Don’t Fear the Reader: Librarian versus Interlibrary Loan Patron-Driven Acquisition of Print Books at an Academic Library by Relative Collecting Level and by Library of Congress Classes and Subclasses

David C. Tyler, Joyce C. Melvin, MaryLou Epp, and Anita M. Kreps

Recently, a great deal of literature on patron-driven acquisition (PDA) has been published that addresses the implementation and results of PDA programs at academic libraries. However, despite widespread worries that PDA will lead to unbalanced collections, little attention has been paid to whether patrons’ and librarians’ purchasing differ significantly. This study analyzes librarians’ and PDA patrons’ acquisitions at an academic library by relative collecting level and by subject (that is, Library of Congress class and subclass) to determine whether concern over patrons’ collecting are warranted.

Over the past decade-plus, the library literature has produced a wealth of articles, books, and conference papers and presentations on demand-driven or patron-driven acquisition (henceforth, PDA), and the results reported by the field have been almost unanimously favorable, especially where circulation/use has been concerned.1 Likely as a result, numerous academic libraries are considering initiating or have recently initiated PDA programs, and PDA programs have become widespread.2 Esposito, Walker, and Ehling recently estimated that there are 400–600 institutions worldwide with active PDA programs, and, as Walker recently noted, there are “strong indications that [PDA] is becoming an established model.”3 However, concerns over PDA as an acquisition or collection-building method for academic libraries persist. Numerous publications have expressed, or at least acknowledged, librarians’ worry that
patrons, because they make requests for items solely to meet immediate needs and do not have institutional collection priorities in mind, will purchase popular or nonacademic items via PDA or will lard their libraries’ collections with topically idiosyncratic or otherwise inappropriate materials. Other literature on the topic has noted that PDA could be understood to be reducing, if not subverting, subject specialists’ control over their collections and collection budgets. Finally, some recent literature has even gone so far as to warn that, if patrons’ collecting were to diverge too greatly from librarians’, over time PDA could lead to overly narrow or to poorly balanced collections that do not meet researchers’ long-term needs. Librarians, therefore, need to be wary lest “a shift to a patron-initiated collections model not result in gaping holes in the collection that would be difficult to back-fill at a later date.” As Dahl has summarily put it, the arguments against PDA “suggest it is shortsighted and allows collections to be developed based on current needs, trends, and hot topics.” This apparently not uncommon attitude no doubt led one PDA survey respondent to adamantly assert, “PDA cannot function as the primary collection-shaping device for any research library that hopes to fulfill research needs in the future,” and may have prompted Rick Anderson, arguably one of PDA’s stronger advocates, to similarly quip in a recent online dialogue, “If your goal is to build a great collection, then PDA is clearly no way to go about it.”

Certainly, where patron behavior is concerned, there has been some cause for concern evidenced both in the wider interlibrary loan (ILL) literature, more generally, and in the recent PDA literature, specifically. Many PDA programs are ILL-driven, and several articles on ILL or ILL PDA have noted that patrons frequently fail to effectively assess the adequacy of their libraries’ holdings prior to making requests and also sometimes request already owned items. Articles on ILL have noted that academic patrons, even faculty members, not infrequently make requests for recreational reading materials. Additionally, several recent print PDA and e-book PDA studies have also reported small numbers or percentages of requested or purchased materials as being nonacademic or too popular (that is having too low of a readership/content level) for their libraries’ collections.

However, the news on PDA has been hardly all, or even predominantly, bad. Numerous studies, using a variety of criteria and methods, have concluded that, with some restrictive guidelines or a guiding approval plan in place, PDA patrons at academic libraries have largely purchased items that were appropriate to their libraries’ collections. Yet the issues surrounding PDA have not all been resolved. As Shen et al. have remarked, very few studies have “focused on whether, or how, patrons’ selections vary from selection choices librarians would have made.” In fact, the authors of the current study were able to locate only two recent studies on the topic, and both dealt solely with e-book PDA. This dearth of articles points to a serious lack in the library literature where PDA for print materials is concerned, for the somewhat parallel print PDA and e-book literatures suggest that collecting and use trends may differ by format. A preponderance of the recent literature on e-book PDA and on e-book usage suggests that the format favors the acquisition or use of books in the sciences (including engineering/technology and medicine), the social sciences (including education and business/economics/management), or both. Contrarily, almost all of the articles on PDA for print materials suggest that it tends to favor the acquisition of books in the arts and humanities, the social sciences, or both. Thus, a study on PDA for print materials that compared librarians’ and patrons’ acquisitions would seem a worthwhile complement to the two prior studies on e-book PDA.
Review of Literature
As was alluded to above, numerous studies on PDA at academic libraries have focused on whether PDA-purchased items could be adjudged suitable additions to their libraries.\textsuperscript{18} There has, of course, been some evidence of items judged inappropriate or otherwise not suitable—whether by subject, Dewey call number, or Library of Congress (LC) class, genre, readership/content-level, or material type—having been requested or purchased via PDA programs.\textsuperscript{19} Most responses to PDA programs, however, have been positive. Most PDA patrons, when asked to assess their PDA programs or to assess their PDA purchases after receipt, have indicated that they supported the programs or have indicated that they felt that their books were useful, were books that the patrons would use again, were books that they would recommend to a colleague, and/or were books that the patrons felt were good additions to their libraries’ collections.\textsuperscript{20} Librarians and library staff who were asked to comment on their PDA programs also have mostly been enthusiastically supportive of them.\textsuperscript{21} Librarians directly reviewing the requested or purchased items have found the books largely to be worthy and appropriate purchases for their collections.\textsuperscript{22} Finally, librarians reviewing their libraries’ PDA requests or purchases at a somewhat greater remove have found solid majorities of the items to have been in alignment with current collection development policies or parameters, to have been mostly in collection-appropriate call number ranges, to have been in LC classes and subclasses exhibiting locally higher-than-average rates of annual turnover, to have also been purchased by peer institutions, to have been published by suitable publishers, to have collection-appropriate content or readership levels, or to have been favorably reviewed by respected academic review sources.\textsuperscript{23} Thus, the consensus of the PDA literature has been that, with some guidelines in place, academic library patrons have proven themselves capable of selecting titles appropriate to their libraries’ collections and/or of interest to other patrons, as evidenced by their tendency to experience multiple circulations.\textsuperscript{24} In fact, one group of authors has gone so far as to chastise librarians for having insulted their patrons by having assumed the case would be otherwise.\textsuperscript{25}

But as was noted above, there appear to be few research projects reported on in the library literature that address whether patron-acquired and librarian-acquired collections differ, and both of the studies referenced above have evaluated only e-book PDA.\textsuperscript{26} In the first such study, Price and McDonald analyzed meaningful (in other words, nonbrowsing) postacquisition e-book usage data from multiple libraries and found that, at the five libraries with mixed selection (that is to say, both librarians and patrons purchased e-books), patron-selected e-books received around twice as much use as librarian-selected e-books, had considerably higher numbers of unique users at four of the five libraries, had fewer titles receiving no postacquisition use, and, most important for the purposes of this study, had “[d]iscipline level subject distribution [that] appeared to be remarkably consistent across purchase types,” with the exception of a single library where patrons selected twice as many arts and humanities and social sciences e-books while librarian selection favored science and technology.\textsuperscript{27} When Price and McDonald further analyzed e-book purchases’ subject distribution at the level of LC class, they found “relatively similar distributions of the most common classes” in three of the five mixed-selection libraries, one library that had the aforementioned skewing in favor of librarian-selection of science and technology e-books, and just one library that “had an almost inverse collecting relationship for some subjects.”\textsuperscript{28} Thus, Price and McDonald concluded that their analyses “provided good evidence that user-selected collections are no more narrow, skewed, or individually focused than those chosen by [librarian] pre-selection. And in fact, for most institutions in the study, the collecting pattern of users mirrored those of pre-selection.”\textsuperscript{29}
In the second study, Shen et al. took a different approach and, rather than compare patron and librarian selection by subject, compared by title the e-books that patrons selected with the e-books that a volunteer group of subject librarians would have hypothetically selected, assuming unlimited funds and using traditional collection development methods, from the same prepared list of ebrary PDA-available titles. The authors found that just 116 of the 637 patron selections (18.2%) were also selected by subject librarians. However, subject librarians from all areas did not participate in the study. When comparison was limited to five subject areas with participating subject librarians, librarians selected 72 of the 238 patron selections (30%). The overlap was greater, but 70 percent of selected titles were still unique patron selections. Thus, Shen et al. concluded that, although students and faculty did a very good job of selecting library-appropriate titles in terms of their content level, the low number of overlapping selections at the title level was a point of concern, and either patrons were collecting myopically, as compared to librarians, or the traditional library ideology for collection development may have become disconnected from patron needs and preferences.

Background

The setting for the current study is the University of Nebraska-Lincoln (UNL) University Libraries. Chartered in 1869, the University of Nebraska-Lincoln (UNL) is a land-grant university that serves as the research university for the state. UNL’s students, staff, and faculty are served by the University Libraries, which comprise the Don L. Love Memorial Library, six branch libraries, and a remote storage facility, and which house over three million print volumes. The UNL Libraries’ ILL department and its Collection Development Committee coinitiated and implemented an ILL PDA program for print books at the beginning of the 2003 June–July fiscal year. After five-plus years’ operation, the authors collected data on the PDA program and, for purposes of comparison and analysis, on library acquisitions via traditional collection development methods.

Historically, the UNL Libraries had purchased books for the circulating collection via one of four channels: book vendors’ approval plans, librarians’ firm orders, targeted donor bequests, and a lost book replacement fund. ILL PDA added a new, fifth avenue for acquisitions. Over the five-year period in question, the libraries acquired 69,941 books and spent $3,499,262.12 (see table 1). Librarians’ orders accounted for 41.3 percent of books purchased and 42.5 percent of acquisition dollars spent on books, and patrons’ orders via ILL PDA accounted for 2.1 percent of books purchased and 2.4 percent of acquisition dollars spent on books. Over the period, the libraries acquired books in 256 Library of Congress (LC) classes and subclasses. The librarians purchased books in 212 of these LC classes/subclasses, and the ILL patrons purchased books in 140 of

<table>
<thead>
<tr>
<th>Purchaser</th>
<th>Books Purchased</th>
<th>Dollars Spent</th>
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</thead>
<tbody>
<tr>
<td>Vendor Approval Plans</td>
<td>36,622</td>
<td>$1,822,283.95</td>
</tr>
<tr>
<td>Librarians’ Orders</td>
<td>28,915</td>
<td>$1,486,053.98</td>
</tr>
<tr>
<td>ILL PDA</td>
<td>1,451</td>
<td>$83,617.55</td>
</tr>
<tr>
<td>Donor Bequests</td>
<td>1,869</td>
<td>$63,404.14</td>
</tr>
<tr>
<td>Lost Book Replacement</td>
<td>1,084</td>
<td>$43,902.50</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>69,941</strong></td>
<td><strong>$3,499,262.12</strong></td>
</tr>
</tbody>
</table>
them. Although there were no subject-related restrictions placed on the ILL patrons’ purchasing by the PDA program’s guidelines, the patrons were effectively banned from purchasing books in the LC subclass Subclass PZ—Fiction and juvenile belles lettres by the program’s nonsubject parameters. As a result, the authors have elected to remove all PZ data from the dataset. Should the astute reader notice the slight discrepancy between the numbers reported for the librarians in table 1 and in later tables, the excision of PZ from the analyses to come should be understood to be the cause.

Methodology
As was noted above, librarians have expressed numerous worries concerning the freedom that PDA affords patrons potentially to unbalance library collections through the purchasing of books that might not normally have been collected, through failing to purchase books in areas that would normally have been collected, and through overvaluing or devaluing subject areas in ways that run counter to academic libraries’ collection priorities. These several worries suggest four research questions that could be addressed by the current study:

1. Do PDA patrons purchase sizable numbers of books or spend large amounts of collection dollars in LC classes/subclasses where the library does not collect?
2. Do PDA patrons fail to purchase books or spend collection dollars in important LC classes/subclasses where the librarians do collect?
3. Do PDA patrons collect significantly more books or spend significantly more collection dollars in little-collected LC classes/subclasses than do librarians?
4. Do PDA patrons purchase books or spend collection dollars such that their subject profile, as expressed via LC classes/subclasses, is dissimilar from librarians’ subject profile?

To assess whether PDA patrons had been collecting in subject areas where the librarians had not been collecting, the authors grouped the books purchased by purchaser and then by LC class/subclass and looked for nonoverlapping subject areas with PDA purchases. To assess whether PDA patrons had failed to purchase books in important LC classes/subclasses where librarians had made purchases and to assess whether PDA patrons had been adding significantly more books to the collection in little-collected LC classes/subclasses than librarians had been, the authors first rank-ordered the UNL University Libraries’ acquisitions via traditional acquisition channels in the 255 LC classes/subclasses that had experienced acquisitions during the five-year period in question (excluding, of course, subclass PZ). The LC classes/subclasses were rank-ordered both by number of books purchased (Books Purchased) and by acquisition dollars spent (Dollars Spent). The authors then created three rough ordinal categories for the LC classes/subclasses based upon their positions relative to the highest-ranked LC classes/subclasses:

- Collected: number of books purchased or dollars spent > 10 percent of the highest-ranked LC class/subclass
- Less Collected: number of books purchased or dollars spent < 10 percent but > 1 percent of the highest-ranked LC class/subclass
- Rarely Collected: number of books purchased or dollars spent < 1 percent of the highest-ranked LC class/subclass

As was noted above, the librarians had purchased books in 211 of the 255 LC classes/subclasses, and the ILL PDA patrons had purchased books in 140 of the 255 LC classes/subclasses. After a quick analysis, it was discovered that the ILL PDA patrons had failed to make purchases in 76 LC classes/subclasses wherein the librarians had made
purchases. To assess whether the patrons had demonstrated a failure of judgment relative to the librarians by ignoring important subject areas that had received the librarians’ endorsement via purchase, the authors simply examined whether the bulk of the nonoverlapping 76 LC classes/subclasses fell into the Collected, Less Collected, or Rarely Collected categories. To then assess whether ILL PDA patrons had been larding the collection with significantly more books from or spending significantly more dollars on little-collected LC classes/subclasses, as compared to the librarians, the authors subjected the PDA patrons’ and librarians’ acquisitions and spending in the three ordinal categories to a Pearson’s Chi-Square Test, also commonly known as the chi-square test for independence.

Before proceeding to the method for addressing the final research question, it may be germane to address why the authors have elected to employ the parallel “Books Purchased/Dollars Spent” approach. The authors are employing the dual analyses to proleptically forestall the objections of librarians serving the humanities and the sciences that either approach alone advantages or disadvantages one discipline over the other due to differences in book prices. Given that the rank-ordering process for books collected put several LC classes/subclasses devoted to literature, to history, and to philosophy in the top 25 for the UNL University Libraries while the rank-ordering process for acquisitions dollars spent placed several LC classes/subclasses devoted to the sciences, to engineering, to agriculture, and to internal medicine in the top 25, the authors readily conceded that the two approaches would produce different pictures of the collection and elected to employ both.

Finally, to address the study’s fourth research question and to assess whether the ILL PDA patrons’ subject profile was similar to or dissimilar from the librarians’, the authors grouped the patrons’ purchases by LC class/subclass and rank-ordered them, again using the dual “Books Purchased/Dollars Spent” approach, and similarly grouped and rank-ordered the librarians’ purchases for the same LC classes/subclasses. The authors then calculated Spearman’s rho (rs), also commonly known as Spearman’s Rank Correlation Coefficient, to discover the nature of the by-subject relationship between the patrons’ and librarians’ purchasing. Rank correlation coefficients were calculated for each individual year to determine whether the patrons’ purchasing in any one year differed radically from the librarians’ in any one year, and rank correlation coefficients were also calculated for all five years as a group to determine what the longer-term by-subject collecting relationships, if any, might be. The reader should note that values will be rounded where appropriate throughout the “Results” and “Analysis” sections to follow.

<table>
<thead>
<tr>
<th>Collection Levels</th>
<th>Number of LOC Classifications*</th>
<th>Books Purchased</th>
<th>Dollars Spent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collected</td>
<td>2</td>
<td>2</td>
<td>470</td>
</tr>
<tr>
<td>Less Collected</td>
<td>21</td>
<td>21</td>
<td>968</td>
</tr>
<tr>
<td>Rarely Collected</td>
<td>53</td>
<td>53</td>
<td>185</td>
</tr>
</tbody>
</table>

* Note: Although the number of LC classes/subclasses in each column is identical, the LC classes/subclasses comprising the Less and Rarely Collected Collection Levels are not.
Results
To address the study’s first research question (that is, do PDA patrons purchase sizable numbers of books or spend large amounts of collection dollars in LC classes/subclasses where the library does not collect?), the authors reviewed the ILL PDA purchases of books that were in LC classes/subclasses that were unique to the PDA program. The authors discovered that, over the five years, the PDA program had purchased books in five program-unique LC classes/subclasses. In these LC classes/subclasses, the program purchased five books and spent $330.98.

To address the study’s second research question (that is, do PDA patrons fail to purchase books or spend collection dollars in important LC classes/subclasses where the librarians do collect?), the authors arranged the purchased books and dollars spent in the seventy-six LC classes/subclasses that had librarian, but not PDA, acquisitions into the previously defined ordinal categories. As table 2 reveals, almost 70 percent of the nonoverlapping LC classes/subclasses in question fell into the Rarely Collected category. Just two of the LC classes/subclasses were in the Collected category.

To address the study’s third research question (that is, do PDA patrons collect significantly more books or spend significantly more acquisition dollars in little-collected LC classes/subclasses than do librarians?), the authors arranged the librarians’ and patrons’ acquisitions and spending by ordinal category and performed Pearson’s Chi-Square Test. As table 3 shows, there were statistically significant differences between both the librarians’ and PDA patrons’ acquisitions and spending.

To address the fourth and final question of the study (that is, do PDA patrons collect books/spend acquisition dollars such that their subject profile is dissimilar from librarians’ subject profile?), the authors rank-ordered the LC classes/subclasses of the PDA patrons’ purchases for each individual year and for all five years of the program and also rank-ordered the librarians’ overlapping purchases in the same LC classes/subclasses and calculated Spearman’s Rank Correlation Coefficients to determine whether purchasing by LC classes/subclasses for the two sets of purchasers were positively, negatively, or not correlated. Prior to performing this procedure, however, the authors rank-ordered the librarians’ purchases for each year and calculated their

<table>
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<tr>
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<th>Books Purchased</th>
<th>Dollars Spent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Librarians*</td>
<td>ILL PDA</td>
</tr>
<tr>
<td>Rarely Collected</td>
<td>249 (0.87%)</td>
<td>20 (1.38%)</td>
</tr>
<tr>
<td>Less Collected</td>
<td>5,754 (20.92%)</td>
<td>319 (21.95%)</td>
</tr>
<tr>
<td>Collected</td>
<td>22,636 (79.04%)</td>
<td>1,112 (76.64%)</td>
</tr>
</tbody>
</table>

n = 30,090
df = 2
χ² = 7.464
Cramér’s V = 0.016

n = $1,566,073.70
df = 2
χ² = 667.809
Cramér’s V = 0.021

Note: Percentages rounded to the nearest 1/100th; χ² and V values rounded to the nearest 1/1,000th.
* Excluding books from LC class PZ—Children’s Literature; Sig. χ² distribution (two-sided):
† p < .05 , ‡ p < .001
rank correlation coefficients. Doing so provides the authors an opportunity to illustrate the approach and to determine whether there was any consistency in the librarians’ purchasing on a year-by-year basis. After all, if the librarians were not consistent over the five years, one would hardly expect consistency between the librarians and the ILL PDA patrons.

Table 4 illustrates the authors’ approach. The years listed along the horizontal axis serve as the base years and determine the number of LC classes/subclasses in question in each calculation. As the table shows, the librarians purchased books in 155 to 181 LC classes/subclasses, depending upon the year. To calculate the correlation coefficients for the years in question, the purchases made in the LC classes/subclasses during the individual years listed along the vertical axis were then compared to the base years’ purchases. As the table shows, in the Books Purchased analysis, the librarians’ purchasing by LC class/subclass had correlation coefficients ranging from 0.80 to 0.93, and the librarians’ purchasing by LC class/subclass in the Dollars Spent analysis had correlation coefficients ranging from 0.81 to 0.92. These correlations are extremely strong and would be almost unheard of elsewhere in the social and behavioral sciences. Thus, we may conclude that the librarians were very consistent in their by-subject purchasing from year to year over the five-year interval.

<table>
<thead>
<tr>
<th>Librarians</th>
<th>Books Purchased (r_s)*</th>
<th>Dollars Spent (r_s)*</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Year One</td>
<td>Year Two</td>
</tr>
<tr>
<td>Year One</td>
<td>0.91</td>
<td>0.91</td>
</tr>
<tr>
<td>Year Two</td>
<td>0.91</td>
<td>0.92</td>
</tr>
<tr>
<td>Year Three</td>
<td>0.91</td>
<td>0.92</td>
</tr>
<tr>
<td>Year Four</td>
<td>0.92</td>
<td>0.91</td>
</tr>
<tr>
<td>Year Five</td>
<td>0.85</td>
<td>0.83</td>
</tr>
<tr>
<td>n =</td>
<td>181</td>
<td>172</td>
</tr>
</tbody>
</table>

Note: Coefficients rounded to the nearest 1/100th. Base comparison year (that is, horizontal axis) determines “n”.
Sig. t distribution (two-sided): Books Purchased or Dollars Spent: *p < .001. Books Purchased or Dollars Spent: FWER = 0.015880558.

To address the question of whether the ILL PDA patrons’ purchasing by subject in any one year was similar to or differed greatly from the librarians’ purchasing in any one year, the authors repeated the procedure that produced table 4 above, but with the ILL PDA patrons’ purchasing serving as the base years. As table 5 shows, the PDA patrons purchased books in 67 to 95 LC classes/subclasses, depending upon the year, and the patrons’ and librarians’ purchases by subject in any one pair of years did not correlate quite as strongly as did the librarians’ purchasing with itself. For Books Purchased, the correlation coefficients ranged from sturdy to very strong (0.53 to 0.66), and for Dollars Spent, the correlation coefficients ranged from weak to very strong (0.29 to 0.68).
Finally, to address the question of whether patrons' and librarians' by-subject purchasing for the whole of the period was similar or dissimilar, the authors rank-ordered the patrons' and librarians' purchasing in all 140 LC classes/subclasses that had had ILL PDA purchases during the interval and then calculated the correlation coefficients for Books Purchased and for Dollars Spent. The authors also grouped the purchases' LC classes/subclasses into the three ordinal categories employed earlier to determine whether the patrons and librarians differed in the Collected, Less Collected, and Rarely Collected categories. As table 6 shows, the correlation coefficients for the five-year period for both Books Purchased and for Dollars Spent were very strong (0.70 and 0.69, respectively). For the Collected LC classes/subclasses, they were sturdy, and it was only in the Less Collected and Rarely Collected LC classes/subclasses where the correlation

<table>
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<tr>
<th>Year One</th>
<th>Year Two</th>
<th>Year Three</th>
<th>Year Four</th>
<th>Year Five</th>
<th>Year One</th>
<th>Year Two</th>
<th>Year Three</th>
<th>Year Four</th>
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</thead>
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<tr>
<td>Librarians</td>
<td>ILL PDA</td>
<td>Librarians</td>
<td>ILL PDA</td>
<td>Librarians</td>
<td>ILL PDA</td>
<td>Librarians</td>
<td>ILL PDA</td>
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<td>ILL PDA</td>
</tr>
<tr>
<td>Year One</td>
<td>0.65</td>
<td>0.65</td>
<td>0.62</td>
<td>0.63</td>
<td>0.66</td>
<td>0.64</td>
<td>0.47</td>
<td>0.47</td>
<td>0.62</td>
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<tr>
<td>Year Two</td>
<td>0.59</td>
<td>0.61</td>
<td>0.61</td>
<td>0.61</td>
<td>0.53</td>
<td>0.40</td>
<td>0.50</td>
<td>0.57</td>
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<tr>
<td>Year Three</td>
<td>0.61</td>
<td>0.61</td>
<td>0.60</td>
<td>0.65</td>
<td>0.56</td>
<td>0.40</td>
<td>0.50</td>
<td>0.57</td>
<td>0.57</td>
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<tr>
<td>Year Four</td>
<td>0.58</td>
<td>0.63</td>
<td>0.61</td>
<td>0.64</td>
<td>0.57</td>
<td>0.38</td>
<td>0.49</td>
<td>0.55</td>
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<tr>
<td>Year Five</td>
<td>0.56</td>
<td>0.60</td>
<td>0.53</td>
<td>0.55</td>
<td>0.52</td>
<td>0.29</td>
<td>0.42</td>
<td>0.55</td>
<td>0.55</td>
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Note: Coefficients rounded to the nearest 1/100th. Base comparison group and year (that is, horizontal axis) determines “n”.

SIG. T DISTRIBUTION (TWO-SIDED): Books Purchased & Dollars Spent:
* p < .001 unless otherwise noted; †p < .01.
Books Purchased or Dollars Spent: FWER = 0.024702287.

<table>
<thead>
<tr>
<th>Collection Levels</th>
<th>Books Purchased</th>
<th>Dollars Spent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>df</td>
</tr>
<tr>
<td>All Categories</td>
<td>140</td>
<td>138</td>
</tr>
<tr>
<td>Collected</td>
<td>57</td>
<td>55</td>
</tr>
<tr>
<td>Less Collected</td>
<td>68</td>
<td>66</td>
</tr>
<tr>
<td>Rarely Collected</td>
<td>15</td>
<td>13</td>
</tr>
</tbody>
</table>

Note: Coefficients rounded to the nearest 1/100th. Base comparison group (ILL PDA) determines “n”.
SIG. T DISTRIBUTION (TWO-SIDED): †p < .05 ; *p < .001.
Books Purchased or Dollars Spent: FWER = 0.003994004.
coefficients were weak, with the exception of Rarely Collected: Books Purchased. This last, very strong correlation should probably be ignored, however, as it was likely the product of the handful of ties at the tail of the by-subject distribution (in other words, the several LC classes/subclasses wherein only one or two books were purchased).

Analysis
With respect to the first research question, the study did find that, over the five years in question, the ILL PDA patrons purchased books in LC classes/subclasses where traditional acquisition modes did not. However, at five books purchased and $330.98 spent in otherwise uncollected LC classes/subclasses, the ILL PDA patrons could hardly be said to have larded the UNL Libraries’ collection with topically idiosyncratic material. In fact, with respect to the program’s Books Purchased and Dollars Spent analyses, PDA’s critics would appear to be getting exercised about just over 0.00007 percent and 0.00009 percent of the period’s collecting and spending, respectively.

With respect to the second research question, the ILL PDA patrons’ failures to purchase in LC classes/subclasses where the librarians collected seem similarly unworthy of concern. Of the 76 nonoverlapping LC classes/subclasses found, almost 70 percent of them were from the Rarely Collected category, and almost 28 percent of them were from the Less Collected category. Just two of the 76 were from the Collected category. A review of the LC class/subclass rankings for the UNL Libraries’ acquisitions revealed that the two in question, TX — Home Economics and S — Agriculture, were, respectively, the 62nd- and 57th-ranked classes/subclasses in the Books Purchased analysis and were the 56th- and 44th-ranked classes/subclasses in the Dollars Spent analysis, so it would appear that the ILL PDA patrons hardly neglected particularly locally esteemed LC classes/subclasses with their failures to purchase.

With respect to the third research question, the study did, indeed, find evidence of a statistically significant difference between how the librarians and the patrons purchased books and spent acquisition dollars by ordinal category. Before rejoicing, however, the PDA-critical reader should note that a comparison of the column percentages across rows in table 3 would reveal that the maximum differences for Books Acquired and for Dollars Spent were actually rather small and would suggest a weak relationship: 2.4 percent for Books Purchased and 0.99 percent for Dollars Spent. This suggestion is supported by the measure of association (that is, Cramér’s V) calculated for each test, which indicate that the relationships for both Books Purchased (V = 0.016) and for Dollars Spent (V = 0.021) were very weak. As Healey has noted, one of the limitations of the chi-squared test is its sensitivity to sample size (such that the value of $\chi^2$ increases at the same rate as sample size). Without denying the significant effect detected by the tests, the authors are inclined by the evidence of the measures of association to conclude that the significant effect is likely trivial and may be the product, at least in part, of the study’s outsized samples.

With respect to the fourth and final research question, the evidence of the study, both year-to-year and for the whole of the five-year period, was very encouraging. As was noted in the literature review, of the five libraries whose subject profiles were studied by Price and McDonald, just one had PDA and librarian subject profiles that appeared to be negatively correlated. In looking over this study’s year-to-year correlations, where the librarians’ purchases in any one year were compared to the purchases of the ILL PDA patrons in any one year, perhaps the most important thing to note would be that every single correlation was positive. For the Books Purchased analysis, zero correlations were classifiable as weak, zero were moderate, one was sturdy, 17 were strong, and 7 were very strong. In essence, of the 25 correlation coefficients calculated, all but one of them were strong or very strong. For the Dollars Spent analysis, just
one correlation was weak, 3 were moderate, 9 were sturdy, 7 were strong, and 5 were very strong. Although the picture provided by the Dollars Spent analysis was more mixed, still 12 of the 25 correlation coefficients were strong or very strong, and 17 of the 25 were 0.50 or higher.

Over the longer term, this variability in the year-to-year coefficients could have produced a divergence in the ILL PDA patrons’ and librarians’ subject profiles, but, as table 6 showed, the profiles appeared to converge somewhat when the five-year period was regarded as a whole, with both the Books Purchased and Dollars Spent analyses producing very strong correlations. The analyses of the ordinal categories for the five-year period showed that the correlation coefficients for the Collected LC classes/subclasses were both sturdy and that the weak correlations were in the Less and Rarely Collected ordinal categories. Thus, in the locally more key LC classes/subclasses, the librarians and ILL PDA patrons would appear to have been largely in agreement where ranking of classes/subclasses by books purchased and by dollars spent were concerned. The bulk of the collecting chaos, as it were, appears to have been confined to the classes/subclasses where neither the librarians nor the patrons collected overly much.

Limitations to the Study/Areas for Further Research

First, as with any single-site study, there is always a question as to how generalizable the reported results may be, and institutional factors may have had some effect on the results reported here. UNL Libraries’ liaison librarians’ funding for books is at least in part determined by discipline and by liaison departments’ sizes, which may have contributed to the apparent confluence of librarians’ and patrons’ by-subject purchasing. Academic libraries employing different fund allocation strategies may experience different results.

In addition to the limitations inherent in a single-site study, to the best of the authors’ knowledge, this study’s first three research questions have not, as yet, been addressed elsewhere in the library literature. Thus, it would be impossible to say whether this study’s findings could be counted as typical. The results of the study’s fourth question, which addressed the by-subject profiles of the ILL PDA patrons and the librarians, replicated the results that Price and McDonald reported for three of five libraries with e-book PDA programs and mixed purchasing. This study does not, however, address the question raised by Shen et al. concerning whether PDA patrons and librarians would purchase the same titles. The authors will leave it to subtler minds to replicate the experiment with printed books of Shen et al.

This study has also left unaddressed at least four important questions raised in the PDA/anti-PDA literatures. First, and unrelated to this study’s objectives, is the question of whether PDA is more economical than repeated ILL borrowing. Several studies have suggested or found that the costs associated with ILL should make borrowing and purchasing nearly equivalent or that PDA will lead to increased efficiencies that should make PDA expenditures worthwhile. Van Dyk, however, has recently concluded that most PDA books could be borrowed several times before the cost-per-loan of ILL borrowing would equal the full cost-per-circulation of PDA purchasing.

Perdue and Van Fleet’s seminal 1999 study found that Bucknell University’s PDA books had achieved an average cost-per-use of $7.07 after four years. More recently, studies by Schroeder and by Tyler et al. have concluded that the cost-per-circulation or price-paid-per-circulation of PDA, respectively, are better than those of traditional collection development modes. Two other studies have shown that, with appropriate price guidelines in place, PDA prices paid can be kept at or below reported average ILL costs. However, it would appear that Perdue and Van Fleet and Schroeder
may have not taken into account, and Tyler et al. explicitly did not take into account, PDA's per-book overhead and staff-related costs, so van Dyk's criticism has yet to be adequately addressed.

Second is the question of collection building. As was noted in the introduction, the consensus in the field seems to be that PDA offers an excellent means to add highly circulating items to a collection but is a poor way to build a collection. The evidence in the literature, at the moment, is scanty. At Grand Valley State University, Way found that more than half of the PDA purchases were also held at peer institutions, but PDA's efficacy as a collection-building tool does not appear to have been otherwise addressed in the literature.\(^1\) As was noted in the review of literature, the bulk of the pertinent literature has been devoted merely to the question of whether the purchased or requested books were suitable additions to their libraries' collections.

The third question centers around who should be requesting books via PDA. Much of the literature on PDA for print materials has reported that graduate students and/or university faculty have made up the bulk of PDA purchasers.\(^2\) Both PDA's supporters and detractors seem to see PDA's providing faculty and/or graduate students an avenue by which to influence the collection as a good thing.\(^3\) Those critical of PDA, however, lament that undergraduates have been allowed to order books, their assumption being that undergraduates will order materials not in line with library collection development standards and/or will order materials of a less scholarly nature, while the faculty and graduate students, who are presumably more informed concerning their fields and more knowledgeable researchers, will order new materials with scholarly merit that are of interest to their fields.\(^4\) There is some evidence from Purdue University that different requestors purchase books of interest to different audiences: PDA purchases by faculty at Purdue tended to be subsequently circulated mostly to other faculty, and PDA purchases by undergraduates tended to be circulated mostly to other undergraduates.\(^5\) However, there is also evidence in the library literature that faculty-recommended books tend to circulate comparatively poorly.\(^6\) Additionally, there is some evidence from citation analysis that graduate students may not know their fields' literatures as well as librarians presume.\(^7\) Thus, the question should be regarded as still open, and the library literature has yet to determine whether or not one sort of patron assembles collections of greater merit.

Fourth, and last, is the question of use. The entirety of the early PDA literature on print materials that has addressed the question of PDA and circulation has concluded that PDA books circulate more than do books acquired via traditional acquisition channels.\(^8\) In fact, a recent study from Purdue University concluded that PDA books outcirculate traditionally acquired books even without their initial circulations to their requesting patrons being taken into account.\(^9\) A recent study employing a multivariate test for interaction effects that similarly stripped PDA books of their initial circulations concluded that PDA books significantly outcirculated approval plan selections and librarian-ordered books even with the effects of time spent in the collection, book price, and book subject area taken into account.\(^10\) To the best of the authors' knowledge, however, no study of PDA has examined whether this significant circulation advantage has translated into a significant use advantage, and the PDA literature would certainly benefit from a citation analysis that compared citation of PDAs', librarians', and approval plans' selections in undergraduate students' papers, graduate students' theses and dissertations, or faculty publications.

**Conclusion**

This article opened with a listing of the several concerns that critics have with PDA programs and the potentially deleterious effects they may have upon the academic
libraries that have developed and employed them. Underlying and anchoring all of these concerns, the authors of the current study have sensed a fear of a loss of control over collections and a fear that PDA will replace traditional acquisition methods and waste or devalue librarians’ hard-won expertise. One can hear echoes of this fear in Walters’ shudder-inducing invitation to the reader in a recent article to “[i]magine a situation in which each member of the university community has equal authority to select library books.”52 The library literature to date, however, suggests that such fears are overblown. Authors of the PDA literature have largely conceived of PDA as a supplement to or a means for augmenting traditional collection development methods, not as replacement for them, as a way to more quickly respond to expressed and immediate user needs, and as a way to obtain timely collection-related input from library patrons.53 As Miller has remarked, “it would be the rare library that would wish to place all book purchase funds into the hands of the users, without any control or say over what is purchased.”54 In fact, in the abundant PDA literature, very, very few authors have advocated that PDA should become a library’s primary collection development method.55 Most of the programs extant appear to have allocated just 1 percent to 5 percent of their book budgets for PDA.56 This hardly represents a universal overturning of the acquisitions applecart.

Operating in concert with the above fears, there appears to be an anxiety that academic librarians have abdicated their responsibility, through the adoption and implementation of PDA, to vet the materials added to their libraries. Walters, for example, recently critiqued several PDA programs reported on in the library literature for their failures to exclude various nonacademic materials with their program guidelines.57 Walters’ critique, however, would seem to be generally incorrect, as several articles on PDA programs have shown that the sorts of materials that he highlights as undesirable tend to be excluded by PDA programs at academic institutions.58 Walters’ critique also appears to be incorrect in its specifics, as well, due to the methodological weakness of his approach. With respect to the UNL University Libraries’ PDA program, for example, had Walters reviewed the program guidelines directly, rather than gathering his data from a brief summary of the program, he would have seen that the undesirable materials that he lists as purchasable via the UNL program were actually explicitly barred.59 It seems unlikely to the authors that the bulk of academic libraries and librarians would be willing to cease serving as acquisition’s gatekeepers and to open their collections to a patron-driven free-for-all, and such a state of affairs certainly does not seem to obtain today.

Last, depending from the above anxiety, the authors sense two further worries: that PDA patrons left to their own devices will select collection-inappropriate books and that PDA will lead to collections that are somehow skewed or poorly balanced. As was discussed in the review of literature, studies on PDA have largely all concluded that, with some guidelines in place, academic library patrons do well at selecting collection-appropriate materials. Regarding the question of collection balance, the picture in the library literature is still inchoate. The first study of the issue concluded that PDA patrons at academic libraries produced collections that were no more unbalanced or skewed than did librarians.60 The authors of this study would concur. The UNL PDA patrons did not fail to collect in any areas that could be considered locally important in terms of number of books collected or acquisitions dollars spent. Librarian and patron by-subject purchasing was well correlated on a year-to-year basis for most of the years studied and was very strongly correlated for the period as a whole. The areas where collecting by patrons was weakly correlated with the librarians’ collecting—PDA in the Less and Rarely Collected LC classes/subclasses—together amounted to just 0.48 percent of books purchased during the five-year interval and just 0.54 percent of
acquisition dollars spent on books, and the areas where patrons engaged in idiosyncratic collecting amounted, again, to just 0.00007 percent and 0.00009 percent of books purchased and of acquisition dollars spent on books, respectively. The authors cannot even begin to speculate how long it would take to build an unbalanced collection at the rates discovered by this study. Building a skewed collection in such a manner would be akin to assembling a mountain with pebbles and grains of sand.

Notes


14. Tyler, “Patron-Driven Purchase on Demand.”


18. For the sake of brevity and because of the remarkable consistency of the results reported by the research, the authors will be reviewing the prodigious literature on PDA in the aggregate in the paragraph to follow. For the reader new to PDA and wishing for more detail, there are numerous suitable points of entry into the literature. Readers interested in the history and development of PDA are invited to review David A. Swords’ 2011 edited collection, *Patron-Driven Acquisitions: History and Best Practices*. Readers interested in exemplary PDA research studies or in articles on innovative programs and future directions for PDA are invited to review Nixon, Freeman, and Ward’s 2011 edited collection, *Patron-Driven Acquisitions: Current Successes and Future Directions*, or the 2010 special issue of the journal *Collection Management* that it reprints. Readers interested in advice for developing and managing a PDA program at their institutions are directed to Ward’s 2012 ACRLCTS guide, *Guide to Implementing and Managing Patron-Driven Acquisitions*. Readers interested in a recently comprehensive review of the research literature on PDA for print materials are invited to peruse Tyler’s 2011 article in *Library Philosophy and Practice*. Readers interested in a similarly comprehensive recent review of research on e-books in academic libraries that touches on e-book PDA should look to Slater’s 2010 article in *Journal of Web Librarianship*. There is, of course, a wealth of library literature presenting research findings or grappling with practical or philosophical issues connected to PDA, but the above should suffice to introduce the unfamiliar reader to the topic of PDA.


25. Esposito, Walker, and Ehling, "PDA and the University Press."

26. Shen et al., "Head First into the Patron-Driven Acquisition Pool."

27. Price and McDonald, "Beguiled by Bananas."

28. Ibid., 143.

29. Ibid., 143.

30. Shen et al., "Head First into the Patron-Driven Acquisition Pool."


the largely autonomous Marvin & Virginia Schmid Law Library was not included in the study.


34. In rating the strength of the various correlations, the authors will be following the scale proposed by Altemeyer for the social/behavioral sciences: “In terms of precise correlation coefficients, a correlation less than .316 is weak, .316 to .417 is moderate, .418 to .548 is sturdy, .549 to .632 is strong, .633 to .707 is very strong, and over .707 is almost unheard of.” Bob Altemeyer, The Authoritarians, (Winnipeg: University of Manitoba, 2006), 45, available online at http://members.shaw.ca/jeanaltemeyer/drbob/TheAuthoritarians.pdf [accessed 23 July 2014].


36. Price and McDonald, “Beguiled by Bananas.”


39. Perdue and Van Fleet, “Borrow or Buy?”


41. Soma, “Purchase on Demand”; Zopfi-Jordan, “Purchasing or Borrowing.”

42. Way, “The Assessment of Patron-Initiated.”


45. Soma, “Purchase on Demand”; Walters, “Patron-Driven Acquisition.”


47. Pritchard, “Purchase and Use of Monographs.”


49. Tyler, “Patron-Driven Purchase on Demand.”


51. Tyler et al., “Patron-Driven Acquisition.”

52. Walters, “Patron-Driven Acquisition.”


54. Miller, “Patron-Driven Acquisitions (PDA),” 3.


56. Lenares and Delquié, “Give the People What They Want”; Tyler, “Patron-Driven Purchase on Demand”; Walker, “Patron-Driven Acquisition.”

57. Walters, “Patron-Driven Acquisition.”

58. Fountain and Frederiksen, “Just Passing Through”; Reel and Conn, “To Buy and Not Borrow”; Tyler, “Patron-Driven Purchase on Demand.”

59. Tyler et al., “Effective Selectors?”

60. Price and McDonald, “Beguiled by Bananas.”