

Reading and E-reading for Academic Work: Patterns and Preferences in Theological Studies and Religion

By Timothy D. Lincoln

ABSTRACT: This article reports on a 2012 survey of 2,578 library patrons at ATLA-affiliated libraries regarding academic reading habits and preferences. The research questions for the study were

1. To what extent is academic reading done as e-reading?
2. What features do participants value in e-books?
3. What library sources do patrons want made available to them electronically?

The method used in the study was an online survey. Key findings were that half of respondents regularly read journal articles on a computer screen and one in five regularly reads or listens to e-books in their academic work. Seven out of ten participants stated that they would like libraries to provide reference works, Bible commentaries, circulating titles, and textbooks in electronic format. Students consistently embraced e-reading and library resources in electronic formats at a higher rate than instructors. The distinction between library-owned resources and those owned by an individual disappeared in the minds of many respondents. They wanted library-owned electronic resources to provide affordances (e.g., annotation functions) never found in print books. The author concludes that theological library directors should consider spending a significant proportion of their collection budget on electronic resources now, despite ongoing difficulties that academic publishers face in making a transition to digital publishing. The author also interprets findings in light of Fred Davis' model of technology acceptance.

Whether or not people choose to use a technology and how they use it depends on their perceptions of the technology's ability to serve their interests. — J. Michael Spector ¹

INTRODUCTION

In 2013, reading is sometimes not what it has been for the last four centuries, an encounter between a reader and words on a physical page. As the variety and price of electronic devices drop and their capacities increase, many people in the world (not just the so-called developed world) now read on the screens of e-readers, smart phones, and computers. A veritable “digital shift” is underway in libraries² and continues at a breakneck pace. In 2006, an Ithaka study reported that “the reading technologies and collections available at present are limited and, at this time, there seems to be little sense among librarians and faculty that e-books will have the same transformative effect as electronic journals.”³ By 2010, Ithaka researchers were asking academic library directors detailed questions about which model or models they preferred to access scholarly monographs as e-books, with

¹ J. Michael Spector, *Foundations of Educational Technology: Integrative Approaches and Interdisciplinary Perspectives* (New York: Routledge, 2012), 115.

² Media Source, Inc., publisher of *Library Journal*, hosts a website called *The Digital Shift* (thedigitalshift.com). The site encourages libraries to be part of the change from a physical-object paradigm for information to the emerging virtual-object paradigm implicit in the production and distribution of information via computer networks.

³ Ross Housewright and Roger Schonfeld, *Ithaka's 2006 Studies of Key Stakeholders in the Digital Transformation in Higher Education* (August 18, 2008), 22. Available from www.ithaka.org.

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no consensus emerging. Researchers also reported, “While they are not yet comfortable with a format transition, most library directors are comfortable with the idea of eventually deaccessioning print book collections under the proper conditions.”⁴

E-books and e-readers (such as Kindle, Kobo, and Nook) are increasingly popular for leisure reading. According to 2012 reports, more than 15 percent of books in Canada and more than 20 percent of books purchased in the United States were e-books.⁵ In 2013, another report put the percentage of current sales at 25 percent.⁶ On the other hand, attitudes about reading for academic work (classwork for students, scholarship for professors) indicate the continuing value of printed books. For instance, a 2011 study of members of the Society of Biblical Literature found that most had not purchased an e-book in the past year and that more than 70 percent considered it essential that their own publications appear in printed as opposed to electronic books.⁷ Many scholars have great affection for printed books and nod affectionately when pondering “the Dickensian atmosphere of . . . secondhand bookshops: crowded shelves, dim light, curmudgeonly owners, tobacco smells, sleeping cats, serendipitous finds, and rarities at astonishingly low prices.”⁸

While other researchers have studied attitudes towards e-readers and e-reading among various types of students⁹ and faculty members generally,¹⁰ no one has studied the perceptions of students and professors in theological education in detail. The research reported here, results of an online survey of more than 2,500 students and professors of theological schools in Canada, the United States, and elsewhere, fills some of this knowledge void. Knowing about the attitudes and preferences of theological students and professors regarding reading and e-reading is important for three groups of stake holders. Professors will benefit. This knowledge will assist them to design courses that fit the habits of students. Academic publishers will benefit. This knowledge will inform their decisions about investing resources in a mix of print and electronic products. Finally, theological librarians will benefit. Understanding how their patrons are reading and their format preferences for various kinds of information sources will inform decisions about building collections and shaping user training programs.

This article has five parts. Part one describes the background and states the research questions for the study. Part two sketches Fred Davis’s model of technology acceptance.¹¹ Part three describes the method used in the study. Part four places selected results in conversation with Davis’s model. Finally, part five suggests implications for the practice of theological librarianship.

⁴ Matthew P. Long and Roger C. Schonfeld, *Ithaka S+R Library Survey 2010: Insights from U.S. Academic Library Directors*, 36. Available from www.ithaka.org.

⁵ Leigh Anne Williams, “E-books Share of Canadian Market Pegged at 16%,” *Publishers Weekly* 259, no. 42 (October 15, 2012): 11; Jim Milliot, “E-books Market Share at 22%, Amazon Has 27%,” *Publishers Weekly* 259, no. 45 (November 5, 2012): 6.

⁶ “Quarter of U.S. Buys Ebooks, Number Expected to Nearly Double by 2014, Survey Says,” *Digital Book World* (March 14, 2013) <http://www.digitalbookworld.com/2013/quarter-of-u-s-buys-ebooks-number-expected-to-nearly-double-by-2014-survey-says/>.

⁷ Jana Riess, “What Research Reveals: SBL Mines the Data,” *Publishers Weekly* 259, no. 42 (October 15, 2012): 4.

⁸ William Pannacker, “We’re Still in Love with Books,” *Chronicle of Higher Education* 58, no. 16 (December 9, 2011): A27.

⁹ L. Johnson et al., *The 2010 Horizon Report* (Austin, TX: The New Media Consortium, 2010), 20-22; L. Johnson et al., *The 2011 Horizon Report* (Austin, TX: The New Media Consortium, 2011), 14-15.

¹⁰ Roger C. Schonfeld and Ross Housewright, *Faculty Survey 2009: Key Strategic Insights for Libraries, Publishers, and Societies* (April 7, 2010). Available from www.ithaka.org. The authors concluded that faculty members across disciplines are becoming increasingly comfortable using digital scholarly resources.

¹¹ Fred D. Davis, “Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology,” *MIS Quarterly* 13, no. 3 (1989): 319–340.

PART 1 BACKGROUND AND RESEARCH QUESTIONS

In the winter of 2011-2012, several librarians were involved in an online discussion about e-books in the context of theological librarianship. The author was part of this interchange, which resulted in strong support for a survey to capture the current landscape of reading patterns and preferences among patrons of ATLA-affiliated libraries. There was also support for asking these patrons which kinds of material libraries ought to purchase in electronic rather than print format. Brenda Bailey-Hainer, executive director of ATLA, agreed to devote ATLA resources to the survey. Early drafts were circulated to ATLA library directors. The resulting set of questions was improved because of comments from several librarians and professors.¹²

The research questions underlying the survey were

1. To what extent is academic reading done as e-reading?
2. What features do participants value in e-books?
3. What library sources do patrons want made available to them electronically?

PART 2 CONCEPTUAL FRAMEWORK

This part provides a theory for interpreting the findings of the study. Information technology is ubiquitous and celebrated in the twenty-first century. Why is it, then, that some technologies become commonplace while others do not catch on? Fred Davis argued that two factors are important for the adoption of technology in the workplace. He defined *perceived usefulness* as “the degree to which a person believes that using a particular system would enhance his or her job performance.” He defined *perceived ease of use* as “the degree to which a person believes that using a particular system would be free of effort.”¹³ Davis devised questionnaires to assess perceived usefulness and perceived ease of use. Based on a series of studies of experienced computer users, Davis concluded that it is possible to measure both constructs reliably and that they point to different perceptions. In other words, someone might identify a new software application as being quite helpful to get work done (perceived usefulness) but might perceive the same software as requiring much exertion to learn (perceived ease of use). Davis also notes that “user reactions to computers are complex and multifaceted.”¹⁴ The value of Davis’ model for this study lies in providing a framework for discussing complex and perhaps contradictory attitudes towards a new technology, in this case, the emerging technology of digital information sources and digital reading devices in the context of the study of religion and theology.

PART 3 METHOD

Part three describes the survey and presents the working definitions that were given to survey respondents. A total of 2,578 respondents completed an online survey, distributed via SurveyMonkey to the primary users of ATLA libraries, students and faculty. The survey was available in French and English versions. Of all respondents,

¹² Thanks to Lisa Gonzalez, Amy Limiptlaw, Jonathan S. Riches, Denise Pinnock, Mitzi Budde, Tracy N. Powell, Karl Stutzman, Eileen Saner, Paul Burnam, Douglas Fox, Anthony D. Rogers, and Terry Kennedy for improving the survey questions. I thank André Paris of blessed memory for translating the survey into French. Thanks to Kelly Jurecko and Brenda Bailey-Hainer at ATLA for distributing the survey. Finally, I thank Christine Wenderoth for her role in drafting survey questions and for providing a cogent critique of drafts of this article.

¹³ Davis, “Perceived Usefulness,” 320.

¹⁴ *Ibid.*, 335.

81 percent were students and 19 percent were professors or instructors. Of those who identified themselves as students, 54 percent were enrolled in an MDiv program. Of all respondents choosing to answer the question about gender identification, 40 percent chose female and 60 percent chose male. It was up to library directors of ATLA-affiliated libraries whether or not to deploy and promote the survey to their communities of users.¹⁵ The bulk of respondents were affiliated with schools in Canada and the United States. There were also respondents affiliated with a few schools or libraries in Europe, one school in Asia, and one in Australia. In the case of thirty-four libraries, thirty or more individuals responded. Seventy-five schools had ten or fewer responses. Because of the way that the survey was distributed, it is not possible to calculate an overall response rate.¹⁶

In the body of the survey, respondents were asked to choose from a list of answer options. Not all respondents answered every question. For purposes of the survey, respondents were given the following definitions of key terms:

Academic work means work that you do as part of a seminary course, if you are a student. If you are a professor, academic work includes teaching as well as reading and research in your field.

An article is a relatively short composition (often 20-25 pages) in a journal, encyclopedia, or on a website.

A book is a relatively long work consisting of multiple chapters. Books that seminary students read while they do academic work are often 100-350 pages in length.

An e-book is a book that is not printed on paper but that exists as a file on a computer. E-books are read on devices like smart phones, laptops, and dedicated e-readers (e.g., a Nook).

PART 4 DISCUSSION OF RESULTS

Part four discusses selected survey results under headings for each of the study's research questions and interprets the results in conversation with Davis's theory of technology acceptance. The appendix provides a summary of all responses to the survey. To aid the reader in using the appendix as needed, the names of tables in the body of this article are keyed to the corresponding survey question in the appendix.

Because theological librarians typically identify students and faculty as their primary patrons and because there were some striking differences between these two groups of respondents, this discussion compares responses for these key groups.¹⁷ The survey itself used the compound heading "professor/instructor" as the name of the category for those respondents whose profession was teaching. I will therefore generally use the term instructor or instructors in this article. One further note on terminology: I use the term affordance to refer to a capability that may be useful, but may or may not be used.¹⁸

¹⁵ In academic life, there is no ideal time to distribute a survey. For instance, one library director chose not to promote the survey because most students at the school were away on a retreat during the survey period.

¹⁶ I prepared school-specific summaries for several schools that had thirty or more respondents. It would be possible for directors at those schools to determine a response rate using their own enrollment information.

¹⁷ Other potential comparisons that may be of interest to some librarians (e.g., female versus male respondents) are beyond the purview of this article.

¹⁸ My BlackBerry Curve, for instance, affords sending text messages. I used the device quite happily to make calls for a couple of years before I began to text. Online catalogs afford subject searching but many patrons search otherwise.

Research Question 1. To what extent is academic reading done as e-reading? The responses to survey question 1 (see Appendix Table A.1) indicated that seven out of ten respondents have the hardware and software to read electronically. Table 1 below compares the responses to this question by students and faculty.

Table 1 (Survey Question 1)

Do you own an e-reader capable device of some sort?

	STUDENTS	INSTRUCTORS
No	27.6%	34.7%
I own a Kobo	0.6%	0.6%
I own a Kindle	31.6%	25.4%
I own a Nook	5.1%	4.7%
I own a Sony	1.0%	0.4%
I own an iPad	19.4%	25.4%
I own an iPod	15.4%	9.9%
I own a tablet computer (not iPad)	5.0%	4.2%
I own a smart phone	37.0%	31.5%
I have e-reader software on my computer	36.1%	29.8%
I own a device that converts text to audio	5.1%	4.0%
Yes - other (please specify)	2.1%	1.1%

More instructors chose the “no” response than students by 7.2 percent. Students reported owning more e-readers (Kobo, Kindle, Nook, and Sony) than instructors by 6.2 percent. Students reported owning more smart phones than instructors by 5.5 percent. Fewer than four in ten respondents reported owning a smart phone. This rate of ownership may appear surprisingly low, given the volume of North American advertising designed to stimulate smart phone purchases.

Two out of ten respondents regularly listen to or read e-books as part of academic work (see appendix Table A.5). The comparison between students and instructors is shown in table 2. Almost twice as many students reported that they regularly read or listen to e-books for academic work compared to faculty respondents (two in ten versus one in ten). At the same time, more instructors reported that they sometimes (“yes, but not often”) read e-books.

Table 2 (Survey Question 5)

Do you listen to or read e-books in your academic work?

	STUDENTS	INSTRUCTORS
Never tried	44.6%	52.2%
Tried once or twice	13.2%	10.8%
Yes, but not often	19.8%	26.4%
Yes, regularly	22.5%	10.6%

Upon discovering an academic e-book of interest, four out of ten read it on a screen. The comparison between students and instructors is displayed in table 3.

Table 3 (Survey Question 6)

In your academic work, what do you do after you find an e-book that interests you?

	STUDENTS OFTEN	INSTRUCTORS OFTEN
Read it only from the electronic device	41%	27%
Annotate and underline content electronically	32%	10%
Bookmark or save the URL for future use	29%	21%
Buy the e-book	24%	13%
Save it as text	21%	13%
Borrow a print copy from a library	21%	23%
Copy and paste portions I want	18%	12%
Buy a print copy of the book	17%	15%
Print out relevant pages	16%	13%
Borrow the e-book from a library	6%	5%
Listen to it	4%	1%
Save it as a podcast	3%	1%

Both instructors and students were about equally likely to borrow a print copy from a library (two in ten) or buy a print copy (one in seven). Students were far more likely to read the e-book only on an electronic device and annotate content electronically. These findings suggest that students are more comfortable using the annotation functions of current software than instructors. Students were more likely to buy an academic e-book than instructors (24 percent to 13 percent).

To summarize comparisons about reading e-books in academic work: students reported that they listened to or read e-books at a higher rate than instructors. They also read such books on electronic devices and made electronic notes at a higher rate than faculty respondents.

Survey question 3 (see appendix Table A.3) asked about reading articles for academic work. The survey authors presupposed that articles might be available in print or electronically (or both). Table 4 compares students and instructors who chose the “often” response.

Students reported downloading articles and reading them on computers at a higher rate than instructors, by ten percent and nine percent, respectively. Students also used electronic annotations more frequently than instructors (25 percent versus 11 percent). By contrast, students and instructors reported annotating printed copies of articles at approximately the same rate. Instructors were twice as likely to read the printed version of the journal (53 percent versus 27 percent). In sum, instructors reported reading and annotating print versions of academic articles more frequently than did students.

Table 4 (Survey Question 3)

When reading articles for your academic work:

	STUDENTS	INSTRUCTORS
I download the whole article and save it	55%	45%
I read articles on a computer	52%	43%
I annotate or highlight printed copies of articles	51%	53%
I download electronic articles and print them out to read them	38%	31%
I read from a photocopy of a print article	34%	40%
I read from the printed version of the journal	27%	53%
I electronically annotate or highlight e-versions	25%	11%
I read articles on a dedicated e-reader (Kobo, Nook, etc.)	13%	7%
I read articles on my smart phone	6%	3%
I listen to articles rather than read them	2%	1%

Considered as a whole, survey responses related to research question 1 show that students engage in e-reading at higher rates than instructors. They listen to or read academic works in e-format twice as frequently as instructors. They read both e-books and articles from screens (as opposed to physical pages) more frequently than instructors.

Research Question 2. What features do participants value in e-books? Respondents had clear preferences for how e-books and e-book software ought to function. There was general agreement between students and instructors about which capacities were valuable. Table 5 compares students and instructors, showing all items that at least half of respondents in one of the groups considered “very important” or “important.”

Table 5 (Survey Question 7)

How important to you are the following abilities or functions when using an e-book for academic work? (Percent choosing “very important” or “important” shown)

	STUDENTS	INSTRUCTORS
Move around quickly within the text	90%	86%
Search for chapters and bookmarks	89%	84%
Check notes, indexes, & table of contents	88%	88%
Perform keyword searches	88%	81%
Flow to fit my screen size	82%	80%
Annotate and underline electronically	79%	63%
Preserve page formatting	77%	81%
Copy/paste into a document	77%	70%

TABLE CONTINUES

Download the whole book	73%	63%
Download portions for later use	65%	64%
Read it on my mobile device	52%	49%

Generally, students and instructors value the same functions. E-books should flow to fit one's screen. Readers should be able to move around quickly in the text, perform searches, and check tables of contents easily. It was more important to students than instructors that e-reading software support electronic annotations (79 percent to 63 percent). Respondents had the option of expressing "no opinion" for each of the e-book functions listed in survey question 7. For students, the range of those expressing "no opinion" about a specific ability or function ranged from 17 percent to 31 percent; for instructors the range was 23 percent to 35 percent. In other words, for each item a higher proportion of students expressed an opinion than did instructors.

Research Question 3. What library sources do patrons want made available to them electronically? Table 6 compares the response of students and faculty to this question.

Table 6 (Survey Question 8)

What sort of academic resources would you like to be available from your theological library in electronic format? (check all that apply)

	STUDENTS	INSTRUCTORS
Reference works (e.g., subject encyclopedias)	82.3%	86.3%
Bible commentaries	84.7%	67.3%
Newly published circulating titles	75.5%	69.9%
Old/out-of-print circulating titles	75.5%	67.5%
Textbooks	72.8%	52.4%

For instructors, reference works topped the list. Students chose Bible commentaries at a much higher rate than instructors (85 percent versus 67 percent). Students also chose textbooks at a much higher rate than instructors (73 percent versus 52 percent). For all five answer options given to respondents, more than half of students and instructors expressed the view that these resources ought to be made available in electronic format.

On the survey, respondents could select an option "other" in addition to the five set items in the answer options. A total of 193 made comments about other library resources that should be available in electronic format from one's theological library. Of these comments, fifty-five said journals or journal articles should be made available; twenty-five said things like "as much as possible"; seventeen made comments about the use of technology ("I dislike electronic material"); sixteen wrote about some kind of required reading material ("anything that is on reserve"); eleven said some kind of primary source ("Loeb Classical Library"); ten talked about biblical studies materials; and ten said no electronic materials should be made available ("I do not read electronically. I want books and paper.").

The answers to this survey question show a clear difference between students and instructors. For every type of library resources except reference works, students more strongly affirmed the desirability of having the resource available electronically. The difference is the largest for textbooks (a gap of 20.4 percent) and the second largest for Bible commentaries (a gap of 17.4 percent).

Survey question 3 asked about reader preferences for the format of journal articles in a library resource. Table 7 compares student and instructor responses. Overwhelmingly, both students and instructors expressed a preference for electronic journals, given the ability to download and save individual articles. Approximately three in ten instructors preferred print journals, two students in ten. Responses to this question continue the pattern of students embracing e-formats at a higher rate than instructors.

Table 7 (Survey Question 9)

Given a choice, which format for articles would you prefer in a library resource?

	STUDENTS	INSTRUCTORS
Print journals	18.6%	29.4%
Electronic journals with the ability to download and save individual articles	81.4%	70.6%

A total of 209 respondents made comments under the additional answer option “It depends on.” Thirty-five wrote about some capacity of e-text software (such as “only if DRM free” and “ease of taking notes and highlighting”). In addition, twenty-three stressed the importance of being able to print out articles and ten stated that they wanted to download articles to a specific kind of device (“download on computer, not just e-readers”). Twenty-eight commented that proximity to the library affected their preference (“For traveling to areas of limited internet facilities printed journals are preferred” but also “ability to access electronically from a distance”). Twenty-two said that they wanted both print and electronic journals to be available to them. Twenty-two talked about issues of accessing e-journals (“It depends upon the ease of access for someone not technologically inclined”). Seventeen spoke about cost, either to the library or themselves (“whether there is a fee”). Twelve respondents commented on their sensuous reading experience (“I like print when I have time and leisure to touch it in the library. When in a hurry I like the convenience of e-formats.”). Twelve said that their format preference depended on the kind of article (“more dense, print preferred”). Eight said that the length of the article was a consideration (“reading on the screen gives me a headache after a while”).

Respondents were also asked about their preference for the format of library books. Table 8 compares student and instructor responses.

Table 8 (Survey Question 10)

Given a choice, which book format would you prefer in a library resource?

	STUDENTS	INSTRUCTORS
E-book	35.4%	19.7%
Print book	64.6%	80.3%

Both students and instructors preferred print books by large majorities. Instructors preferred print books at a higher rate than students (80 percent versus 65 percent). To put it another way, students favored e-books as a library resource at a much higher rate than instructors. One out of three students preferred e-books; one in five instructors preferred them.

A total of 399 respondents made comments under the option “It depends on.” Eighty-two comments addressed functionality of print or e-books (“How well I can annotate and highlight the E-book;” “If I would be able to save my annotations”). Another thirty comments discussed issues of format (“Older books over 30 years old should be kept in classic book form”; “if the e-book has page numbers so it can be referenced in writing papers”). Forty comments talked about the use or purpose to which the book would be put (“For works that I use regularly for research, I prefer an electronic [book]. For shorter works I just need to reference once or twice, I prefer print”; but also “if it is a book I will be referencing often after the class I would prefer print”). Another thirty-four comments focused specifically on the level of use over an extended period of time (“my long-term interest in the book: the longer my likely interest, the more likely I’d prefer print”).

Seventy comments related to availability or accessibility of books (“So that multiple people could use it simultaneously”; “Library is not open enough and I write papers at odd hours”; “Some libraries make their print collections very widely available, but their e-collections available only to people directly connected with the institutions.”). Another eighteen comments were about e-reading devices (“Once I get an e-reader, I would prefer to get e-books”). Thirty-six comments were about the physicality of books or the reading experience (“I really, really like paper books, but they are heavy and e-books are much more portable”; “some books are meant to be held and have their pages turned”). Twenty-five comments discussed the long-term value of the book or whether it was a reference work or not (“Large books and major resources should always be in print. Ephemeral materials in e-form”; but also “E-book reference materials only”).

Twenty-one comments indicated that format preference depended on one’s proximity to the library (“Given my distance from the library, I prefer e-book access.”). Twenty comments said both print and e-books should be available (“Les deux”; “A mix of both formats is important to reach a broad base of students”). Finally, eight comments related to cost (“I want what is most cost-effective for the library”; “It depends on price of the book for buying or borrowing”).

What sense can be made of responses about format preferences for academic resources, articles, and books? The preference for printed *books* stands in contrast to the preferences expressed elsewhere in favor of e-format in journal articles and the desire to have all sorts of books (including circulating titles) in e-format. Respondent comments help to clarify, but not eliminate, this apparent contradiction. Some respondents suggested that printed books are the better or the “classic” form. They tolerate e-books because e-books might allow multiple simultaneous users, be available when the library was closed, or be available to those who are at a distance from the library building. Some respondents distinguished their preference for one format or the other based on their use of the book. For some users, this meant using electronic books for quick lookups but not sustained reading. For some, e-books were preferred for textbooks to be used for a single class, but not for books that the owner would use later on. Others commented that physical books were better in the long run, presumably because one knows that a library book on the shelf will last for generations but the future storage of e-books is an open question.

In Search of the Super Library Book. Upon analysis, it seems that respondents largely set aside the distinction between library resources and one’s personal copies of books or e-books when writing comments to the question, “Which book format would you prefer in a library resource?” This is puzzling at best. The designers of the survey took pains to stress that the boundaries for the questions were, first, materials used in the context of student or professorial academic work, and, second, library-provided resources (rather than journals or books owned by an individual). Nevertheless, the pattern of responses points towards the desirability of a kind of library-owned

e-book that far surpasses any existing library-owned print book. Libraries historically have discouraged patrons from writing in library books, yet respondents want e-books that can be annotated and highlighted with ongoing patron access to their notes. In other words, in the minds of respondents the ideal academic library-owned e-book should have features unmatched by print books. Christine Wenderoth¹⁹ suggests that the non-physical nature of digital library materials makes it difficult to imagine that the putative distinction between an e-book that I own and an e-book that the library owns should have any bearing on the reader's use of the e-book. The desired book transcends the library/individual ownership distinction.

The Acceptance of E-Reading Technologies. As discussed in part 2, Davis's model of technology acceptance posits that a technology that achieves popularity does so because users perceive it as highly useful and because the technology is perceived as requiring little to no effort to employ. In terms of perceived usefulness, many survey respondents affirmed that e-books can assist their academic work. The responses show that the majority of participants thought that it was desirable to have e-books for reference works, stack copies, and textbooks. Many comments from participants addressed issues of perceived ease of use. Participants want e-materials that approach (or even surpass) the affordances of printed books. They want to be able to navigate through the text quickly and use indexes and tables of contents. They want to be able to make and permanently save annotations. They want the e-book to retain page-like features.²⁰ In sum, the results of the survey are consistent with the conclusion that e-reading technology is on the cusp of meeting Davis' standards for perceived usefulness and perceived ease of use.

Students Embracing E-Resources. Comparisons between students and instructors reveal that students consistently embrace e-reading and library resources in electronic format at a higher rate than their faculty counterparts. What might explain this difference? A plausible interpretation might be the digital native versus digital immigrant conjecture. A decade ago Prensky famously argued that one's date of birth correlates with one's comfort-level and technical aplomb in the digital world.²¹ Table 9 shows the age distribution of students and instructors who responded to the survey. Student respondents, as a group, were younger than instructors. Four in ten students were thirty or younger. Two out of three instructors were fifty-one or older. Nearly the same proportion of students and instructors were forty-one to fifty (17 percent and 18.9 percent, respectively). The experience of those fifty or younger with academic libraries is more likely to have entailed using libraries with databases and access to online resources in undergraduate work. For those over fifty, it is possible that undergraduate work (and graduate work) would have involved little or no use of databases and electronic resources.

TABLE 9 AGE OF RESPONDENTS, STUDENTS AND INSTRUCTORS

	STUDENTS	INSTRUCTORS
30 or younger	37.3%	1.9%
31 to 40	19.7%	11.8%
41 to 50	17.0%	18.9%

TABLE CONTINUES

¹⁹ Personal communication, February 2013.

²⁰ The irksome problem of consistent pagination appears not to be as large of a concern in electronic journals because the broad use of the PDF format insures consistent virtual pages that mimic the physical pages of a print journal — even in electronic journals like this one that have no print counterpart.

²¹ Marc Prensky, "Digital Natives, Digital Immigrants," *On the Horizon* 9, no. 5 (2001): 1-6; Prensky, "Digital Natives, Digital Immigrants: Part II," *On the Horizon* 9, no. 6 (2001): 1-6.

51 to 60	19.6%	37.3%
61 or older	6.4%	30.0%

To put it in phenomenological language, the natural attitude for contemporary younger North American students is the *normalcy* of e-resources.²² The natural attitude for older students and for most of the North American professoriate in theological education is that e-resources are recent novelties, whether prized, suspect, or awkward. Thus, age differences may helpfully explain some findings in the survey.²³ At the same time, both instructors and students generally agreed on the affordances they desired in e-resources, such as annotation functions and consistent pagination. The age of respondents seemed to matter not at all in that context. This pattern of responses is consistent with Davis' concepts of perceived usefulness and perceived ease of use.

PART 5 IMPLICATIONS AND WILD ASSERTIONS

This section suggests implications for the practice of theological librarianship derived from survey findings. Some of these implications rise, in my opinion, to the level of obviousness; others are open to debate. Some preliminary words are in order, however, about the limitations of the study. As noted earlier, participants were not selected from a random sample; individual library directors opted in to the survey process and promoted the survey among their patrons. Thus, the generalizability of these findings is less robust than if the survey had operated with more controls. Readers are therefore at liberty to add the appropriate amount of salt to my suggestions.

In light of the results of this study, theological library directors should seriously consider spending a significant proportion of their collection budget on electronic resources now. Why?

Large majorities of both students and instructors asserted that they want reference works, Bible commentaries, and circulating titles in e-format. A majority of students also wanted e-textbooks.

There was even more consensus among students and instructors about the desirability of libraries providing access to electronic journals. Eight in ten students and seven in ten instructors prefer this format. According to the survey, slightly more than half of students read articles on their computers and make electronic annotations. It seems reasonable to conclude that survey respondents want e-format materials because these materials provide affordances lacking in codex books, such as the ability to search for phrases and to cut and paste from the e-format document into one's own writing. A more conservative reading of survey results would distinguish between spending for e-journals (probably a very good idea), spending for reference materials (perhaps a good idea), and spending on monographs (why shift resources away from purchasing printed books at all at this point?).

The recommendation to spend proportionately more money on e-materials runs up against a problem of supply. As of this writing, appropriate materials may not be available for purchase or lease by theological libraries. While

²² Five percent of students responding to the survey identified themselves as citizens of Canada, ninety percent as citizens of the United States, and five percent as citizens of other countries. I am surmising that the bulk of students who participated in the survey were educated in Canadian or American schools which provided them access to electronic resources.

²³ A growing body of research challenges the notion that digital natives are sophisticated in their ability to use information technology simply because of when and where they were born. See Erika E. Smith, "The Digital Native Debate in Higher Education: A Comparative Analysis of Recent Literature," *Canadian Journal of Learning and Technology* 38, no. 3 (September 1, 2012) and Penny Thompson, "The Digital Natives as Learners: Technology Use Patterns and Approaches to Learning," *Computers & Education* 65 (July 2013): 12-33, doi:10.1016/j.compedu.2012.12.022

vendors now sell many e-books directly to users (Amazon and Barnes & Noble), the market is still sorting out how to sell academic e-books to libraries, who traditionally “own and loan” books.²⁴ Some reference materials are already available such as *Credo Reference* and *Oxford Biblical Studies Online*. The number of such reference products is likely to increase. I find it difficult to imagine a compelling reason for publishers in religious studies and theology not to make a virtually complete transition²⁵ to electronic versions of their publications.²⁶

In addition to shifting purchases towards materials in electronic format, theological librarians should review their current programs of user training. Librarians should assist users to achieve (as much as possible) the dream of Super Library Books and their sidekicks, Super Journal Articles. Respondents repeatedly stressed the importance of being able to make annotations to library-owned e-format material that would continue to be available to users indefinitely. Cloud storage and tools like Evernote and Mendeley make possible some of these dreams.²⁷ The ability to download and save journal articles for personal use already addresses some of the challenges for electronically annotating articles.²⁸ Theological libraries can demonstrate their value to the academic enterprise directly to their patrons by teaching students and faculty how to become sophisticated users of annotation tools.

In my view, theological librarians should not wait for the perfect solution to the problems that e-texts pose for their users and libraries before spending money on them. Nor should they remain on the sidelines while permit academic and church publishers struggle to invent business models without input from a traditionally important part of their customer base, libraries. One virtue of the recent report of the AAUP Taskforce on Economic Models for Scholarly Publishing was its insistence on collaboration between all parts of the scholarly communications ecosystem, including academic libraries.²⁹ Reading preferences among professors and students are shifting, even in the theological disciplines. Theological librarians can side with the late adopters if we wish. I say: let’s lead.³⁰

²⁴ In early 2013, for instance, EBSCO announced a subject e-book collection in theology and religion. See Sue Polanka, “EBSCO releases 23 new eBook subject sets,” *No Shelf Required* (February 19, 2013), <http://www.libraries.wright.edu/noshelfrequired/2013/02/19/ebSCO-releases-23-new-ebook-subject-sets/>.

²⁵ I am confident that there will be a small market for printed books just as there are markets for hand-made shoes and custom-made vestments. In another context, I posited the year 2020 as the date when most academic libraries will spend more than half of their acquisitions dollars on electronic resources (Timothy Lincoln, “Reading Room: How Do Libraries Contribute to Learning?” *Insights* 128, no. 2 [Spring 2013]: 12). Because theological libraries typically are part of institutions that highly value tradition and because of the power that professors exert in decisions in free-standing theological schools, this tipping point is likely to come later for many seminary libraries.

²⁶ Because librarians want to provide good service to a variety of patrons, they may wish to continue to purchase both print and electronic versions of some publications. This practice raises a question of stewardship. Seminary boards of trustees will want well-reasoned answers when they ask why essentially the same content is being paid for twice.

²⁷ Evernote is available from www.evernote.com, Mendeley from www.mendeley.com. See “Evernote,” *Engineering & Technology* 8, no. 5 (June 2013): 90–91 and Steven Ovidia, “A Brief Introduction to Web-Based Note Capture,” *Behavioral & Social Sciences Librarian* 31, no. 2 (April 2012): 128–132, doi:10.1080/01639269.2012.679852..

²⁸ For a discussion of Mendeley’s annotation capabilities, see Holt Zaugg et al., “Mendeley: Creating Communities of Scholarly Inquiry Through Research Collaboration,” *TechTrends: Linking Research & Practice to Improve Learning* 55, no. 1 (January 2011): 32–36, doi:10.1007/s11528-011-0467-y. For a discussion of recent upgrades to the most common PDF reader, see Joel Mathis, “Adobe Reader Adds Signature, Annotation Features,” *Macworld* 29, no. 7 (July 2012): 28.

²⁹ Lynne Withey et al., “Sustaining Scholarly Publishing: New Business Models for University Presses,” *Journal of Scholarly Publishing* 42, no. 4 (July 2011): 397–441.

³⁰ In some theological schools, the decision to shift library purchases to e-materials is simply required by the need to guarantee access to high-quality sources for use by students in blended or distance education courses.

APPENDIX

Table A.1 Survey Question 1

Do you own an e-reader capable device of some sort? (Check as many as apply)

ANSWER OPTIONS	RESPONSE PERCENT	RESPONSE COUNT
No	29.2%	747
I own a Kobo	0.6%	16
I own a Kindle	30.3%	774
I own a Nook	5.1%	130
I own a Sony	0.9%	22
I own an iPad	20.4%	522
I own an iPod	14.4%	367
I own a tablet computer (not iPad)	4.8%	122
I own a smart phone	35.8%	915
I have e-reader software on my computer	34.7%	887
I own a device that converts text to audio	4.9%	124
Yes - other (please specify)	1.9%	49
<i>Answered question</i>		2554

Table A.2 Survey Question 2

Do you have access to an e-reader through a lending program?

ANSWER OPTIONS	RESPONSE PERCENT	RESPONSE COUNT
No	85.0%	2156
Yes	15.0%	380
<i>Answered question</i>		2536

Table A.3 Survey Question 3

When reading articles for your academic work:

ANSWER OPTIONS	OFTEN	SOMETIMES	RARELY	NEVER
I download the whole article and save it	53%	32%	32%	4%
I annotate or highlight printed copies of articles	51%	25%	25%	11%
I read articles on a computer	50%	34%	34%	3%
I download electronic articles and print them out to read them	37%	33%	33%	9%
I read from a photocopy of a print article	35%	39%	39%	6%

TABLE CONTINUES

I read from the printed version of the journal	32%	30%	30%	11%
I electronically annotate or highlight e-versions	22%	18%	18%	42%
I read articles on a dedicated e-reader (Kobo, Nook, etc.)	12%	13%	13%	60%
I read articles on my smart phone	5%	12%	12%	65%
I listen to articles rather than read them	2%	6%	6%	78%
Answered question				2571

Table A.4 Survey Question 4

Do you read or listen to e-books for any purpose (e.g., leisure reading)?

No	37.3%
Yes, but not often	29.9%
Yes, regularly	32.8%
Answered question	2559

Table A.5 Survey Question 5

Do you read or listen to e-books in your academic work?

Never tried	46.1%
Tried once or twice	12.7%
Yes, but not often	21.0%
Yes, regularly	20.1%
Answered question	2558

Table A.6 Survey Question 6

In your academic work, what do you do after you find an e-book that interests you?

ANSWER OPTIONS	OFTEN	SOMETIMES	RARELY	NEVER
Read it only from the electronic device	38.5%	32.9%	13.9%	14.7%
Annotate and underline content electronically	27.7%	23.9%	18.5%	29.9%
Bookmark or save the URL for future use	27.4%	41.4%	17.4%	13.9%
Buy the e-book	21.9%	30.2%	17.2%	30.6%
Borrow a print copy from a library	21.2%	40.8%	22.4%	15.6%
Save it as text	20.0%	38.4%	19.4%	22.2%
Copy and paste portions I want	17.0%	37.1%	21.1%	24.8%

TABLE CONTINUES

Buy a print copy of the book	16.5%	38.6%	27.5%	17.4%
Print out relevant pages	15.1%	28.3%	24.9%	31.6%
Borrow the e-book from a library	5.9%	16.0%	21.5%	56.6%
Listen to it	3.9%	9.9%	19.2%	67.0%
Save it as a podcast	2.4%	7.4%	17.4%	72.7%
Answered question				2534

Table A.7 Survey Question 7

How important to you are the following abilities or functions when using an e-book for academic work? Of those expressing an opinion:

ANSWER OPTIONS	VERY IMPORTANT	IMPORTANT	SOMEWHAT IMPORTANT	NOT IMPORTANT
Perform keyword searches	58.1%	28.3%	11.5%	2.1%
Move around quickly within the text	56.7%	32.7%	7.6%	3.0%
Search for chapters and bookmarks	55.1%	33.1%	9.8%	2.0%
Check notes, indexes, & table of contents	53.6%	34.0%	9.6%	2.7%
Annotate and underline electronically	50.5%	25.5%	16.0%	8.0%
Preserve page formatting	47.1%	30.5%	15.5%	6.9%
Flow to fit my screen size	45.8%	36.1%	14.0%	4.1%
Copy/paste into a document	38.7%	36.7%	17.4%	7.2%
Download the whole book	35.9%	35.1%	21.1%	7.8%
Read it on my mobile device	29.4%	22.4%	17.5%	30.8%
Download portions for later use	26.7%	37.9%	26.1%	9.3%
Read it on my smart phone	14.9%	14.9%	20.1%	50.2%
Link to other resources	12.6%	26.5%	40.4%	20.5%
Convert from text to audio	7.8%	9.4%	20.6%	62.2%

Table A.8 Survey Question 8

What sort of academic resources would you like to be available from your theological library in electronic format? (check all that apply)

ANSWER OPTIONS	RESPONSE PERCENT	RESPONSE COUNT
Reference works (e.g., subject encyclopedias)	83.0%	2029
Bible commentaries	81.4%	1990
Newly published circulating titles	74.4%	1819
Old/out-of-print circulating titles	73.8%	1805
Textbooks	68.5%	1675
Other (please specify)		193
Answered question		2445

Table A.9 Survey Question 9

Given a choice, which format for articles would you prefer in a library resource?

ANSWER OPTIONS	RESPONSE PERCENT	RESPONSE COUNT
Print journals	23.1%	519
Electronic journals with ability to download and save individual articles	67.6%	1519
It depends on....(briefly explain)	9.3%	209
<i>Answered question</i>		2247

Table A.10 Survey Question 10

Given a choice, which book format would you prefer in a library resource?

ANSWER OPTIONS	RESPONSE PERCENT	RESPONSE COUNT
E-book	32.3%	762
Print book	67.7%	1599
It depends on... (briefly explain)		399
<i>Answered question</i>		2362

NB: Respondents who chose "It depends on" also chose either e-book or print book.

Table A.11 Respondents by Academic Category

Which category best describes you? Choose one only.

ANSWER OPTIONS	RESPONSE PERCENT	RESPONSE COUNT
Student in undergraduate degree program (bachelor's level)	3.8%	97
Student in a certificate program	2.3%	58
Student in a MDiv program	43.9%	1122
Student in academic master's program	11.0%	281
Student in professional master's program (Master of Arts in ____)	11.5%	294
Student research doctoral program (such as Th.D. & Ph.D.)	4.3%	109
Student in professional doctoral program (e.g., DMin.)	3.2%	82
Student not enrolled in a degree or certificate program	1.2%	31
Professor/instructor	18.8%	479
<i>Answered question</i>		2553

Table A.12 Students, by Program Type

If you are a student, which category best describes your program:

ANSWER OPTIONS	RESPONSE PERCENT	RESPONSE COUNT
Residential (more than half of courses are taught in person)	84.2%	1743
Distance (more than half of courses are not taught in person)	10.9%	225
Intensive (courses taught in person over two weeks or less)	4.9%	101
<i>Answered question</i>		2069

Table A.13 Students, by Enrollment Status

If you are a student, which category below best describes your enrollment status?

ANSWER OPTIONS	RESPONSE PERCENT	RESPONSE COUNT
Full time	69.2%	1433
Half time	17.4%	361
One course most semesters	11.2%	232
Only occasional courses	2.2%	46
<i>Answered question</i>		2072

Table A.14 Distance from Institution's Library

How far do you live from your institution's library?

ANSWER OPTIONS	RESPONSE PERCENT	RESPONSE COUNT
Less than one mile or on campus	31.5%	797
1 to 10 miles	26.5%	672
11 to 50 miles	23.4%	593
Over 50 miles	18.6%	471
<i>Answered question</i>		2533

Table A.15 Age of Respondents

Which category best describes your age?

ANSWER OPTIONS	RESPONSE PERCENT	RESPONSE COUNT
20 or younger	0.6%	16
21 to 30	29.8%	761
31 to 40	18.4%	470

TABLE CONTINUES

41 to 50	17.5%	447
51 to 60	22.9%	585
61 to 70	9.8%	251
71 or older	1.1%	27
<i>Answered question</i>		2557

Table A.16 Gender

I am:

ANSWER OPTIONS	RESPONSE PERCENT	RESPONSE COUNT
Female	39.6%	1011
Male	58.6%	1495
I prefer not to answer this question	1.8%	47
<i>Answered question</i>		2553

Table A.17 Citizenship

ANSWER OPTIONS	RESPONSE PERCENT	RESPONSE COUNT
Canada	6.6%	168
United States of America	88.5%	2261
another country	4.9%	126
<i>Answered question</i>		2555

Table A.18 Ethnicity

ANSWER OPTIONS	RESPONSE PERCENT	RESPONSE COUNT
American Indian/Alaska Native	0.2%	4
Canadian/First Nations	0.6%	16
Asian/Pacific Islander	3.6%	92
Black/Non-Hispanic	8.1%	204
Hispanic	3.1%	78
2 or more	3.3%	83
White/Non-Hispanic	81.1%	2050
<i>Answered question</i>		2527