative Science Quarterly* was the only specialization journal to have accounted for a larger percentage of citations to the former than to the latter.

The mean number of core articles examined increased from 151 per year (1961–70) to 162 per year (1974–83), and the mean number of specialty articles per year increased from 237 (1961–70) to 274 (1974–83).²² Core articles accounted for 39 per cent of the 1961–70 articles examined and 37 per cent of the 1974–83 articles examined. However, as we have seen, core articles accounted for 51 per cent and 67 per cent of the citations.

Summary and discussion

The assumption on which this research was based is that citations in articles in a variety of journals indicate the extent to which articles published in core journals provide integrating contributions to the sociological discipline. The major findings are:

1. Although a majority of the core articles were cited in one of the ten examined journals, one-third (1960) and one-fifth (1973) of the articles failed to receive even one citation.
2. During both periods, core articles were more likely to be cited in core articles than in specialty articles.
3. Core articles published in 1973 were more likely to be cited in core articles than were core articles published in 1960, while, in general, core articles appearing in 1960 were more likely than those published in 1973 to be cited in specialty articles.

²²The mean number of core articles per journal per year increased from 50.2 (1961–70) to 53.9 (1974–83), and from 33.8 (1961–70) to 39.2 (1974–83) for specialty articles. These data are based on all articles in each journal for the years 1961, 1965 and 1970 for the 1960 sample and 1974, 1978 and 1983 for the 1973 sample.

²³BAUGHMAN, *op. cit.*, Ref. 7, 306.

The fact that only 13 per cent (1960) and 10 per cent (1973) of the core articles were cited in five or more journals raises questions concerning statements such as: ‘The core journals for the total discipline are also the primary core journals for the subdisciplines in sociology’.²³ I suggest that the core journals are becoming relatively less likely to play a role as primary core channels for the subdisciplines and that this role is likely to

be played by specialty journals themselves or textbooks and monographs.²⁴

A comparison of the content of the *ASR*, *AJS* and *SF* for the years 1968 and 1978 led Smalley to conclude that 'sociology as a discipline is increasingly rewarding empirical and numerical data studies'.²⁵ Smalley could have been a little more conservative and limited her conclusion to the three examined core journals; however, the orientation of these journals may account for the relatively modest role they appear to play in the discipline's journal literature. Alexander has criticized 'important' journals such as the *ASR* for having undergone a transformation 'from broad, intellectual organs into specialized outlets for "scientific sociology"—atheoretical exercises in verification, falsification, and theory "construction"',²⁶ while Spector and Faulkner have proposed that the general journals are not general at all, 'but are dominated by a narrow range of research designs, procedures for data collection, and modes of analysis and theorizing'.²⁷

If core general journals are to play a significant role as channels of publication for integrating contributions, their editors would do well to consider Bierstedt's analysis and advice of two decades ago:

... one of our most imperative needs in contemporary sociology is not more theory, in the sense in which our theory has recently developed, but more theses — that is, positions advanced, taken, defended, lost, and won again in the eternal dialectic that is the life of the mind.²⁸

How many theses, in Bierstedt's terms, have appeared in the core journals?

Peritz has shown that methodological articles in the core journals, 1972 and 1973, are more likely to be cited than are theoretical or empirical articles.²⁹ Unfortunately she does not present data on the nature of the citing journals, the number of different citing journals, or the reason for citation. She does, however, point out that the reason for the citation may not coincide with the classification of the article, e.g., theoretical or empirical articles may be cited for methodological reasons. Content and contextual analyses of citations are needed. It may be fruitful for such studies to distinguish between Bierstedt's theories and theses.

A reader of this article has suggested that the core journals do not play an 'integrating' role, but rather represent the mainstream of the discipline, publish articles on topics similar to those covered by the specialty journals, and are 'career boosters'. Literature pointing to the role of core journals in career advancement has been cited. There is no contradiction between the integrating role of core journals and the career enhancement role. I suggest that the major reason for the latter role is that these journals are perceived of as fulfilling the former role.³⁰ This article has presented data on the extent to which core journals publish articles that are cited in a variety of specialty journals. Such a measure is one way of operationalizing the concept of integrating contributions. It may, of course, be that authors of articles in specialty journals cite articles in core journals as a means of associating their work with that of a prestigious sociologist who has published in the core journals. Cross-journal citation studies of articles in specialty journals over time would provide data needed to develop a more comprehensive view of the role of various types of authors, articles and journals.

The second area of concern raised by the reader involves the diffusion

²⁴GASTON (*op. cit.*, Ref. 1, 790) and RODMAN and MANCINI suggest that as sociologists achieve 'famous' or 'eminent' status, they avoid the possibility of having their work rejected by a journal editor and are much more likely to publish books, monographs and commissioned chapters. Rejection rates for the core journals are in excess of 80 per cent. It may be that the famous or eminent status referred to provides one with an opportunity to develop contributions that are relevant to a number of areas within the discipline. RODMAN, H. and MANCINI, J. A. (1981). The publishing patterns of eminent social scientists. *Sociology and Social Research*, 65, 381–389.

²⁵SMALLEY, T. N. (1981–82). Trends in sociology literature and research: A comparison of characteristics of journal articles, 1968 and 1978. *Behavioral & Social Sciences Librarian*, 2, 16.

²⁶ALEXANDER, J. C. (1984). Social-structural analysis: Some notes on its history and prospects. *The Sociological Quarterly*, 25, 5.

²⁷SPECTOR, M. and FAULKNER, R. R. (1980). Thoughts on five new journals and some old ones. *Contemporary Sociology*, 9, 479. SPECTOR and FAULKNER point out that new journals specializing in qualitative, interactionist and humanistic sociology have begun publication and that as these journals grow, the 'mainline' journals may find themselves in a more competitive situation. They go so far as to suggest that the new journals may receive the right of first refusal of an increasing number of manuscripts.

²⁸BIERSTEDT, R. (1960). Sociology and humane learning. *American Sociological Review*, 25, 8.

²⁹PERITZ, *op. cit.*, Ref. 7.

³⁰Although I am not proposing that there is a necessary correspondence between mission statements and actual functions of journals, the mission statement of the *American Sociological Review* indicates that: 'The *American Sociological Review* publishes work of interest to the discipline in general, new theoretical developments, results in research that advance our understanding of the most fundamental social processes, and important methodological innovations. . . . Unlike the more specialized journals of the Association, the *American Sociological Review's* primary focus is on whatever has the most general bearing on the knowledge of society.'

³¹DOREIAN, P. and FARARO, T. J. (1985). Structural equivalence in a journal network. *Journal of the American Society for Information Science*, 36, 35.

³²Gordon's recent study of the publication patterns of biochemists led him to reject the 'reward maximization' model to account for journal selection by authors and to substitute a visibility model. Biochemists publish in journals that give the authors visibility amongst significant peers. However, he (Gordon, p. 41) suggests that in the case of sociology, 'a limited number of core journals (for example, *American Sociological Review*) offer exceptionally high rewards to an author, and visibility to his or her work'. Gordon's study also points to the need for replication in the social sciences. GORDON, M. D. (1984). How authors select journals: A test of the reward maximization model of submission behaviour. *Social Studies of Science*, 14, 27-43.

or flow of information between core and specialty journals. The results of a recent study of the journal-to-journal citation network of journals publishing articles of interest to 'model-building' sociologists³¹ reveals 'a simple core-periphery structure of the network. The core is comprised of journals that are broad or comprehensive journals. Each of the peripheral sociological journals are tied to the core but not to each other.' The comprehensive journals referred to are the three core journals identified in this article.

The centre-periphery model should be tested for in other specialties and research areas in sociology and other disciplines. Finally, citation studies must be supplemented by analyses of the publication, reading, and informal communication patterns of sociologists and other researchers.³²