

Are Serials Worth Their Weight in Knowledge? A Value Study

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Abstract

The researchers aimed to use qualitative measures to define value as applied to print and electronic serial publications held at Sam Houston State University.

Researchers examined faculty key activities-namely, *Research, Publishing, Course*

Preparation and Development, Service, and Personal Interests—and also asked about the perceived extent of support that library journals provided for these key activities. The results of a survey sent to the faculty of two major colleges, Education and Criminal Justice, emphasized the importance of electronic over print serials for research, publishing, and teaching. Many respondents reported that they never used print serials for key activities but have recently used electronic serials. The print serial collection was reported to provide only minor support for the key activities whereas the electronic serials collection was reported to support those to a major extent. Most faculty respondents reported that they would drop subscriptions to personal interest journals if the Library obtained electronic access.

Introduction

A value study of print and electronic journals was conducted for the collections held at the Newton Gresham Library of Sam Houston State University, classified by the Carnegie Commission on Higher Education as a Doctoral Research University, in Huntsville, Texas, approximately 60 miles north of Houston.

At the outset, the researchers wished to pursue an avenue of research that was less than traditional, and not rely wholly upon statistics and mathematical calculations to determine value. We wanted to evoke truer, clearer evidence of value by allowing our faculty to, in a manner, *tell* us how they value the Library's journal collections. The task was more difficult than it seemed, as our profession, as well as academia in general, has a long history of counting, calculating, analyzing, crunching, and reckoning data; we

have some amazing tools with which to work, and we do it all very well! Ask us to measure value *qualitatively* and we get nervous. For the purposes of our study, we decided to elicit qualitative information using a faculty survey.

Please note that the terms *serials* and *journals* are used interchangeably. Additionally, we defined *value* as the degree to which the Library's journal publications affect the teaching faculty's achievement with regard to *Research, Publishing, Course Preparation and Development, Service, and Personal Interests*. These categories were selected because they closely align with the University's requirements for achievement of tenure and therefore would be areas in which professors were most likely to seek and apply information. We focused on two colleges: Criminal Justice and Education. While the pool of survey respondents was small, the findings are informative.

Literature Review

There is little doubt in the minds of teaching faculty and librarians in colleges and universities that the serial collections in academic libraries have value. Oakleaf (2011) encourages librarians to participate in library value research in order to demonstrate that "value is not about looking valuable, it's about being valuable" (pg.206). Volentine and Tenopir (2013) found that scholars in all disciplines agreed on the value of reading scholarly articles for research; and also that scholarly reading was the basis of all

academic activities, even those not related to teaching. But how might libraries measure the value of their specific journal collections?

Serial collections in academic libraries have been evaluated using a variety of methods. Bucknell (2012) evaluated using the cost per download model to gauge the value of electronic journal articles. Tenopir (2010) suggested the return on investment (ROI) model to appraise the value of serials; and Volentine and Tenopir (2013) surveyed faculty to determine their use of scholarly publications.

Currie and Monroe-Gulick (2013) analyzed the citations of University of Kansas faculty in the Social Sciences, Humanities and Science/Technology. They found that journal articles make up 66% of all citations used by faculty. The University of Kansas library provided access to over 90% of the journals cited by their faculty. Based on these findings, the researchers inferred a high positive value of their library's serial holdings.

Bucknell (2012) identified potential complications with cost per download and usage statistics of e-journals as definitive measures of value. Complications such as the confusion generated by serial title changes, prices changes, and publisher changes can impact formulating an actual cost per download dollar amount. Usage statistics can be skewed by convenience factors such as: platform design, usability of the interface, and the availability of pdf versions of journal articles. Additionally, the reliability of vendor provided statistics must be questioned. Vendor usage statistics may be subject to technological issues and the algorithms to calculate usage statistics can vary, rendering these statistics suspect. Bucknell urges the cautious application of cost per download and usage statistics for decision making and assessments of the value of e-journal

collections. Wood (2006) suggests that combining these usages statistics, such as electronic “hit trackings,” with user surveys could provide enough information for making collection development decisions.

Tenopir and King (2007) reported a favorable demonstration of ROI after interviewing faculty in the US and Australia regarding the use of e-journal collections. Return on investment is the most common business profitability ratio and is usually net profit divided by total assets. In assessing library serial holdings, ROI compares the actual cost of library provided e-journal articles to estimates of alternative sources for the same article. Not surprisingly, they found “comments from both faculty and students speak to the value of collections in terms of time saved, increased productivity in work, and convenience” (pg. 203).

Volentine and Tenopir (2013) analyzed two open-ended questions from a 2011 survey of faculty in six universities in the United Kingdom on the use of scholarly publications. The participants’ comments did not directly correlate to the universities’ serials collection as many referred to books, social media, and other types of publications. Responses indicate faculty highly value scholarly articles for their research across disciplines. They also found that faculty specifically value the immediate and remote access to current and archival articles provided by academic library e-journal collections. They conclude from faculty comments that the quality of the university library’s serial subscriptions contribute significantly to the overall quality of the university.

Value is subjective, and a serial collection deemed valuable by survey of faculty may not appear to be valuable using cost per download analysis, citation analysis or

ROI study methods. Many methods are available to researchers for determining the value of an academic library's serial holdings collection. In order to rely on a specific method, each individual method must be considered within the context in which the data were gathered, the analysis applied, and the conclusions derived.

Methodology

This study used a qualitative survey designed to gauge faculty members' use of and reliance on library subscriptions to print and online journals. The survey measured recentness of use of library print and online journals for key activities—namely, *Research, Publishing, Course Preparation and Development, Service, and Personal Interests*—and also asked about the perceived extent of support that library journals provided for these key activities. The survey also asked participants about their requirements for undergraduate and graduate classes to use library journals; dropping of personal subscriptions in favor of library subscriptions for journals that support the key activities; and travel to other libraries to use journals in support of the key activities.

An invitation for the qualitative survey was sent to all tenured or tenure-track faculty members in the College of Education and the College of Criminal Justice; the survey was available for two weeks during the early fall 2014 semester, with the initial invitation going out on 23 September 2014, a follow-up email going out on 30 September 2014, and the survey closing on 7 October 2014.

The researchers wished to further compare faculty use of journals to the number of journals actually provided by the Library. However, in the end it was not feasible to compare historical journal subscription counts because of several complicating factors.

Over the years, the Library has subscribed to a variety of packages (some now discontinued, and sometimes with overlaps between packages) as well as single-title subscriptions. Exact title lists for all those packages at historical points are not available. Although the Library's historical annual reports are available, the preferred method for counting journals varied over time, such that annual reports differ in their inclusion of components such as aggregated databases, periodicals on microfilm, periodicals in government documents, and so forth. Ultimately it proved almost impossible to accurately count or compare journals per year, prior to the past few years, and so this method of comparison was eliminated from the study.

Results

Survey Demographics

A total of 122 faculty members, comprising all of the currently tenured or tenure-track faculty in the Colleges of Education and Criminal Justice, were invited to take the survey. Of these, 27 faculty members completed the survey, including 16 Education faculty members and 11 Criminal Justice faculty members, for an overall response rate of 22%.

Eleven of the respondents (41%) held the rank of Assistant Professor, while seven (26%) had been tenured and promoted to Associate Professor and another nine (33%) were ranked as full Professor. Nearly 82% of the respondents had been at the University for 14 years or fewer, while only five participants had 15 years or more of employment at the University.

Journal Usage for Key Activities

Of the 27 total survey respondents, two reported never having used the journal collections from the Library, though the majority (93%) of respondents had done so.

Participants reported distinctly less recent use of print library journals compared to online. In fact, for each key activity, anywhere from 40% to 87% of respondents said they have never used print journals; *Service* and *Course Preparation* led this trend with 87% and 68% reported non-usage, respectively. Usage across key activities was most commonly reported to have occurred one to three years past (see Table 1). Among the five key activities, *Research* received the most reports of use within less than a year (four respondents, 16%)—however, even this was still lower than the number of reports of use for *Research* within one to three years (8 respondents, 32%).

Table 1. Recentness of Usage of Library Print Journals for Key Activities

	<i>Never</i>	<i>Less than a year</i>	<i>In the last 1-3 years</i>	<i>In the last 4-6 years</i>	<i>More than 6 years ago</i>	<i>Total</i>
Research	40% 10	16% 4	32% 8	8% 2	4% 1	25
Publishing	48% 11	13% 3	26% 6	9% 2	4% 1	23
Course Preparation and Development	68% 17	4% 1	20% 5	4% 1	4% 1	25
Service Activities	87% 20	4.35% 1	0% 0	4.35% 1	4.35% 1	23
Personal Interests	64% 16	12% 3	16% 4	4% 1	4% 1	25

A strikingly differently usage picture is seen with online library journals (see Table 2). For all the key activities except *Service*, use was most commonly reported

within less than one year, ranging from 61% for *Personal Interest* to 84% for *Research*.

More than six years since use is almost unreported for online journals.

Table 2. Recentness of Usage of Library Online Journals for Key Activities

	<i>Never</i>	<i>Less than a year</i>	<i>In the last 1-3 years</i>	<i>In the last 4-6 years</i>	<i>More than 6 years ago</i>	Total
Research	4% 1	84% 21	4% 1	4% 1	4% 1	25
Publishing	9% 2	78% 18	4.35% 1	4.35% 1	4.35% 1	23
Course Preparation and Development	12% 3	72% 18	12% 3	4% 1	0% 0	25
Service Activities	50% 10	45% 9	0% 0	5% 1	0% 0	20
Personal Interests	17% 4	61% 14	13% 3	9% 2	0% 0	23

Regardless of the journal format, *Research* and *Publishing* stand out as the key activities most likely to precipitate library journal use, as one might expect, while *Service* is least associated with library journal use: 87% and 50% of respondents reported never using print or online journals (respectively) to support *Service* activities.

Perceived Extent to Which Journals Support Key Activities

Faculty were also asked to report to what extent (minor, moderate, or major) library journals supported their work in the key activities. With regards to print journals, the number of participants indicating support to a major extent was very low across all

the key activities; instead, the majority of respondents reported either no use of print journals for that activity or support to only a minor extent (see Table 3).

Table 3. Extent to Which Library Print Journals Support Key Activities

	<i>Minor extent</i>	<i>Moderate extent</i>	<i>Major extent</i>	<i>I don't use them</i>	Total
Research	36% 9	24% 6	16% 4	24% 6	25
Publishing	42% 10	25% 6	4% 1	29% 7	24
Course Preparation and Development	38% 9	13% 3	8% 2	42% 10	24
Service Activities	38% 9	8% 2	0% 0	54% 13	24
Personal Interests	36% 9	8% 2	8% 2	48% 12	25

For online journals, however, a majority indicated support to a major extent for *Research* (92%), *Publishing* (83%), and *Course Preparation and Development* (76%; see Table 4). *Research* is the key activity most supported by library journals, while *Service* is the least supported; this level of support is proportionate to journal use observed in the previous survey questions.

Table 4. Extent to Which Library Online Journals Support Key Activities

	<i>Minor extent</i>	<i>Moderate extent</i>	<i>Major extent</i>	<i>I don't use them</i>	Total
Research	0% 0	4% 1	92% 23	4% 1	25
Publishing	0% 0	8.33% 2	83.33% 20	8.33% 2	24
Course Preparation and Development	4% 1	8% 2	76% 19	12% 3	25
Service Activities	9% 2	13% 3	30% 7	48% 11	23
Personal Interests	25% 6	12% 3	46% 11	17% 4	24

Student Use Requirements

Many of the faculty respondents reported that they do not teach undergraduate classes, but those who do teach at this level require undergraduate use of online journals more than print journals at almost a 3:1 ratio across the areas of *Assigned Readings*, *Course Activities*, and *Writing Assignments* (see Table 5). In particular, *Writing Assignments* was the activity where the highest percentage of faculty required undergraduate use of both print journals (15%) and online journals (32%).

Table 5. Required Use of Library Print and Online Journals in Undergraduate and Graduate Courses

	<i>Assigned Readings</i>	<i>Course Activities</i>	<i>Writing Assignments</i>	<i>Other</i>	<i>I don't teach courses at this level</i>	<i>I don't require students to use these</i>	Total Respondents
Undergraduate Print Journals	10% 2	10% 2	15% 3	0% 0	50% 10	25% 5	20
Undergraduate Online Journals	24% 6	24.00% 6	32.00% 8	0.00% 0	44.00% 11	16.00% 4	25
Graduate Print Journals	22% 4	11% 2	17% 3	0% 0	22% 4	50% 9	18
Graduate Online Journals	72% 18	68% 17	60% 15	16% 4	16% 4	4% 1	25

With regards to graduate students, the ratio of required online journal use to required print journal use jumps, ranging from 4.5:1 to 8.5:1 across activities (see Table 5). *Assigned Readings* is the activity where the highest percentage of faculty required use of both print journals (22%) and online journals (72%). The majority of respondents actually required graduate use of online journals in all activities; 68% required use for *Course Activities*, 60% required use for *Writing Assignments*. In contrast, less than one-quarter of faculty required graduate use of print journals (17% in *Writing Assignments* and just 11% in *Course Activities*).

Dropping Personal Subscriptions

Faculty were asked to indicate whether and how recently they had dropped personal journal subscriptions, in favor of library journals, that supported the key activities. Twenty respondents (80%) reported not dropping any personal subscriptions. Among the five respondents who did drop a subscription, the subscription cancellations occurred within the last 1-3 years; print subscriptions were more likely to be dropped than online subscriptions; and faculty were more likely to drop print journals that supported *Research* (100% of four respondents) or *Personal Interests* (75% of four respondents).

Several respondents shared comments about their motivations for dropping these personal subscriptions, which boiled down to cost, storage space, and ease of access (both in terms of accessing issues in sequence and searchability). However, even faculty who had not dropped a subscription reported a high possibility of doing so in the future if the right institutional access was available. Fully 55% selected Yes and another 9% selected Maybe when asked if they would drop a personal subscription if

they learned that the Library provided *online* access. However, print access provided a less compelling reason to abandon personal subscriptions: only 27% selected Yes and another 18% selected Maybe when asked if they would drop a personal subscription if they learned that the University library provided *print* access.

Traveling to Use Journals at Other Libraries

When asked if they had traveled to another library to use journals in support of the key activities, 20 respondents (74%) said they had not, while seven reported doing so. Of these, four had traveled less than 100 miles from SHSU; two had traveled more than 100 miles from SHSU; and one had traveled to libraries that were both less than and more than 100 miles away. Six out of the seven respondents had traveled to use journals that supported *Research*, three for *Course Preparation*, two for *Publishing*, and two for *Personal Interests*; no one reported traveling to use journals that supported *Service*.

The availability of specific journals is of course one factor that has influenced travel to other libraries. However, based on the write-in comments supplied by faculty, another major factor is the high percentage of SHSU faculty who live outside both the city and county in which the institution is located, frequently commuting thirty minutes, an hour, or more to work at the University. Survey participants reported that they sometimes visited other libraries simply because those institutions were closer to their place of residence. Finally, one respondent noted that he/she was often traveling to other libraries in order to access original manuscript collections and simply accessing

journals there out of convenience, though many of the same journals could have been accessed through the SHSU library as well.

Discussion

The findings demonstrate the Library's success in its mission, which in part includes "providing organized access to a diverse array of quality print, electronic, and other resources," such as journals (Sam Houston State University, Newton Gresham Library). The most meaningful findings indicate that faculty do largely use the journal collections, have a strong preference for online over print, and indicate that the online journals support their key activities of *Research, Publishing, and Course Preparation and Development* to a major extent. Other compelling results show that professors make good use of the journal collections in their undergraduate and graduate courses; again with strong preferences for online resources. Faculty are more likely to require student use of both online and print journals in graduate courses versus undergraduate.

Survey responses also indicate that professors are more likely to consider dropping personal journal subscriptions if the Library provided online access to the same journals. However, to keep these results in perspective, one must remember that many professional association memberships include subscription to the association's journal. Thus, it is unclear whether a faculty member responding that they would *not* drop personal subscriptions means that they would not *want* to give up personal copies, or simply that they would expect to continue receiving these journals anyway via their association memberships. Nevertheless, meeting faculty needs for publishing, course development, grant writing, literature reviews, and even personal interests can aid in

faculty recruitment, retention, and provide support on that sometimes toilsome track to tenure and beyond.

When faculty participants were invited to share any additional comments concerning their perception of the value of the Library's journal collections, several comments praised the comprehensiveness of the collection, especially the back-file holdings; although purely anecdotal in this context, these comments suggest that access to historical as well as current research may be a priority for faculty in these fields. Such a priority may need to be measured more fully and considered carefully when making journal subscription decisions in the Library, because findings that help to better inform future expenditures can increase spending efficiency, cut down on waste, and increase user satisfaction; all coveted circumstances – especially for purse-holding administration and management personnel.

Difficulties

As acknowledged earlier in this paper, the researchers wrestled from the beginning with exactly *how to measure value*. Journal use and/or user satisfaction are admittedly easier to gauge, but value itself equates with worth which is a more elusive concept. We have attempted our best and hope that our work will serve as both informative and as a suitable foundation upon which other work can be built.

Further Research

In conducting this survey, several areas of further research were identified. First, the small participant pool and smaller number of respondents may limit the generalizability of the findings. Additionally, a significant majority of the survey responses came from faculty with less than 15 years at the University, and the survey

applied to a very limited set of disciplines, so the opinions reported may not accurately represent the feelings or serial usage of longer-tenured faculty, or those working in markedly different discipline areas, such as the arts and humanities. With these factors in consideration, researchers might wish to experiment with conducting similar surveys with different timelines to increase participation, and may consider extending this survey's line of inquiry to a broader pool of faculty to determine whether the findings are consistent across various disciplines.

A second area of further research is whether the comprehensiveness of a subject area correlates to assigned value. For example, would Criminal Justice faculty from a university with a comprehensive Criminal Justice collection find serials more valuable than faculty at a university with a very limited serials collection in Criminal Justice? Similarly, if faculty from various disciplines at the same institution assign drastically different levels of value to serials, does the comprehensiveness of their respective subject's serial collections play a key role in this discrepancy? Additionally, if faculty highly value a particular format, is this because of the comprehensiveness of a subject's serial collection in that format, or is it because of other factors? Not accounting for the comprehensiveness of a subject area may result in the value assessment taking on a nontransferable relevance; that is, the results will only depict serial value for faculty of a particular discipline at a particular institution, but there will be no way to accurately gauge how the results may be applied to any other library. Thus, not accounting for this variable may limit the usefulness of the results for other libraries or academic institutions, and may inhibit other researchers from accurately replicating the testing conditions.

A third area of further research is whether the provision of serials in one format influences the frequency of serials use in another format and, if so, to what degree. Results from this study show a possible correlation between the decrease in print serials use over the past four years and the increase in use of online serials over the same timeframe. While this shift in format use is likely due to evolving user preference for the electronic format, it is possible the deviation from print could also be attributed to other variables that have not been taken into consideration. For example, if a patron prefers to use print but routinely experiences difficulty accessing the library's print serials due to high demand for that format (i.e., they are heavily used by other patrons), the patron may resort to using the online format not because of his/her preference for that format, but because of the lack of the print format's availability. In this way, the provision of serials in electronic format would provide a viable alternate means of access, but it would not be the primary catalyst for the decreased use, and the diminished value, of print serials for that patron.

Conclusion

The value of serial collections in academic libraries remains an ongoing discussion among teaching faculty and university librarians. While there are various ways to approach value assessment, this study sought to trace evidence of value through surveying faculty on their use of the library's serial collection when working to support professional activities, including: Research, Publishing, Course Preparation and Development, Service, and Personal Interests. The researchers found that while the participants reported using the library's serial collection for each key activity area, they reported using print serials less than online serial across all categories, with this

deviation occurring most prevalently in areas of Research and Publishing. Areas of Research and Publishing had the highest reported usage rates among both electronic and print serials, whereas Service was the least reported reason for use among both formats. Moreover, teachers of both graduate and undergraduate courses reported requiring student use of online serials proportionally more than print serials, with the ratio of electronic to print being greater in graduate courses. Very few participants indicated that print journals support key activities to a major extent; however, the majority indicated that the library's electronic serials do support key activities to a major extent. The overall results show that the participants do largely use the serials collection, have a strong preference for online over print, and regard this collection as a valuable resource for supporting their key professional activities.

Works Cited

- Bucknell, T. (2012). Garbage in, gospel out: Twelve reasons why librarians should not accept cost-per-download figures at face value. *Serials Librarian*, 63, 192-212.
- Currie, L., & Monroe-Gulick, A. (2013). What do our faculty use? An interdisciplinary citation analysis study. *Journal of Academic Librarianship*, 39, 471-480.
- European Association of Science Editors. (2014). Impact Factor Statement. Retrieved from <http://www.ease.org.uk/publications/impact-factor-statement>
- Oakleaf, M. (2011). Do the right (write) thing: Engaging in academic library value research. *C&RL*, 72 (3), 204-6.
- Sam Houston State University. Newton Gresham Library. (n.d.). About the Newton Gresham Library. Retrieved from: <http://library.shsu.edu/about/aboutngl.html>.
- Tenopir, C. (2010). Measureing the value of the academic library: Return on investment

and other value measures. *Serials Librarian*, 58, 39-48.

Tenopir, C., & King, D. W. (2007). Perceptions of value and value beyond perceptions: Measuring the quality and value of journal article readings. *Serials*, 20(3), 199-207.

Volentine, R., & Tenopir, C. (2013). Value of academic reading and value of the library in academics' own words. *Aslib Proceedings: New Information Perspectives*, 65(4), 425-440.

Wood, E. (2006). Measuring journal usage: add a survey to the statistics? *Journal of Electronic Resources in Medical Libraries*, 3(1), 57-61.

Keywords: value, serials, journals, serial collections, journal collections, electronic journals, electronic serials, research, publishing, course preparation, course development, service, personal interests, teaching, library, university, faculty, print serials, print journals, online journals, online serials