United They're Cited: Impact of a Social Work Coauthor Network

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Abstract: *Social work has emphasized the importance of the social environment, and social networks are an important means of understanding the social environment. The scholarship of a journal coauthor network provided important findings and an example. Prior theory and research suggested there are more citations from the center of coauthor networks than at the periphery. Using abductive logic, complexity theory, social network analysis, and tabular analysis of a social work coauthor network, the center of the network was found to produce more citations than the periphery. Both the prestige of coauthors' setting and position were modestly associated with network centrality and citations. The functionality of citations, which includes the contribution to good scholarship, is questioned. Areas of further research and issues of evaluating coauthored scholarship are discussed. Placing greater value on coauthoring and publishing with less prominent coauthors for tenure and similar decisions is recommended.*

Keywords: *Network analysis, coauthored articles, citation achievement, complexity theory, abductive logic, social work scholarship*

Social work scholarship has become increasingly collaborative. Computer models of social interaction have produced theory and logic of social networks, and a common area of study of such networks has been that of academic coauthors. Research has found that coauthor network centrality has been associated with citations, though there have been contending interpretations of citations. From such work and with publically available data, the present study examined the development of a social work coauthor network and the impact of that network on scholarship. Using exploratory abductive research, this study examined whether network centrality measures were associated with authors' citation advantages and if those measures and citations were related to academic prestige.

Importance for Social Work

Long-standing critiques of social work and social science might be addressed with the study of social networks as complex systems. Though social work is a profession that is social by name, Specht and Courtney (1995) claimed social workers abandoned their social mission with a trend toward clinical work. Further, Barton (1968) likened research methods such as random sampling to understanding the biology of cells by studying ground meat because randomization stripped out social relationships. Finally, and to the point of the present research, scholarship has become an increasingly social endeavor, and the implications of that development for our knowledge base must be understood. More specifically the present research has begun to address Shuai's (2014) assertion that quantitative study of scholarly communication can help improve effectiveness and assess the quality of scholarship. Before that promise can be fulfilled, the emerging patterns of scholarly communication in social work must be identified; such identification was the central purpose of the present inquiry.

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Complexity Theory, Research Methods, and Coauthor Networks

Considerable theory of social networks has been developed, much of it from computerized simulations called agent-based modeling (Macy & Willer, 2002) (See Table 1 for definitions of key terms). Macy and Willer (2002) point out that on-going network relationships have had future impact, and that agents' partners tended to interact with each other, which in turn has diffused reputations, created bandwagons, and promoted monitoring and enforcement of conformity to norms. Drawing on complexity theory that evaluated social work literature, Hudson (2000, 2005) defined self-organization as spontaneous development of new, unique larger phenomena from the interaction of parts, similar to coauthor interaction in the present research. Hudson asserted that self-organized structures could be functional. Likewise, Börner, Dall'Asta, Ke, and Vespignani (2005) indicated coauthor networks functioned as a social brain, greater than the sum of individual authors and able to dynamically respond to increasing demands.

Other assertions of functional coauthor networks included Zaccala's (2004) sharing and developing new ideas, or sharing expertise (Gelman & Gibelman, 1999; Moody, 2004). Uzzi and Spiro (2005) theorized that coauthor networks enabled the material to develop and become credible, and Burt (2004) argued that structural holes, the gaps between cliques filled by one person, provided unique vision and brokerage. Rivera, Soderstrom, and Uzzi's (2010) review pointed to homophily, or similarity, as well as complementary or differing abilities as a basis for coauthoring and to clustered cliques that favored norm development.

Coauthor networks might be functional if they produce citations that advance scholarship, and coauthor networks and network properties have been shown to be related to the volume of citations. Rivera et al. (2010) noted that people with more ties were likely to be more successful in general, and Baldi (1998) and Beaver (2004) indicated coauthors produced more citations than single authors. Börner, Maru, and Goldstone (2004) claimed citation and coauthoring networks have coevolved. Further, Börner et al. (2005) as well as Yang, Jaramillo, and Chonko (2010) found that authors' central location in the network produced a large numbers of citations. Uddin, Hossain, and Rasmussen (2013) examined the network centrality measure called degree, or the number of coauthors. They found these measures were correlated with the number of citations. Such findings guided the present research.

Literature also provided guidance for the methods of the present research. Power-law distributions have a few extreme values at one end and many common values at the other end (Clauset, Shalizi, & Newman, 2007). Barabási et al. (2002) claimed network growth patterns approximated power-law distributions, meaning that a normal distribution of variables cannot be assumed. Tol (2009) found this to be true for citations of economists, as did Ho (2013) for social workers. Further, the complex adaptive nature of networks (Aydinoglu, 2013) has made networks unsuitable for linear analysis. Thus, visual and tabular analyses were used in the present investigation. As Aydinoglu indicated, complex adaptive systems have had limited predictability, and social network variables have also had uncertain time-order (Kadushin, 2012). Abductive reasoning is the logic of agent-based modelling (Halas, 2011), and can be used to interpret findings (Kaag, 2014). Traditionally, theory-hypothesis-finding was the order of deduction and finding-generalization-theory

was the order of induction. However, abductive logic has begun with theory and generalization, developed from computerized simulations in the present instance, as one possible explanation of a particular finding. For example, abductive logic is the logic used in mental health diagnosis. Thus, abductive logic, limited causal interpretation, and approximate power-law distributions were methodological considerations in the present investigation.

Table 1. *General Definitions of Key Terms*

Term	Definition Used in this Study
Abductive logic	Logic that proceeds from modeling-derived generalizations to a possible explanation of a finding.
Agent-based modeling	Computer modeling that simulates the actors (authors) and interaction (coauthoring) to develop theoretical generalizations.
Betweenness	The number of paths (chains of coauthorships) between nodes (authors) on which a particular node (author) lies.
Clustering	The proportion of actualized relationships (coauthorships) among a node's (author's) possible ties (coauthorships).
Complementarity	Differences of attracting value between actors (authors).
Degree	The number of direct ties (coauthorships) of a node (author) to other nodes.
Homophily	Similarity of attracting value between actors (authors).
Network centrality	The central placement of a node (author) in a network indicted by measures such as degree or betweenness.
Node	Network locations (authors) connected by ties (coauthorships).
Power-law distributions	Skewed distributions characterized by a few extreme values at one end and many common values at the other end.
Self-organization	Development of new phenomena (coauthor network) from interaction (coauthoring) of parts (authors).
Social network analysis or SNA	Analysis of networked nodes (authors) and the ties (coauthoring) with maps and statistics describing the attributes of the nodes, ties, and the network.
Tie	A line (coauthoring) that connect nodes (authors) in a network.

Coauthor networks have been studied widely, but not in social work. Coauthoring has been increasing in many disciplines for some time (Bozdogan & Akbilgic, 2013), including sociology (Moody, 2004), physics (Martin, Ball, Karrer, & Newman, 2013), and high-impact Finnish medical research (Riikonen & Vihinen, 2008). In economics, the average number of coauthors almost doubled between the 1970s and 1990s as the coauthor network grew by a factor of six (Goyal, Van Der Leij, & Moraga-González, 2006). Increased coauthoring in social work was noted by Gelman and Gibelman (1999), and resulting networking was studied by the present author (Woehle, 2012). Some attention to other kinds of networks included Baker's (1992) documentation of a social work network based on citations; Martínez, Cobo, Herrera, and Herrera-Viedma's (2014) map of social work literature themes; Blakeslee and Keller's (2012) study of coauthors in the social work related area of youth mentoring; and Williams et al.'s (2008) mention of, "A Network for

Social Work Education and Research." However, the social work network literature is less extensive than other studies of networks.

In brief, complexity theory and research in various fields have suggested that coauthor networks can be functional systems that can have impact on and improve scholarship via citations. Complexity theory, abductive logic, and attention to power-law distributions, as well as variables associated with the coauthoring-citation relationship, have been identified as research issues. However, coauthor networks have been mostly ignored in social work and are thus ripe for study.

Methods

Three major analyses for the present investigation included: (1) mapping a social work coauthor network for a set of articles and their associated citations, (2) description of the association of networked authors' network centrality with citations, and (3) description of the association of authors' university, school, and academic rank with network centrality and the citations they achieved. Across these tasks, the variables studied were located in a time order that limits the ways that influence might have operated, as indicated in Table 2. University and school characteristics were first in time. Coauthors came together prior to publication, and citations followed publication. Therefore, while claims of linear causality are not made here, questions explored in the present research assumed that time order.

Table 2. *Time Frame and Source of Variables in the Analyses*

Variable	Source	Origination Time
University Rank	Shanghai Jiao Tong University (2003)	Prior to 2003
School Rank	Feldman (2006)	1990-2003
Academic Rank	Article or online source	Prior to publication
Network Variables	Articles studied	Prior to publication
Publication Time	Dates from Google Scholar	2006-2008
Citations of Articles	Google Scholar	Article publication through 2013

Discovering and Describing the Network

The identification of networked authors and articles involved social network analysis (SNA), developed as a method for analyzing objects (nodes) connected by lines representing relationships (ties). SNA has designated actors as nodes and relationships as ties (Kadushin, 2012; Knoke & Yang, 2007), or authors and their coauthoring respectively in the present investigation. The nodes or authors were used in a manner similar to units of analysis in traditional research, but SNA has conceptualized ties as though they were another kind of unit of analysis with variable attributes. For example, in the network diagrams in this article, the width of the ties represented the amount of coauthoring. Börner et al. (2005) applied SNA in a somewhat similar manner to the present analysis.

While conducting an earlier study (Woehle, 2012), a particularly well-connected group of coauthors was documented, and the association of those authors with citations was described generally. In that earlier study, a centrality measure called eigenvector centrality was used to identify a central network skeleton. That skeleton was the initial basis of the

network in the present research, and it suggested that the network in the present endeavor was one of the most highly connected social work coauthor networks at the time. For the present study, those authors' coauthor relationships were followed to reveal the full network of coauthors who had addressed social work. The coauthor ties were followed from one coauthor to another, until the trail expired as far as 10 consecutive relationships from an initial author. Google Scholar was utilized to search for coauthors in the social science area covering the years 2006-2008. The search required inclusion of the term "social work," or a term that translated literally to social work by GoogleTranslate, in the journal title or statement of purpose. To be included, both authors in a pair had to be listed as a seventh author or higher. Authors' names were checked manually for spelling variations and secondary characteristics like work settings to assure identity.

NodeXL (Smith et al., 2009), an SNA template for Microsoft Excel, was used to diagram the coauthor network. The primary data were the authors' names, entered by listing each pair of coauthors in NodeXL in horizontally adjacent cells. NodeXL allowed coding of node and tie attributes and calculation of network-derived attributes. Nodes or coauthors were attributed weights for being variously cited. Coauthor ties were given weights according to year of first use and total amount of use. Coauthors were weighted equally in a given article and summed for multiple uses of the tie in all included articles to establish the total use of a coauthor tie. Age of network ties was used to diagram shades of gray, with lighter shades indicating greater age, that is, longer publication tenure in the network. NodeXL then created a diagram, arranged for visualization, using an algorithm in the program. The drag-and-drop capabilities of the program were used to further separate authors. The diagrammed network was based on 134 articles and 258 coauthors representing 584 coauthor relationships.

The journals, and the number of articles included from each journal, are listed in Table 3. The authors of the articles form a network, but the articles do not form a thematic whole beyond the social-work-related limitations described above. Research was a possible theme, with 42 articles from the research journals *Social Work Research* and *Research on Social Work Practice*. In addition, eight more article titles mentioned research topics. However, the articles varied from methodological discussions to reports of research projects and applications of research findings. While 14 articles mentioned evidence-based practice in the titles, that topic was variously approached, including discussion of problems, as well as attempts to implement evidence-based practice. With 21 articles, child welfare was another popular topic. Many of these articles were research-based, and 12 were published in child welfare journals. Twelve other articles addressed health, five of which addressed mental health. Articles in other areas included seven on spirituality, six on gerontology, and four on Latino issues.

Table 3. *Journals and Number of Articles in the Analysis*

Journal	# Networked Authored Articles
Administration in Social Work	2
Advances in Social Work	3
Affilia	1
American Journal of Community Psychology	1
Child & Adolescent Social Work Journal	3
Child & Youth Care Forum	2
Child Abuse and Neglect	3
Clinical Social Work Journal	1
Families in Society	1
Health and Social Work	4
International Journal of Social Welfare	2
International Social Work	6
Journal of Community Practice	4
Journal of Community Psychology	3
Journal of Comparative Social Welfare	1
Journal of Evidence-Based Social Work	2
Journal of Family Issues	1
Journal of Gerontological Social Work	5
Journal of HIV /AIDS and Social Services	1
Journal of Human Behavior in the Social Environment	3
Journal of Public Child Welfare	1
Journal of Religion & Spirituality in Social Work	4
Journal of Social Work Education	12
Journal of Social Work in Disability & Rehabilitation	1
Journal of Social Work Practice in the Addictions	1
Portularia	1
Qualitative Social Work	1
Research on Social Work Practice	21
Residential Treatment For Children & Youth	3
Social Work	9
Social Work & Society	1
Social Work in Health Care	2
Social Work in Public Health	6
Social Work Research	21
Women in Social Work	1
Total Articles	**134**

Citations were allocated to authors with self-citations removed. Self-citations were calculated in two ways--a conservative method which subtracted every instance of self-citation from an article's total, and a fractional method, in which a self-citation reduction was calculated as the product of the fractions of shared authors in the cited and citing articles. An author's coauthoring share for each article was multiplied by an article's citations and summed for all of an author's articles, with self-citations subtracted, to allocate an author's citations. Citation counts with both self-citation measures are reported in Tables 4 and 5, but an average of the two citation measures was used to allocate node

size in the diagrams. Citations of articles were counted using Google Scholar. As with the articles above, citations were limited to citations in journals with the term social work, or a literal Google Translate translation to that term, in their title or statement of purpose. Citations accumulated by an article by the end of 2013 were counted, a period of five through seven years. That was longer than Baldi's (1998) generally expected period but shorter than Hodge and Lacasse's (2011) expected period for social work, resulting in continuing growth of citations as the present study progressed. There were 626 citations by the whole self-citation removal measure and 710 citations by the fractional removal method.

Analysis of Authors

NodeXL was used to develop network variables and then to explore how the network might produce citations. SNA provided the author attributes of degree, clustering, and betweenness. Degree was the count of a given author's coauthors, clustering was a measure of the extent to which an author's coauthors form a clique using the possible relationships, and betweenness was the extent to which an author lies on paths of ties between other networked authors. These variables, as well as the citation variable, approximated power-law distributions, non-normal highly skewed distributions characterized by numerous similar values at one end of the distribution, and infrequent but extreme values at the other end. Clustering had the highest values at the low ends of the degree and betweenness distributions. For an analysis of these variables in relation to status variables, and for network diagrams, an index was created which divided each centrality variable by its largest value, thus standardizing each to values of 0 to 1, then summing the degree and betweenness standardized variables, subtracting the clustering variable, and dividing that result by 3. The resulting index approximated a power-law distribution in which a few very central authors approached a maximum value of 0.50 and a large number of clustered and peripheral authors approached a minimum value of -0.29. Though the raw network centrality variables were also used in some analyses, the index provided a more continuous variable to analyze the relationships between networking and status variables on one hand and citations on the other. The authors, or nodes, were depicted in network diagrams as rectangles labeled with the author's name for more central authors by the indexed measure, and Xs for the less central. Greater size of the rectangle and font represented larger numbers of citations, measured by an average of the two measures. For example, in Figure 1 below, Bledsoe and Hodge were among the more central and cited authors and thus are named with large font size in large rectangles of the diagram.

Measures of authors' setting and professional status were also examined. Most of the authors were at universities. University rankings based on accumulated citations developed by Shanghai Jiao Tong University Institute of Higher Education (2003) were used. A highly ranked group spanned by Harvard to Emory was designated as the top rank here, as opposed to all other settings which were designated as the lower rank. Feldman's (2006) analysis of doctoral programs in social work provided the basis for school rank. His list ranged from 1 to 69 and allowed a dichotomous measure of the top 30 as opposed to all other settings. That dichotomy, based on Feldman's survey-based scale, may have resulted in measurement problems from a combination of respondent unfamiliarity with social work

schools and author location outside of a doctoral school of social work. It should also be noted that both the university and school measures were ecological and perhaps were weak measures of the coauthors' actual situation. Finally, author rank at first publication was used to create a dichotomous variable. Deans, chairs, and professors at or above the associate professor level were considered high rank, and less prestigious positions were considered low rank. Author rank information was either reported in the first network article published or gleaned from curriculum vitae or similar on-line postings for each coauthor. Ten of the 258 networked coauthors could not be so identified and were assumed to be in low-status positions.

In brief, the methods included identification of an article-based social work coauthor network, and the authors of the network were compared by citation production to network centrality, prestige of research setting, and author's academic position.

Findings

The questions described in the introduction were tentatively answered by the present research: Power-law distributions of degree, betweenness and clustering were associated with similarly distributed authors' achievement of citations, and, high university, school or academic rank of an author slightly favored greater network centrality and citations.

The Network, Citations, Centrality, and Author Status

Figure 1 depicts the network constructed of the coauthors studied. The network diameter, or the number of consecutive ties between the most distant authors, was 18, with an average distance between coauthors of more than seven degrees. Figure 1 revealed the full network as a central structure and attached cliques. Clustered cliques were apparent throughout the structure, but large nodes that represent highly cited authors were frequently notable between two or more cliques, indicating comparatively more centrality but less clustering of those authors.

Table 4 presents relationships between the citations of authors and the network variables. The 258 authors were sorted into roughly equal quintiles, from those allocated the most citations to those with the least. As Table 4 shows, authors' median degree and betweenness were skewed similarly to citations, and median clustering was inversely skewed compared to citations. In particular, having had a high degree, or many coauthors, and greater betweenness, or lying on paths between other authors, resulted in greatly enhanced citations. The first quintile had more than four times the citations of the second quintile. Alternatively, authors in a cluster at the periphery approached zero citations. The broad ranges of the variables suggested exceptions to these generalizations. A notable exception is Parrish, who was much cited despite only coauthoring with Rubin (See Figure1).

Table 4. *Association of Network Variables with Citations among Authors (n= 258)*

# of AUs	Degree Median (Range)	Betweenness Median (Range)	Clustering Median (Range)	Citations/ AU Minus Whole Self-Citations	Citations/ AU Minus Weighted Self-Citations
52	6.0 (1-16)	634 (0-7,290)	0.3 (0-1)	8.7	9.6
57	4.0 (1-12)	0 (0-7,063)	0.7 (0-1)	2.0	2.2
49	4.0 (1-17)	0 (0-7,383)	0.9 (0-1)	0.8	1.0
52	3.0 (1-12)	0 (0-5,170)	1 (0-1)	0.3	0.4
48	3.0 (1-10)	0 (0-4,895)	1 (0-1)	0.0	0.1

AU=Author

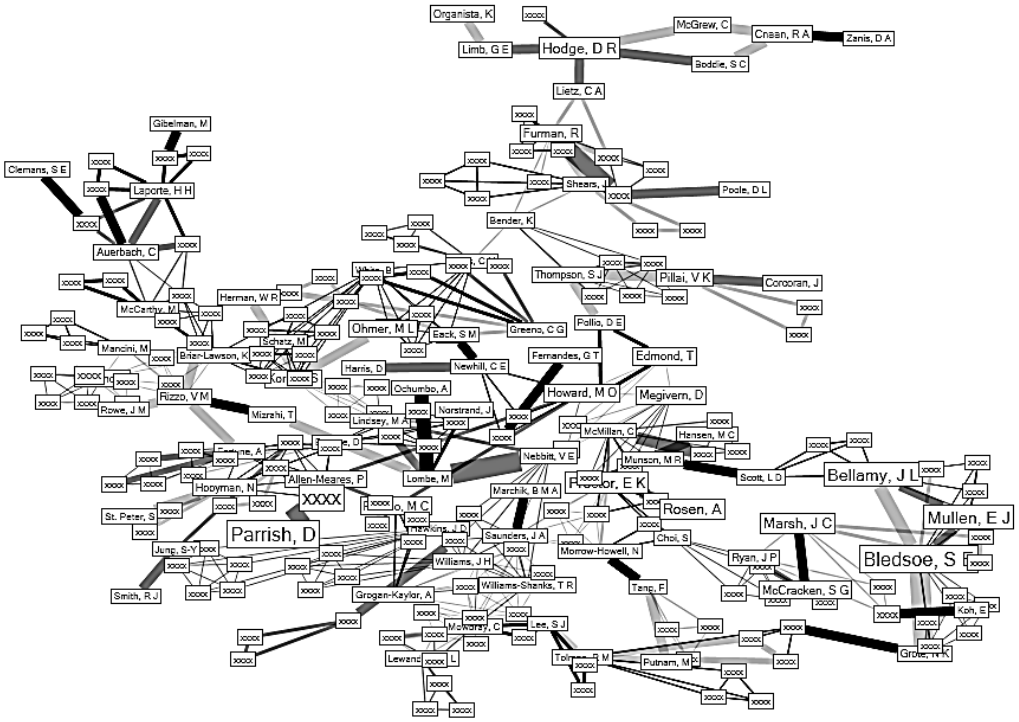

Figure 1. The complete coauthor network. Font and node size represent the author's share of citations. The gray ties were older, and the wider ties were more heavily used. Named authors were most central.

Figures 2 and 3 further show the relationship of network variables and citations. The authors in the top 34% of scores on the networking index are shown with their coauthoring relationships in Figure 2, with the less connected of the coauthors and their ties removed. By either citation measure, the authors in Figure 2 accounted for about 66% of the citations, or almost twice the share that would have been expected from a random distribution. A few

individuals or small cliques were disconnected in Figure 2, either because they were not central or not cliquish, and some specialized groups were connected by one important tie, such as the spirituality-oriented group around Hodge at the top, or the research-oriented group around Bledsoe at the bottom right. However, a large interconnected component at the center of the diagram pulled most of these authors together. Figure 3 depicted the 66% of authors that together accounted for 34% of the citations, about half of the expected amount. Small numbers of citations were indicated by the many small rectangles, and that is clearly associated with the absence of central ties shown by the fragmentation of Figure 3. While there were some networked segments, more obvious were the triads, dyads, and single authors scattered throughout Figure 3. Together, Figures 2 and 3 illustrate that authors who eventually would be most cited often were initially likely to be in the central and large connecting structures of the coauthor network.

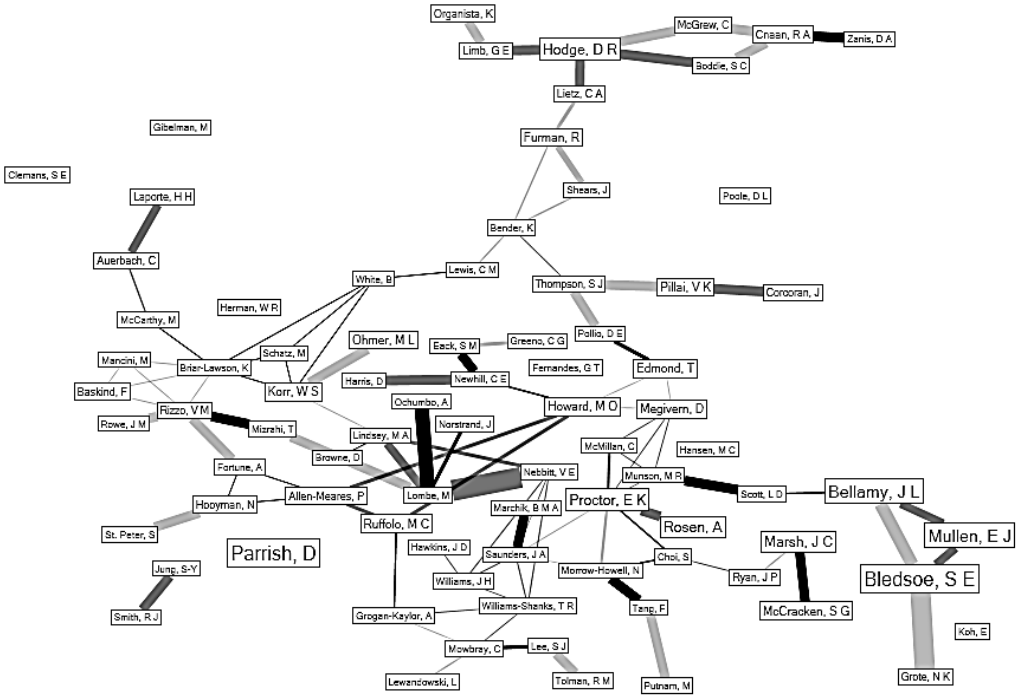

Figure 2. Network Analysis showing the 34% most highly connected and most cited coauthors. The font and node size represents the author's share of citations. The gray ties were older, and the wider ties were more heavily used.

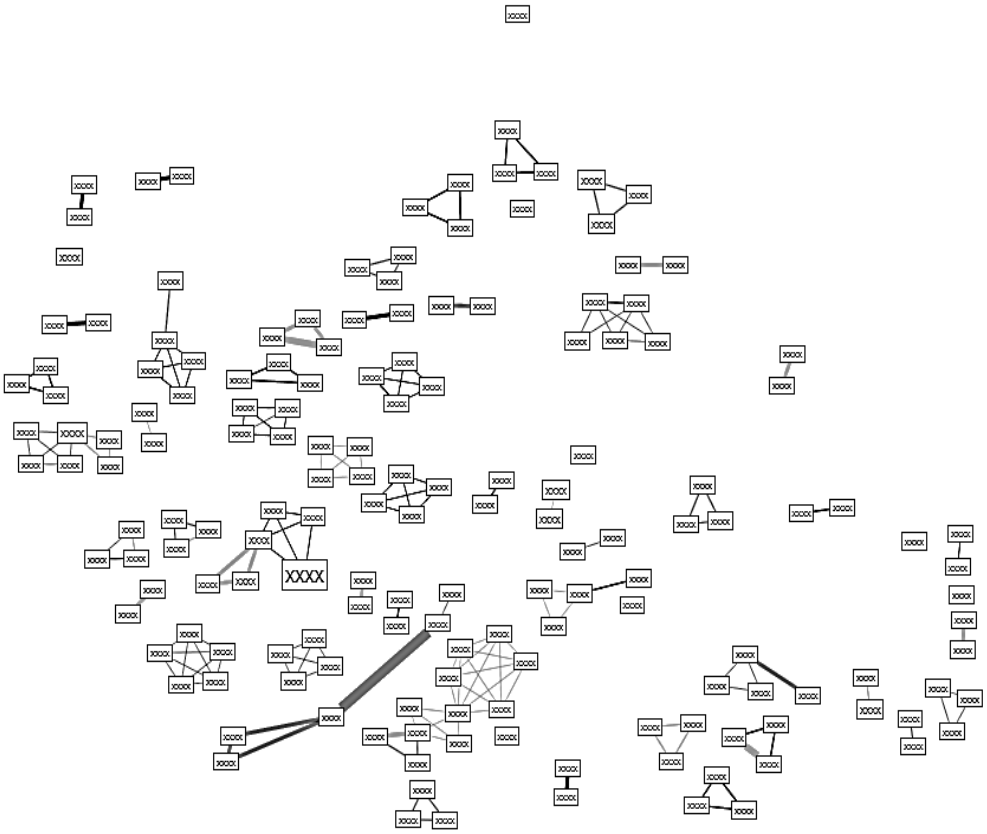

Figure 3. Network analysis showing the 66% least connected and least cited coauthors. The font and node size represent the author's share of citations. The gray ties were older, and the wider ties were more heavily used.

Table 5 presents the relationship between network centrality, citations, university rank, school rank, and academic rank of authors. As shown, the emergence of networking was more probable under high status conditions. However, the network index was more strongly related to citations which suggested that citations emerged primarily out of network centrality compared to the status measures, though limitations of status measurement raised questions regarding that assertion.

Table 5. *Network Index by Citations, University Rank, School Rank, and Faculty Rank (n= 258)*

n	Network Index Median, Range	Citation/ AU*, Whole Measure	Citation/ AU, Fractional Measure	% in ↑[x] Ranked Univ.	% in ↑ Ranked Schools	% ↑ Ranked Faculty
89	.07 (.02 to .50)	4.6	5.1	33%	65%	46%
87	-.24 (.00 to -.25)	1.6	1.9	32%	55%	38%
82	-.27 (-.27 to -.29)	0.8	0.9	20%	48%	20%

*AU= Author, [x]↑=Highly

Discussion

The findings of the present research appear to be consistent with complexity theory when they are interpreted abductively in light of that theory. The network appears to be self-organized by authors. University settings which are known to favor such self-organization are likely to encourage and sanction rules for scholarship. The impact of the network on citations suggests diffused reputations of authors from structural holes, resulting in citation bandwagons. The approximate power-law distributions of the network variables and citations resemble those found in complex systems. However, the research presented here should be regarded as tentative; more research is needed.

There are shortcomings of the present research which should be addressed. The public data used here limited which variables could be considered and may have resulted in poor measurement of variables, especially school and university prestige. Given that, more research is needed with improved measurement of authors' situations. Power-law distributions generate questions regarding statistical analysis, and research should move beyond the tabular approach used here with improved statistical analysis. Further, the present research should be validated in other social work coauthor networks because the network displayed here may be an aberration. Some future research might be done with public data. For example, the content of articles, or the journals in which they were published might be studied for their impact on citations. Other questions might be answered by a survey of authors. Did the authors have pressure to publish or research support that encouraged collaboration? In addition, the connection of coauthor and citation networks to teaching and practice networks is an important area of future research. Because evidence-based practice is being advocated, it has become important to understand how evidence flows to practice. Another very important unanswered question is that of the function of citations.

Hudson (2000, 2005) noted that emergent structures can be dysfunctional as well as functional. Network bandwagon effects (Macy & Willer, 2002), as shown by Greenberg (2009), could be the source of distortions and lead to cascades of false information. The functional interpretation would have been what Bornmann and Daniel's (2008) literature review called normative, where citations were correlated with awards and honors, but they wrote that was questioned by constructionists who suggested a community whose claims might be based on social agreements among authors, not empirical science. Bornmann and Daniel report that constructionists pointed to the relationship of citations to prior connections as found here. In a profession moving toward evidence-based practice, such construction could be dysfunctional if it departs from the evidence. That makes the study of possible distortion of evidence via networks and citations an area that needs attention.

Given the need for more research, the rush to collaborative scholarship might seem premature. However, the rush is on, it appears to have been underway for some time, and it seems to lead to self-organized complex systems that will not wait for direction from network researchers. Meanwhile, it appears that first and single authoring have been valued most in universities (Seipel, 2003), apparently assuming less prominent coauthors play an unimportant role. As a result, some speculation about such evaluation of coauthors' scholarship is in order.

First, scholars are judged when they might be hired, tenured or promoted, and increasingly their scholarship will be coauthored. If collaboration has contributed to high quality scholarship, then the scholar should be valued for finding a way to produce work of high quality. Second, scholarship should be judged fairly in the process of publication. Perhaps blind review processes should limit reviewers' knowledge of the coauthoring with techniques such as limiting the use of singular versus plural pronouns. Additionally, scholarship is sometimes judged when it is cited. If citations are made for reasons other than improving scholarship or are in error, the citer may contribute to poor quality literature. Thus, citers and reviewers should be attentive to the use of citations.

Scholars at the beginning of a publishing career might want to note the choices that networks present. One choice might be to associate themselves with a well-connected scholar to immediately become a part of a recognized and cited network. However, if such scholars find themselves at the periphery of a network, the choice may be to either unite their cluster by coauthoring with another cluster on a mutually interesting and creative topic or to work in one of the many valued academic positions at the periphery or even outside of coauthor networks.

There may be reasons for coauthoring beyond the accumulation of citations. Uncited coauthors located in practice settings or in less prestigious colleges or universities may help to communicate scholarship to the teaching-oriented community and the practice community. In any case, scholars should be cautious about the pursuit of citations. Martin et al. (2013) found that publication success was more unequal than wealth, or in other words, highly unequal. As a result, a scholar's achievement of highly cited publications is unlikely. Because most authors will have few if any citations, other measures will be necessary for evaluating scholarship in some settings. If the coauthor community is of value for the social work profession, coauthoring itself might be valued as Takeda, Truex, and Cuellar (2010) suggest.

Should social work scholars use coauthoring? Social work values seem to favor such collaboration. However, the inequality of network centrality and citations may not rest as well with social work values. If coauthoring can improve our scholarship, these conflicts will be worth our engagement and our careful consideration of their costs and benefits. In any case, the growth of coauthoring gives us no choice but to confront the issues it brings.

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