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# Conventional Wisdom or Faulty Logic? The Recent Literature on Monograph Use and E-book Acquisition

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## Conventional Wisdom or Faulty Logic? The Recent Literature on Monograph Use and E-book Acquisition

### Abstract

The idea that academic libraries acquire a great many books that are never used, and that this is because traditional collection development – i.e., professional librarians purchasing books based on subject expertise and local knowledge of student and faculty needs and interests – is ineffective, has been repeated frequently during the last decade. This claim has been used as justification to change collection practices and to bolster ideas about new organizational models for libraries and their work. A closer look at the literature, however, reveals that the data being cited to support this claim has been communicated, for the most part, in an inaccurate and misleading way by its proponents and that a great deal of data exists, in fact, to refute it. This article outlines the genesis and propagation of this idea in the context of the actual findings of libraries' collection use studies to both refute a claim that librarians seem to have been unduly uncritical in accepting and repeating, and also to question why we have done so.

### History

The idea that librarians are just “guessing” at what our patrons want and, in many cases, guessing wrong has its genesis in the literature about patron-driven acquisitions (PDA) for print books beginning in the late 1990s.<sup>1</sup> In 1999, Perdue and Van Fleet published an article about a program for purchasing materials based on interlibrary loan (ILL) requests at Bucknell University. Their data showed that such a program could be a cost-effective way to reduce ILLs and that the materials purchased enjoyed a higher rate of use overall than traditional firm ordered or approval books. Around that same time, a number of libraries implemented print purchase-on-demand programs and reported on their success in articles published during the first decade of the 21<sup>st</sup> century. The authors of some of these studies cautioned that PDA

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<sup>1</sup> Rick Anderson has used the word “guess” several times: see Freeman 2011, Meddings 2011 and Anderson, “What Patron-Driven Acquisition,” 2011.

programs should serve as a supplement to, not a substitute for, traditional collection development. Use studies on the books purchased through PDA were done to debunk the idea that PDA purchases would be too specialized or otherwise inappropriate for library collections (Tyler 2011).<sup>2</sup>

Tyler et al. (2013, 4) wrote that “in rapidly short order” librarians went from suggesting PDA be used in conjunction with ILL “to asserting that PDA and purchase-on-demand (POD)-style programs have largely proven themselves and are well on their way toward becoming advisable, established, necessary, standard, and/or ‘more sane’ practice.” Though Tyler et al. were chiefly concerned with print PDA programs, eight of the eleven articles they cited as making these assertions related to PDA for e-books or a combination of print and electronic purchase-on-demand programs. Without exploring it deeply, Tyler et al. acknowledged the popularity of patron-driven acquisitions for e-books and cited Rick Lugg (formerly of R2 Consulting and now, as of 2015, an Executive Director at OCLC), Rick Anderson (currently Associate Dean for Scholarly Resources and Collections, University of Utah) and Dennis Dillon (former Associate Director, Research Services, University of Texas at Austin Libraries) in their review of enthusiastic proponents of this method of acquisition.

These three authors also seem to be some of the earliest to popularize the idea that traditional collection development is ineffective or has “failed,” and they seem to have done so around 2010, in conjunction with the widespread availability of vendors’ PDA plans for e-books and their promotion of these plans in their own or to others’ libraries.<sup>3</sup> While print PDA proponents encouraged libraries to add patron-driven purchasing to their collection development practices, these authors, and others who

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<sup>2</sup> Tyler (2011, 14) wrote that K.J. Anderson et al. and Nixon & Saunders warned that “programs of this sorts [sic] are an excellent complement to traditional collection development modes, but they are not and should not be seen as a replacement for libraries’ traditional collection development practices.”

<sup>3</sup> Though NetLibrary (since purchased by EBSCO) offered patron-driven acquisition for e-books as early as 1998 (Hodges, Preston and Hamilton 2011), EBL (Ebook Library) and ebrary (both now owned by ProQuest) released their programs closer to 2010 after piloting them with libraries several years earlier (see “Ebrary Launches Patron-Driven Acquisition Model” 2010; Howard 2010; Macicak and Schell 2009). Furthermore, in 2010 EBL and YBP announced plans to partner on a joint print and e-book patron-driven acquisitions service (“YBP Library Services” 2010).

subsequently wrote about e-book PDA programs, were much more likely to encourage libraries to replace their current practices with PDA, claiming that much of what librarians buy never circulates and that academic libraries' traditionally-built print collections are little-used.

In 2009, the Committee on Institutional Cooperation (CIC) hosted a conference in Bloomington, Indiana at which both Lugg and Dillon were speakers. Both claimed in their presentations that traditional collection development had failed and called for libraries to shift half of their collection of print and electronic books to PDA. Both of their presentations would be subsequently cited in the literature, and both are still available online. As with many who would later repeat this idea, Lugg and Dillon cited little data to support it.

Lugg (2009) characterized what he called “expert selection” both “then” (1975) and “now” (post-2006). The only published research he cited for either era was the Pittsburgh study, a comprehensive study published in 1979 about collection use at the University of Pittsburgh between 1969 and 1975 (Kent et al. 1979). To support his conclusions about the ineffectiveness of expert selection in the first decade of the 2000s, Lugg presented a summary of his consulting firm’s “informal circulation survey” of six Association of Research Libraries (ARL) libraries. He concluded that “even the best institutions get it right [i.e., purchasing books through traditional firm order and approval plans] about 50% of the time” and that libraries should, as a result, implement PDA plans (both print and e) for 50 percent of acquisitions.

In his presentation, Dillon (2009) reported that his goal was to move to a model where 50 percent of selection was done by users – what he called “demand-side selection.” Rather than focusing on the *rate* of use of books acquired via traditional collection development practices, Dillon presented information about the *overall* circulation of books owned by academic libraries. He claimed that 15 percent and 8 percent of the books held in academic and ARL libraries, respectively, could be expected to circulate in

any given year, and that this low percentage of annual collection use calls for a different approach to academic libraries' collection development practices.<sup>4</sup>

Perhaps the provocative nature of both speakers' presentations has caused librarians to ignore some of the problems with how they support their claims. The Pittsburgh study, along with Trueswell's 1969 article about the 80/20 rule and Fussler and Simon's 1969 book about research library collection use, was an important study of the use of library collections in the pre-electronic era. Together, these studies yielded a number of broad conclusions about the use of library materials that have helped shape our modern understanding of the lives of collections: newer items circulate at a higher rate than older items, past use predicts future use, and a portion of a collection will account for the majority of its use.<sup>5</sup> The Pittsburgh study also found that 40 percent of the books purchased by Pittsburgh in 1969 had not circulated during their first six years in the collection and concluded they were unlikely to do so in the future (Kent et al. 1979, 9-10). Lugg repeated this figure as something that continued to be true for all libraries – something many subsequent presentations, opinion pieces, and scholarly articles have also done (as this article demonstrates below). This, however, does not take into account the many changes that have taken place since the 1970s in library collecting and discovery, such as online catalogs, approval plans, and discovery systems; the fact that other studies show very different statistics; or the fact that the circulation of print books at the University of Pittsburgh from 1969 to 1975 is not the only nor is it likely the best data on which to base decisions about how academic libraries in general should select books in 2014.

Dillon's argument – that libraries should move to PDA because overall circulation is falling – is also misleading. Overall circulation does not necessarily indicate anything of substance about the utility

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<sup>4</sup> Dillon also said that the "Colorado Alliance of Research Libraries reports that over the last 9 years between 30-67% of their books were never used," but he did not cite this and I was unable to find this statistic elsewhere.

<sup>5</sup> These ideas are presented, respectively, in Kent et al. 1979, 10; Fussler and Simon 1969, 15; and Trueswell 1969.

of a collection, particularly if one does not also take into account collection size, subject distribution, or the date of acquisition of its materials; it certainly does not indicate anything about the success of a collection's method of selection. UT Austin and other ARL libraries might have a very low circulation rate for their overall collection in any given year: it is logical to assume that research libraries hold many volumes whose utility at any particular moment might be low. However, O'Neill and Gammon's (2014) recently-published OhioLINK-OCLC circulation study, which examined one year of circulation for the over 6.6 million titles held by OhioLINK member libraries, showed that low-circulating items do not necessarily reach a point where they become of no use. In a very large collection, many items' individual circulation rates will approach zero, but these items, collectively, will still have significant circulation: O'Neill and Gammon found that books older than 70 years, collectively, were responsible for as many circulations in OhioLINK libraries as the most recently published titles. They also concluded that, while the proportion of circulating items from the collective collection that are not used, are used only once, or are used more than once will stay relatively constant from year to year, individual items will "move between the three groups in a somewhat random process" (O'Neill and Gammon 2014, 803).

#### Non-peer reviewed literature

Lugg's and Dillon's presentations at the 2009 CIC conference were not the first time these authors had pointed out that overall academic library circulation is low and many items academic libraries purchase are never used.<sup>6</sup> But these presentations are significant in that they might be the first time these claims had been presented in conjunction with promoting PDA for e-books. Since then, these ideas have often been used to argue for a shift from traditional collection development to PDA. Promoters of PDA have conflated these two ideas to imply that low or falling overall circulation means that many new

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<sup>6</sup> For example, in 2008, Lugg and Fischer wrote, "Deep down, most librarians of a certain age recall the 1968 Kent Study at the University of Pittsburgh, which discovered that 40% of the books in academic libraries never circulate – not even once." This is a misrepresentation of that study, which only found that 40% of the books acquired in *one particular year at one particular academic library* had not circulated within *six* years. They continued by saying: "We uneasily realize that this number is probably much higher 40 years later, when so much content is available in electronic form" (88).

acquisitions will never circulate, even though this idea has never been studied. Lugg's and Dillon's 2009 presentations have been cited in peer-reviewed journals. They both contributed chapters to the first book on patron-driven acquisitions for e-books, which was edited by the former Vice President of Sales and Marketing at the e-book aggregator platform EBL.<sup>7</sup> Many who have echoed their arguments have also failed to cite much more than the Pittsburgh study and anecdotal evidence to support their claims, despite the fact that many additional studies exist.

Rick Anderson is a prolific blogger, writer, and speaker whose ideas have frequently appeared in *Against the Grain*. He has said, "Selection by librarians only saves the time of the user if the librarian actually succeeds at guessing what the user will need, and all available research suggests that we do so with a very high failure rate (roughly 40%)" (Freeman 2011). He has also stated that traditional library collection is a "bad guess at patron needs" (Meddings 2011). After reading an OCLC report on mass-digitized print, Anderson wrote, "My confidence in the long-term viability of traditional collection-building has been undermined even further" (Anderson, "The Digitized Book," 2011). Despite the frequency with which he claims traditional collection development is ineffective, Anderson only once cites anything other than the Pittsburgh study: in a 2011 blog post, after stating that, "It no longer fundamentally makes sense for most academic libraries to build large permanent collections based on librarians' speculations about patrons' future needs. For one thing, our speculations are very often wrong" (Anderson, "What Patron-Driven Acquisition," 2011). Here he linked to a 1988 article about the use of 1,398 books purchased in 1982-1983 at Eckerd College in which the author found that 66 percent of the books had circulated at least once during their first two and a half to three years in the collection but suggested that, "given the findings of the Pittsburgh and DePauw studies" (an earlier study by the same author), the remaining books would never circulate (Hardesty 1988, 64). This citation hardly proves that

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<sup>7</sup> David A. Swords, ed., *Patron-Driven Acquisitions: History and Best Practices* (Berlin; Boston: DeGruyter Saur, 2011). Dillon's institution also piloted EBL's pay-per-view patron-driven acquisitions program in 2007 (Macicak and Schell 2009).

librarians are “very often wrong” about what patrons need, not least because three years is not enough time to determine the circulation level a group of books will ultimately attain.

In 2010, Cornell University released a study that revealed that 55 percent of the books acquired there since 1990 had never circulated (Cornell 2010). In an article discussing that study, Stewart (2011) repeated Dillon’s statistics about the low chance, overall, any book in an ARL library has of circulating in a given year (citing that author’s 2009 CIC presentation) alongside Lugg’s characterization of the Pittsburgh study to create a continuum between the 1970s and the present. He concluded that “The Cornell study reinforces data from a study conducted at the University of Pittsburgh over three decades ago” (Stewart 2011, 355). Stewart not only ignored other, intervening use studies published between Pittsburgh’s and Cornell’s, he did not even cite Kent et al. directly but rather Lugg’s characterization of it as repeated in other speakers’ conference presentations.

The statistic that 40 percent of Pittsburgh’s acquisitions from 1969 did not circulate in six years has also been presented by some authors as having been replicated in multiple studies done by libraries over the course of decades – but without citing any. Miller (2011, [2]) wrote, “Studies conducted in the 1970s at the University of Pittsburgh and elsewhere since that time have repeatedly shown that approximately half of the books purchased by academic libraries...sit unused, for years, and in some cases for their entire lives.” He implied that multiple studies had replicated Kent et al.’s findings, but cited none. Spitzform (2011, 20) claimed that at the University of Vermont “fully 40% of our books had not been checked out for years after they began sitting on our shelves,” and that Vermont “turned out to have the same rate of (non-) circulation as virtually every other circulation study to be found in the literature, beginning with the famous Pittsburgh Study from 1973 [sic] conducted by Allen Kent.” Spitzform also did not cite any other circulation studies, treating as conventional wisdom the idea that all library collections have the same level of use exhibited by Pittsburgh in 1970s.

The ACRL Research Planning and Review Committee published its Top Ten Trends of 2012 for academic libraries in the June 2012 issue of *College & Research Libraries News*. The seventh stated, “PDA of e-books is poised to become the norm.” The committee cited two things to support this claim. The first was a post on *Inside Higher Ed* by technology reporter Steve Kolowich (2011) about a proprietary report on the future of libraries released by a higher education consultants’ firm. The second was a blog post by Joseph Esposito (2011) reviewing Swords’s book about PDA. To clarify, one of the committee’s sources was a blog post about an unpublished report about libraries written by consultants, meant to be purchased by university administrators, and not available to librarians.<sup>8</sup> The other was a blog post reviewing a book about the trend edited by the Vice President of Sales and Marketing of an e-book company that had recently developed a PDA program it was marketing to libraries.

Kolowich (2011) wrote that PDA “aims to relieve library purchasing agents from spending thousands on books nobody will end up reading” and quoted Doug Way, a librarian at Grand Valley State University, discussing the “jaw-dropping margins of frivolous spending” libraries do on books no one will ever use. Way also wrote a chapter for Swords’s book, though Esposito (2011) did not mention it in his review. Esposito did repeat the idea that “by some estimates, 40% of library collections never [circulate],” but qualified it by saying “I am not myself entirely confident about the accuracy of that number.”

#### Peer-reviewed literature

Most of what has been cited above is presentations, blog posts, and opinion pieces. Librarians as researchers have the responsibility to critically examine these claims, particularly in our scholarly literature, something which we have failed to do with sufficient rigor. It is mainly in the recent scholarly

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<sup>8</sup> Advisory Board Company, Education Advisory Board University Leadership Council. 2011. *Redefining the Academic Library: Managing the Migration to Digital Information Services*. Washington, DC: Advisory Board Company. This could include librarians in member institutions: the small print on page II of the report outlines the restrictions on its dissemination, which include not sharing it with employees beyond those who require access to learn from it.

literature, particularly studies that examine e-book collection and use, that the idea that traditional collection development has failed and many or even most of the books that librarians buy will never be used becomes accepted as conventional wisdom. Data supporting the claim is misrepresented and data is alluded to but not cited. In many articles, as in Miller (2011) and Spitzform, the figure presented in Kent et al. that 40 percent of new purchases made at the University of Pittsburgh in 1969 had not circulated within six years is transformed into the unsubstantiated figure that 40 percent or even “most” of all books purchased in all libraries never circulate (often with only the Pittsburgh study cited as proof), and that purchasing e-books is the solution to this problem.

For example, Bucknell (2010, 131) cited only Kent et al. when he concluded that use of recently-acquired Springer e-books at the University of Liverpool “compares well against the widely-quoted figure of 40% of print books being unused six years after purchase.” Cramer (2013, 88) cited only Kent et al. when she referenced “the oft-cited use studies, which concluded that many books on academic library shelves never get used.” Levine-Clark (2010, 202) wrote, “As at most academic libraries, a large percentage of books at the University of Denver do not get used and probably never will be used.” In this case, he cited an interview with Rick Lugg.<sup>9</sup>

In 2012, The University of Iowa decided to implement a pilot program for PDA of e-books after several of its librarians heard two conference speakers (Lugg and Dillon at the 2009 CIC conference in Bloomington, IN) discuss the “unimpressive results” of traditional collection development in research libraries (Fischer et al. 2012, 470). Fischer et al. cited no studies other than Kent and Trueswell, who, in the 1960s, tested the hypothesis that 20 percent of a library collection would account for 80 percent of its use (Trueswell 1969). While Trueswell’s theory has been accurate for some libraries, other studies have

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<sup>9</sup> In this interview, Lugg said “now, in most of our libraries 50% of the shelves are occupied by books that have not circulated in more than 10 years” (Lugg, Tucker, and Sugnet 2010, 20).

shown that anywhere from 7 percent to 58 percent of a collection accounts for 80 percent of its use.<sup>10</sup>

Fischer et al. (2012, 479) concluded that their PDA pilot was a success because 80 percent of the books they purchased received between two and ten user sessions in the past year, which “represents significantly more use than most print books receive as measured by circulations in a given year, according to the 1979 Kent Study and the results of informal circulation surveys reported by Rick Lugg.”

Pickett, Tabacaru and Harrell (2014, 218) cited Kent et al. when they wrote, “Research libraries have long suspected that print collections are little used.” They asserted that the data from the Cornell study “reinforces what many research libraries know about their own print collections through evidence-based assessment or anecdotal evidence: the use of print collections is declining,” but cited no other studies. Pickett, Tabacaru and Harrell conflated the ideas that print collections are little used and that overall use is declining in order to promote moving to PDA, concluding that “expansion of e-book offerings seems a logical alternative to investing only in print collections.”

Cramer (2013) also equated a low overall rate of circulation with much of that collection having never been used. She said a “crude analysis” of her institution’s collection revealed that “roughly 50% of the books have not circulated since...1991” and concluded that libraries should consider moving to PDA for e-books (Cramer 2013, 88). In reality, overall circulation and rate of use are two different statistics. Low overall use might be very reasonable based on the size of the collection and how often or recently it had been weeded.

Downey et al. (2014, 140) wrote that at Kent State University they “know that 39% of all librarian-selected print books have never circulated,” but did not say how. Despite referencing multiple

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<sup>10</sup> Different authors have shown 80 percent of use to come from 7.2 percent of titles (specifically of manifestations, not individual items) (O’Neill and Gammon 2014); 36 percent of the collection (Eldredge 1998); 38 percent of the collection (Blecic 2000); 40 percent of the collection (Miller 1990); and 43-58 percent of the collection (Burrell 1985).

use studies from “many” libraries, they cited no actual circulation studies in their article (which was about implementing an e-book PDA program).<sup>11</sup> They cited Levine-Clark and Spitzform, so it is easy to see why they would conclude that other libraries have also found that only around 60 percent of new acquisitions ever circulate: both of those articles alluded to the existence of multiple use studies despite the fact they cited none.

Rose-Wiles (2013, 131) claimed that Cornell’s figure of only 45 percent of books acquired in twenty years having ever circulated is “a typical value for ARL institutions.” It appears she may be attributing this claim to Stewart, whose 2011 article she cited. However, this raises the question: what *would* be a typical figure for ARL institutions? Not enough comparable studies exist in the literature to draw a firm conclusion, but existing studies do *not* show 45 percent use in twenty years to be typical.<sup>12</sup> Here is what studies done at ARL institutions in the last 10-15 years say instead:

- 66 percent of the 1.3 million books purchased between 2003 and 2008 by CARLI libraries (which include the ARL libraries at the University of Illinois at Urbana-Champaign, Southern Illinois University Carbondale, Northwestern University, and University of Illinois at Chicago) circulated during that five year period (Wiley, Chrzastowski and Baker 2011).
- 69 percent and 60 percent respectively of approval book purchases made at Penn State and UIUC in 2004-2005 circulated at least once by March 31, 2007, or roughly within their first three years

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<sup>11</sup> Downey et al. cited Spitzform when they wrote that Vermont implemented patron-driven acquisitions “as a result of a circulation study showing that like KSUL and *many other reporting libraries*, 40% of the print books acquired never circulated” (Downey et al. 2014, 142). They also wrote, “*Many libraries* report a 60% circulation rate for approval-selected print books, and for long-term use that figure drops to 50%. *Studies* also show that the circulation of the print collection is slowly declining” (144) (emphasis mine).

<sup>12</sup> The studies included here were limited to those that reported statistics with sufficient specificity; most are print use studies. I did not include statistics from studies that, though published, did not specify how or when they were acquired. For example, in an article about e-books at Brigham Young University, Schroeder & Wright (2011, 217) wrote, “Usage statistics for the past decade indicate that only one half of books purchased in the decade circulated. An analysis suggested that if a book had not circulated in its first five years, it was highly unlikely to circulate at all,” but their article does not provide any specific evidence about how this data was compiled.

in the collection (Alan et al. 2010) (note these are approval book purchases only; Tyler et al. (2013) found that approval purchases have a lower use rate than firm ordered ones, though Kingsley (1996) found the opposite).

- 58 percent of 2005 imprints owned by the University of Denver circulated at least once by 2009 (Levine-Clark 2010).
- 62.5 percent of 20,030 print books purchased by Kent State University between July 2009 and December 2011 had been used by December 2012 (Downey et al. 2014).

Other studies discuss usage at non-ARL libraries or were not recently published. These also belie the idea that a 45 percent circulation rate in twenty years is typical:

- Davidson (1943) found that 45 percent of 2,131 books acquired by the Muhlenberg College Library from 1940-1941 had circulated at least once by September 1, 1942.
- Fenske (1994) found that 58 percent of books acquired between 1987 and 1989 at the University of Illinois Chicago (UIC) Health Sciences Library had been used at least once. Because she gathered usage data in fall 1989, some of the books in question had only been available in the collection for as little as two months.
- Hamaker (1992) found that 45 percent of the books cataloged at Louisiana State University between January 1 and August 31, 1991 had circulated at least once by January 1, 1992.
- De Jager (1994) examined a random sample of 2,654 items at the University of Cape Town's library (about 1 percent of its collection) and discovered that 84 percent of the items had circulated at least once.
- Eldredge (1998) found that 84 percent of monographs acquired in 1993 at the University of New Mexico Health Sciences Center Library had circulated within 4 years, and 91 percent received at least one use (when factoring in in-house use).

- In 1993, Bowden examined circulation for 87,936 monographs published between 1980 and 1992 at four health sciences libraries. The libraries' circulation rates for these titles were 86 percent, 82 percent, 79 percent and 62 percent, respectively (Bowden 1994).
- Kingsley (1996) found that 40 percent of books added to the collection at Western Michigan in September 1995 had circulated within five months and 54 percent of books added in November 1994 had circulated at least once in their first sixteen months in the collection.
- Blecic (2000) showed that 81 percent of books acquired from 1994-1995 at the UIC Health Sciences Library had circulated within their first three years – 39 percent in their first year in the collection.
- Cheung, Chung and Nesta (2011) found that 44 percent of books acquired in 2009 at Lingnan University in Hong Kong had circulated in their first year and 67 percent of books acquired in 2004 (six years old) had circulated at least once.
- Danielson (2012) found that only 37 percent and 30 percent, respectively, of books purchased between 2003 and 2008 at the Asbury Theological Seminary Libraries in Kentucky and Florida had circulated by 2012.

Many of these libraries' studies show at least 45 percent of new acquisitions circulate in their first year, with use that can be expected to grow. Though Kent et al. claimed that if a title did not circulate in its first two years in the collection its chances of ever doing so dropped rapidly, a number of subsequent studies have demonstrated that a longer period of time is required for a collection to attain maximum use. Circulation data at the University of Sussex from 1976-1980 caused Burrell (1985, 35) to conclude that "When we observe a *fixed* collection over an increasing length of time we find that gradually more and more of the items are circulated for the first time so that gradually the size of the circulating collection increases." De Jager (1994, 76) determined that books "are not heavily used within the first three years after accession," but that use "builds up gradually and then continues for many years." Cornell (2010, 12)

found that use of a collection did not plateau until it was twelve years old. Cheung, Chung and Nesta (2011, 424) found that at Lingnan University “circulation counts cumulated as the collection aged and grew,” and fewer materials under six years old, overall, had circulated than those that had been in the collection six years or longer.

Uncritically accepting the idea that 40-55 percent of what libraries acquire never circulates and that this is the result of the failure of traditional collection development in academic libraries ignores the facts, the complexities of circulation, and the differences between the size, purpose, and methods of building collections at different libraries. Tyler et al. (2013, 6) listed many of the factors that library literature has investigated as potential influencers of book circulation (subject area, publishing output, cost of books, number of faculty and students in particular departments, availability periods, publisher, and language) to demonstrate that “circulation is potentially a complex, multifaceted subject.” A few recent studies have acknowledged this: O’Neill and Gammon (2014) suggested that librarians keep the lessons learned from past studies in mind when assessing collections, such as the fact that many books do not circulate for years and past use predicts future use. They also suggested that high-density shared storage facilities can help libraries get the biggest return on investment for low-use titles. The Cornell study (2010, 3-5) cautioned that circulation rates for books “should not be attributed to a single straightforward cause” and said librarians should consider how different disciplines use print and electronic materials and how that changes over time; how scholarship in different disciplines is disseminated; how a library’s collection practices influence collection use; and the size of the audience for any particular item (including highly specialized and non-English language materials).

Are e-books the answer?

The claim that traditional collection development is ineffective and the practice of equating low rates of overall circulation with low use and ineffective selection practices are not the only problems with the recent literature on e-book acquisitions. When comparing the use of e-books to print, a number of

studies equate whatever number cited by the vendor report (usually accesses, though sometimes the authors do not say what kind of use is being reported) to a print book circulation.<sup>13</sup> Littman and Connaway (2004, 260) were the first to do this, and they concluded that, “based on this method of evaluation, e-books received 11 percent more use than comparable print books” though they also admitted there is “incongruity” between print circulations and e-book accesses. Christianson and Aucoin (2005) and Bailey (2006) failed to define what they meant by use for print or e-books, though contextual information in their articles reveals it to be circulations and accesses.<sup>14</sup> Kimball, Ives and Jackson (2009) compared accesses or user sessions to print book circulations and listed degrees of magnitude to which e-books were used more than print despite including a lengthy discussion about how these two use measurements are not equivalent. Fischer et al. (2012, 480) concluded that their comparison of print circulations to e-book user sessions “reveals a ten-fold increase in ‘use,’” and Smyth and Carlin (2012, 185) claimed their data “revealed that e-books are used significantly more than their print counterparts.” Actually, Smyth and Carlin’s data can be interpreted as showing a congruence between the usefulness of titles in both formats at the same time of year, revealing that books that are useful in print are also useful in electronic format, where unlimited simultaneous user access can benefit use.

Articles like these have caused some to conclude that studies show that e-book use is greater than print book use.<sup>15</sup> Researchers who have approached the metrics differently, however, have not found this to be true. Gray and Copeland (2012) examined physical and electronic circulations of thirty-four new, popular titles held both in print and electronically. They found that both formats were used at a similar

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<sup>13</sup> An access is usually the equivalent to a user session, or a login to a database – a single session of use of a title which can equal either a scan of a table of contents or the close reading of many pages. A circulation of a print book can be equal to many equivalent accesses of that title physically.

<sup>14</sup> Bailey (2006) conflates checkouts and accesses when discussing e-books, but says the checkout period for an e-book at that time was two hours. The numbers of checkouts and accesses for e-books in his study are the same, leading me to believe that his patrons had to check out an e-book title in order to access it.

<sup>15</sup> For example, Walton (2014, 263) wrote, “Academic libraries that provide access to e-books found the use rate of their e-book collection was equal to or greater than that of their printed book collection.” Slater (2009, 32) concluded, “The bulk of the research on e-book use indicates that in academic libraries e-books have traditionally received equal or greater usage than their print counterparts.”

rate: the e-book copies (which had a three-week checkout period) circulated on average 15.5 times each while the print copies (which could be checked out for four weeks at a time) circulated 14.3 times each. Only seven titles circulated more electronically than they did in print. Williams and Best (2006) found that certain *Choice*-reviewed titles were used more in print than electronically (though their sample was also very small) Kimball, Ives and Jackson (2009) compared the rate of use of 4,288 NetLibrary titles to that of the same number of print titles in the same subject areas and found the rate of use was nearly identical – 24 percent of the print books and 23 percent of the e-books had at least one use in the same time period.

Some writers extrapolate from inaccurate data to conclude that users prefer e-books. Rose-Wiles (2013) compared use of her college's entire print collection between 2005-2009 to the usage of a small number of e-book titles acquired closer to 2013. Despite the fact that these two data sets were not comparable in time period, sample definition, or usage metrics, and after admitting nearly half the college's books in the sciences had been purchased 30-40 years earlier, she concluded "Our circulation data seem to confirm the low demand for print books, especially in the sciences" (Rose-Wiles 2013, 144). Pickett, Tabacaru and Harrell (2014) concluded that, because electronic titles were used more often than print when both were available, users preferred electronic books. They did not consider the fact that when print books are checked out, they are unavailable to additional users and therefore users needing that title would turn to the electronic version (Walton (2014) calls this "forced adoption").

Fischer et al. (2012, 480-81) also used questionable evidence to claim their users have a "remarkable preference for online materials when they are available." They stated that if a second copy of a book was acquired by a user clicking on its record in the catalog and triggering a PDA purchase when the library already owned the print that, "users were demonstrating their preference for electronic versions."

However, the print copy could have been checked out or not shown up in the patron's search results. They also stated that "circulation of the print copy drops dramatically once the electronic version is available,

especially for those books that had received two or more print circulations prior to the start of the PDA program.” Again, this could be because the title in question was checked out or because it was on subject matter that dated quickly. This kind of information should be examined within the context of the book’s publication date, its date of acquisition in print, and its rate and date of use electronically. Fischer et al. noted that quite a few older books were purchased electronically through their PDA plan even when there was sometimes a newer print edition in the collection, claiming this data “further support the supposition that users prefer online access.” However, depending on how the user searched, he or she may not have realized a newer print copy was available or that an older edition had been chosen.

Authors have also made statements about the preferred subject areas for e-book use without evaluating how many e-books the library owns in each subject area. Print circulation studies have shown that collection size influences use – i.e., more overall use of a collection of books will be in subjects or collections where more books are owned. Wiley, Chrzastowski, and Baker (2011) found that subjects with the highest number of purchases also had the highest print collection use. The authors of the Cornell (2010) study also remarked on this, believing it is the case both because those collections have more titles available and because libraries tend to put more resources into collecting in those areas.<sup>16</sup> However, this has not been a consideration made by most authors of e-book use studies. If most of their e- book use is in science, technology, mathematics (STM) and business titles, they have concluded this is because users in these disciplines are more inclined to use e-books than other disciplines or because information use in these subject areas lends itself more readily to the e-book format, without taking into account the number of e-books in all subject areas available at their libraries. Dillon (2001), Bailey (2006) and Gedeon and Meyer (2005) are all examples.<sup>17</sup>

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<sup>16</sup> “Use of library collections in general, and print monographs in particular, is influenced by the relative collection strengths at a particular institution” (Cornell 2010, 5).

<sup>17</sup> Dillon (2001, 119) wrote: “The one trend that appears to have been demonstrated so far, is that e-books in the fields of economics and business, and computer science, are receiving higher use than other subject areas, with medicine and health close behind.” However, he did not provide the size of his library’s collections in each subject area. Bailey (2006) concluded that the five most-used subjects for e-books at

Unlike these authors, McLure and Hoseth (2012) calculated an index to determine a relative level of use for each subject area in their e-book collection (percent use divided by percent of titles in that subject). Though science and mathematics subjects were among their highest-used subject areas for e-books, psychology, journalism and fine arts also revealed themselves to be popular subjects, while business was not.

## Discussion

The claim that 40% of collections never circulate and librarians' poor guesswork is to blame is false. Those who make it largely seem to be repeating something they believe to be conventional wisdom. They have been convinced not by data, but by this idea's persuasive proponents and a publishing industry eager to sell e-books and control content. Traditional monograph selection, management and preservation are resource-intensive and librarians are under increasing pressure to do more with less: e-book adoption, particularly through a PDA model, seems like one way to achieve this. Many librarians and publishers also believed the success of e-journals would naturally be replicated in monographs, and librarians like to be early adopters of new technology. This idea, as well as many myths about e-book use, are pervasive also because vendors and publishers have used them to promote e-book sales to libraries.

In 2008, Cleto wrote, "Reference materials and monographs, particularly in the STM fields, are most amenable to e-book collections" (47). She had a compelling reason for wanting readers to believe this: she was the Global E-books Manager for Springer, the largest publisher of reference and STM monographs in e-book format. Springer also holds topical meetings with libraries worldwide referred to

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his library were business, computers, literature, general social sciences and medicine, but did not share the number of books available in these or any other subject areas. Gedeon and Meyer (2005) found that computers and business were among the most popular subjects for Western Michigan's e-book collections, but did not report the size of the collections available. Many of these conclusions can likely be attributed to the fact that libraries tend to own more STM and business titles because of the wide collecting of Springer and Safari packages.

as “summits,” many of which are geared towards increasing acceptance of e-books. The 2009 Northeast e-books Summit featured representatives from ebrary, YBP and Publishers Communication Group, a consultants’ group for the publishing industry (Springer 2009). The overwhelming takeaway from all the presentations was that e-books are widely accepted and their use could be expected to soon outpace that of print books.

It is unlikely that collection use will rise if libraries shift to e-books, even via a PDA model. One reason is that people prefer print books (see Clark 2013; Cheung, Chung, and Nesta 2011; Gray and Copeland 2012; Lincoln 2013; Rod-Welch et al. 2013; Smyth and Carlin 2012; Walton 2014). Another is that many books are not available as e-books. Further, academic e-book publishing and collecting seems heavily skewed towards STM and business titles (disciplines that do not rely on books as heavily as others). The data that claims people use e-books more than print is dubious. By contrast, Fischer et al. (2012) revealed that only 15 percent of their ebrary aggregator package was used in eleven months – the same rate of use that, when Dillon presented it for print collections, they found “unimpressive.” McLure and Hoseth’s data (2012) is similar.

If libraries stop purchasing print books because the circulation of print materials is low or falling and buy e-books, which may be used even less, the shift in collecting would appear to be motivated not by a desire to fulfill our core mission on our campuses or to give users what they want but to save money – save the money spent on librarians who select books title by title or who would need to do the labor-intensive work of refining selection practices and approval plans to make traditional selection more effective. Save the money spent on librarians and staff who catalog, process, and shelve those books. Save the money spent on maintaining space to house them. It is no coincidence that this is the vision for the future of libraries being promoted by higher education consultants. Higher education administrators are under pressure to cut spending, and libraries, like so many other academic units, are not revenue-drivers. De Jager’s data suggested that when purchases of new books decreased, circulation of old books

increased, but only the books that were also highest in demand when they were new. She called this “the consequences of information impoverishment caused by significant decreases in spending on library materials” (De Jager 1994, 79-80). This is the outcome this course of action presents for our users.

On the vendor side, companies like ProQuest (which owns e-book aggregator platforms ebrary and EBL and vends Safari), EBSCO (which purchased NetLibrary), Springer (which recently purchased the Nature MacMillan publishing group), and other publishers (Oxford and Cambridge sell e-books and other academic presses use aggregator platforms JSTOR and Project MUSE) also stand to gain since they make or save money when libraries shift purchasing to e-books. This also enables them to retain more control of their content, control that first sale and fair use cedes to purchasers of print but is not guaranteed for e-books, which are licensed and often leased rather than owned. Complicated digital rights management (DRM) controls users’ reading, books can be made to expire after a certain number of uses, interlibrary loan can be prohibited, copying and printing limits are set by publishers and enforced by platforms, and use can be restricted through access controls. At BGSU, print books are available for loan to anyone in Ohio and anyone in the world through ILL, while e-books purchased for the campus are not. Print books can be checked out for up to a year, renewed indefinitely, and records of who reads them are purged after they are returned, but downloads of e-books usually require multiple personal online accounts and expire after a week or two. It is clear which model is best for readers – especially graduate students and faculty, whose research can take years to complete.

Striphas (2009) has made a compelling argument that one of the publishing industry’s objectives for the last century has been to undermine the processes by which readers can obtain book content without direct payment to the publisher – by borrowing from friends or libraries, or purchasing a used copy. He argued that this is what has motivated the industry’s interest in convincing people that e-books are widely used by readers even when this is not the case. Certainly getting libraries to buy e-books, despite the fact that most readers do not prefer them for most book uses, and especially when these books

might expire after twenty-six uses (as HarperCollins's do) or cannot be used for interlibrary loan, would further this agenda.

Paulson (2011) confirms this in her contribution to *Patron-Driven Acquisitions* edited by Swords. The founder of Ebook Library (EBL) and its President at the time, she wrote that publishers were convinced to participate in EBL's PDA program, in part, because they wanted a model where "payment had a one-to-one relation with use, and publishers were paid each time their book was used or bought" (Paulson 2011, 70). In contrast to ILL, which offered no profits to publishers, a PDA model that included short-term loans "offered publishers a means to be included in a new incremental revenue stream" (69) and gave them "an opportunity to enter [the ILL] economy and to reclaim some of the funds that were going to couriers" (71). In addition, she wrote, PDA offered a model in which publishers' "valuable backlist content could potentially produce revenue for much longer, even indefinitely" (71). Paulson's words imply that publishers approached e-books from the beginning as a means to extend their ability to profit from book content in ways unavailable to them with print.

## Conclusion

Libraries respond with innovation both to what we learn through careful scholarship and what we try based on new tools and technologies available. Collection practices should change as user needs change, information sources and availability evolve, and research and scholarship practices, including curricular foci and publishing, shift. E-book PDA is a new tool to add to libraries' practices, and e-books provide definite advantages in some instances for both libraries and users, such as the fact that they save space and can be available immediately. Libraries should take advantage of these benefits when they further our missions. What we should not do is propagate false information and inadvertently decimate practices and collections of materials that have been historically successful and may still provide the best service to users. In 1990, Miller wrote, "In a new era, with new fundamental rules to the game, collecting is an evolving process, one in which quantitative information about use and its implications play an ever-

increasing role” (20). In 2015, this could not be truer. As e-books continue to enter our collections, we as librarians obviously need to be more careful about the quantitative information we accept about their – and our print books’ - use.

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