
Rachel Jordan
January 2017

Submitted in partial fulfilment of the requirements for the degree of MSc in Library Science

Supervisor Dr Lyn Robinson
1. Abstract

The purpose of this dissertation was to investigate, firstly, the availability of LGBTQ materials in public high school libraries in the U.S. state of North Carolina and, secondly, how LGBTQ students use these materials. The availability of LGBTQ materials was researched via querying schools’ remotely accessible OPACs for both checklists and relevant subject headings. Use was examined by requesting and analysing circulation data provided by willing school librarians, and by conducting an online questionnaire of young LGBTQ adults over the age of eighteen. The final sample was comprised of 55 schools, 6 sets of circulation data, and 21 survey respondents. The main findings were that 1) North Carolina’s public school libraries are still under-coll...
2. Table of Contents

1. Abstract ........................................................................................................................................ 2

2. Table of Contents ....................................................................................................................... 3

  2.1 List of tables ............................................................................................................................ 6

  2.2 List of figures .......................................................................................................................... 6

3. Acknowledgements .................................................................................................................... 7

4. Introduction ................................................................................................................................ 8

  4.1 Aims, research questions, and objectives .................................................................................. 10

    4.1.1 Aims ..................................................................................................................................... 10

    4.1.2 Research questions ............................................................................................................. 10

    4.1.3 Objectives .......................................................................................................................... 10

  4.2 Scope and definition .................................................................................................................. 11

    4.2.1 Scope .................................................................................................................................. 11

    4.2.2 Definition ............................................................................................................................ 11

5. Literature review .......................................................................................................................... 12

  5.1 Availability of LGBTQ materials in high school libraries ......................................................... 12

    5.1.1 Publication of LGBTQ materials ....................................................................................... 12

    5.1.2 Librarian and academic attitudes toward LGBTQ materials ............................................. 13

    5.1.3 Public library holdings of LGBTQ materials .................................................................... 14

    5.1.4 School library holdings of LGBTQ materials .................................................................... 15

  5.2 Use of high school libraries' LGBTQ materials ....................................................................... 16

    5.2.1 General LGBTQ information behaviour ............................................................................ 16

    5.2.2 LGBTQ information behaviour differs from other information behaviour ...................... 17

    5.2.3 Information poverty ............................................................................................................ 18

    5.2.4 Teenagers' library use ......................................................................................................... 19

    5.2.5 Teenagers' school library use ............................................................................................. 19

    5.2.6 LGBTQ teenagers' library use ............................................................................................ 20

    5.2.7 Safe spaces ......................................................................................................................... 21

6. Methodology .............................................................................................................................. 21

  6.1 Mixed methods ......................................................................................................................... 21

    6.1.1 Limitations of mixed methods ........................................................................................... 22
6.2 LGBTQ collection evaluation ................................................................. 22
   6.2.1 Sampling ......................................................................................... 23
   6.2.2 Preparing for and conducting the collection evaluation ................. 23
   6.2.3 Limitations of the collection evaluation .......................................... 24
6.3 Circulation analysis ........................................................................... 25
   6.3.1 Sampling ......................................................................................... 26
   6.3.2 Conducting the circulation analysis .................................................. 26
   6.3.3 Limitations of the circulation analysis ............................................. 27
6.4 Survey questionnaire.......................................................................... 27
   6.4.1 Preparing the survey questionnaire ................................................... 28
   6.4.2 Target population, sampling, and survey distribution ..................... 29
   6.4.3 Limitations of the survey questionnaire .......................................... 30
7. Results .................................................................................................... 30
   7.1 Collection evaluation ......................................................................... 30
      7.1.1 Using subject headings ................................................................. 30
      7.1.2 Using checklists ............................................................................ 31
      7.1.3 E-materials .................................................................................... 32
   7.2 Circulation analysis ........................................................................... 32
   7.3 Survey questionnaire ......................................................................... 33
      7.3.1 Impact and use of school library LGBTQ materials ....................... 34
      7.3.2 Properties of school and their effects on use .................................. 36
      7.3.3 LGBTQ student satisfaction ......................................................... 38
      7.3.4 Sources of LGBTQ materials and reasons for their use............... 39
8. Discussion ............................................................................................... 44
   8.1 The current state of LGBTQ collections in North Carolina public high schools 44
      8.1.1 Collection evaluation ................................................................. 44
         8.1.1.1 Checklist versus subject heading searches ............................... 45
         8.1.1.2 E-materials .......................................................................... 45
      8.1.2 Students’ perceptions ................................................................. 46
      8.1.3 Importance ................................................................................. 46
   8.2 How heavily are North Carolina public high schools’ LGBTQ collections used? 47
      8.2.1 Circulation ................................................................................. 47
8.2.2 In-house use .................................................................47
8.2.3 Theft .........................................................................48
8.3 Where do LGBTQ public high school students look for LGBTQ materials? .... 48
  8.3.1 Preferred sources of LGBTQ materials ..................................48
  8.3.2 Reasons behind preferred sources of LGBTQ materials ..............49
    8.3.2.1 Selection and privacy .............................................50
  8.3.3 Reasons behind using the school library to access LGBTQ materials 50
  8.3.4 Desired changes to school libraries ....................................51
  8.3.5 Respondents who did not use LGBTQ materials from any source ....52
8.4 What else characterizes students' behaviour when seeking out LGBTQ materials? ...............................................................52
  8.4.1 Difficulty locating LGBTQ materials in the school library ..........52
  8.4.2 Information poverty ......................................................54
9. Conclusion ........................................................................55
  9.1 Summary of findings .......................................................55
  9.2 Academic significance ....................................................56
  9.3 Practical significance .....................................................57
10. References .......................................................................59
11. Appendices .....................................................................71
  11.1 Appendix A: Reflection ..................................................71
  11.2 Appendix B: Checklists ..................................................72
    11.2.1 Books from Webber's (2010) core collection ......................72
      11.2.1.1 Fiction ...............................................................72
      11.2.1.2 Non-fiction .......................................................72
    11.2.2 Updated checklist ....................................................73
      11.2.2.1 Fiction ...............................................................73
      11.2.2.2 Non-fiction .......................................................74
  11.3 Appendix C: Survey instrument .........................................75
  11.4 Appendix D: List of social media pages used to distribute link to survey ....81
  11.5 Appendix E: Project proposal ..........................................82
  11.6 Appendix F: Ethics checklist ............................................102
  11.7 Appendix G: Letters to school librarians requesting circulation data ....105
11.7.1 Introduction .............................................................................................................. 105
11.7.2 Instructions for participating librarians ............................................................... 106

2.1 List of tables

Table 1. Comparison of Hughes-Hassell et al.’s (2013) findings to current study .......... 32
Table 2. Collection and circulation data by school library .............................................. 33
Table 3. Reasons for using school library to look for LGBTQ materials ......................... 41
Table 4. Reasons for using public library to look for LGBTQ materials .......................... 41
Table 5. Reasons for using university library to look for LGBTQ materials ................... 41
Table 6. Reasons for using a physical store to look for LGBTQ materials ...................... 42
Table 7. Reasons for using the Internet to look for LGBTQ materials ......................... 42
Table 8. Respondents’ reasons for their most-used sources of LGBTQ materials ............. 43

2.2 List of figures

Figure 1. Number of titles with LGBTQ-related subject headings held per school .......... 31
Figure 2. Did your school library have any books (or other materials) with LGBTQ content? .................................................................................................................................. 34
Figure 3. Effects of knowing one’s school library held LGBTQ materials ..................... 35
Figure 4. How often student respondents were able to find specific LGBTQ materials in their high school libraries .................................................................................................................. 35
Figure 5. Frequency of respondents’ methods of accessing school LGBTQ materials ....... 36
Figure 6. Effect of the presence of various features of the school library on respondents’ reported likelihood of use of this library as a source of LGBTQ material ...................... 38
Figure 7. Respondents’ levels of satisfaction with their school library LGBTQ collections and experience accessing them ............................................................................................................ 39
Figure 8. Percentage of respondents’ time spent using various sources to look for LGBTQ materials ..................................................................................................................................... 40
Figure 9. Mean percentage of time respondents spent using each source to look for LGBTQ materials ................................................................................................................................. 40
Figure 10. Reasons for each respondent’s most frequently used source of LGBTQ materials ........................................................................................................................................ 43
3. Acknowledgements

Sincere thanks to my friends and family, my lovely supervisor, the kind librarians who sent me their circulation data, everyone who helped me distribute my survey, all my survey participants, and, last but very much not least, my cat.
4. Introduction

It is imperative when providing library services to recognize the diversity of the community that one serves and to “strive to reflect that diversity by providing a full spectrum of resources” to this community (American Library Association [ALA], 2004). Although data on the subject vary, a recent study by the Public Religion Research Institute estimates that at least 7% of millennials identify as lesbian, gay, bisexual, or transgender (LGBTQ\(^1\)), and a small number more report experiencing same-sex attraction despite identifying as heterosexual (Jones and Cox, 2015, p. 46); thus, it is important for school libraries - and all libraries serving young people - to recognize the LGBTQ population and to evaluate the availability and use of their LGBTQ materials in order to make sure their LGBTQ patrons are being adequately served.

The study of services to LGBTQ students is crucial for reasons more concrete than the ALA mandate: discrimination and hostility against LGBTQ high school students is still very much alive and has quantifiable negative effects on these students. The National School Climate Survey, conducted by the Gay, Lesbian and Straight Education Network (GLSEN), is a biennial online survey of LGBTQ youth that measures their school experiences (Kosciw et al., 2014, p. xv). Their most recent study, conducted in 2013 and published the following year, found that many LGBTQ students still experience hostility in school; for instance, 74.1% and 55.1% of LGBTQ students reported having been verbally harassed for their sexual orientation and/or their gender expression, respectively (Kosciw et al., 2014, p. xvii). This study found that students who experienced victimization or discrimination because of their sexualities or forms of gender expression were more likely to miss school, had lower grade point averages, were less likely to have plans to attend post-secondary education, and were more likely to experience depression and low-self-esteem than students for whom bullying was not a concern (Kosciw et al., 2014, p. xviii). Savage and Schanding (2013) reported in a summary of recent literature that LGBTQ teenagers also experience heightened feelings of isolation and ostracism and are more likely to engage in drug use and risky sexual

\(^1\) Many scholars (e.g. Horton, 2016) include a Q for queer or questioning at the end of the common acronym LGBT.
behaviour. Given the current state of affairs, the LGBTQ high school population is especially in need of support.

One way to support and affirm these students is to make sure that they have access to books and other materials that include LGBTQ characters, LGBTQ issues, and other relevant content (Pecoskie, 2005; Levithan, 2004; McCafferty, 2006). Hughes-Hassell et al. (2013) studied the availability of LGBTQ materials in high schools in an unnamed southern state; the state is identifiable as North Carolina based on information provided in the authors’ description of the state’s political history, number of counties, and number of geographical school regions as designated by the state’s Department of Education (Hughes-Hassell et al., 2013, p.5). Hughes-Hassell et al. (2013) concluded that LGBTQ materials were being under-collected in North Carolina’s public high schools.

There have been several significant events since Hughes-Hassell et al.’s (2013) work that have affected the LGBTQ community and thus justify updating their study. As of 2014, several states had legalized same-sex marriage; North Carolina, however, was not one of them (Lachman, 2014). The United States Supreme Court in effect overruled the state’s ban by legalizing same-sex marriage nation-wide in 2015 (Obergefell et al. v. Hodges, 2015). However, the political landscape in North Carolina still does not fully protect LGBTQ individuals; in early 2016, North Carolina passed a severely controversial bill requiring individuals to use the public bathrooms that correspond with the sex recorded on their birth certificates, as opposed to the bathrooms that correspond with their gender identity. The same bill prohibited the passing of local anti-discrimination ordinances (General Assembly of North Carolina, 2016). Additionally, although the data collection in the current project predates this event, the notoriously anti-LGBTQ politician Mike Pence was elected to the vice presidency of the United States in November 2016, causing considerable fear among the LGBTQ community (Redden, 2016).

In response to these recent events, the current project re-investigates the availability of LGBTQ books in public high schools in the southern U.S. state of North Carolina and compares the results to those of Hughes-Hassell et al. (2013); this is done
by utilizing Hughes-Hassell et al.’s (2013) methodology (with minor additions and updates) of a checklist study and the querying of relevant LGBTQ subject headings in the sample high schools’ OPACs. The current study then builds on the topic of school libraries’ LGBTQ holdings by exploring the use of these materials. This exploration is conducted via circulation analyses of the LGBTQ materials of the high schools whose OPACs were queried and by surveying recent high school graduates from the state in question in order to create a more well-rounded picture of this topic.

4.1 Aims, research questions, and objectives

4.1.1 Aims

- To investigate the availability and use of materials with LGBTQ content in public high school libraries in the state of North Carolina.

4.1.2 Research questions

- How many titles with LGBTQ content do public high school libraries in North Carolina hold, and how this has changed since Hughes-Hassell et al.’s (2013) study?
- How much do these materials circulate?
- What does the measure of relative use factor (RUF) reveal about the intensity of use of these materials?
- Do LGBTQ high school students look to their school libraries for LGBTQ materials, or do they look elsewhere?
- What reasons are there behind LGBTQ high school students’ use or nonuse of their school libraries as sources of these materials?
- What are these students’ patterns of behaviour and preferences regarding the use of these materials?
- Do these students’ patterns of behaviour align with Chatman’s (1996) theory of information poverty?

4.1.3 Objectives
• To carry out a checklist study and subject headings search in order to evaluate the LGBTQ holdings of public high schools in North Carolina.
• To compare the relevant results to those of Hughes-Hassell et al. (2013).
• To obtain circulation data about LGBTQ materials from the schools sampled in the checklist study and use this to calculate their relative use factor as described by Bonn (1974) and Gavigan (2014).
• To conduct a survey questionnaire to investigate LGBTQ students’ use of LGBTQ materials.

4.2 Scope and definition

4.2.1 Scope

This project will be restricted to active public high school libraries in North Carolina that have remotely searchable Follett/Destiny OPACs at the time of the research. Due to ethical considerations, the survey questionnaire will be administered to students that are at least eighteen years of age, and thus are graduating or have graduated high school in 2016.

4.2.2 Definition

• LGBTQ is an acronym commonly used (e.g. by Cart and Jenkins, 2015) to refer to people who are not heterosexual and/or cisgender; it stands for lesbian, gay, bisexual, transgender, and queer or questioning.
• LGBTQ materials include, for the purposes of this study:
  • Materials (in any format) that are retrieved via querying an OPAC for the Sears subject headings of gay men, lesbians, transsexualism, homosexuality, and bisexuality (Miller and Bristow, 2007).
  • Materials that may not necessarily carry the aforementioned metadata, but which have been identified as having “significant and authentic GLBTQ content” by the Rainbow Book Lists (Rainbow Books, 2009), or
which appear on the list of core LGBTQ books compiled by Webber (2010).

- A public high school is a school serving grades nine through twelve, usually corresponding to ages fourteen through eighteen years, which is funded by and freely available to members of the public.
- High school students in this case will be defined as people who attended public high school in the state of North Carolina for the duration of (at a minimum) the 2015-2016 academic year.
- Relative use factor is a measure of use that is calculated using circulation data. It is “the ratio of the percentage of circulations in a given subject area compared to the holdings’ percentage in the same subject area” (Bonn, 1974, as cited by Gavigan, 2014, p. 99).

5. Literature review

5.1 Availability of LGBTQ materials in high school libraries

5.1.1 Publication of LGBTQ materials

LGBTQ materials must first exist before librarians can collect them. Literature on the subject shows a growing body of LGBTQ materials aimed at teenagers. Cart and Jenkins (2015) note that an estimated 700 young adult novels with LGBTQ content have been published since 1969, with the majority of these having appeared within the last two decades (Cart and Jenkins, 2015, p. xi). Gross (2013) and Jiménez (2015) have also noted a major rise in the rate of publication of these works in recent years. Greyson (2007), focusing on graphic novels, found that LGBTQ characters are finally beginning to appear in comics from more mainstream publishers. A rise in quality, complexity, and diversity has occurred as well (Cart and Jenkins, 2006; Lo, 2014). Cart and Jenkins (2015) have identified 250 books including fiction, non-fiction, and graphic novels that they consider to be well crafted and lacking in harmful stereotypes. Additionally, several

---

2 The 1969 publication of John Donovan’s I’ll Get There. It Better Be Worth the Trip marks the debut of queer content in young adult novels (Cart and Jenkins, 2015, p. xi).
awards have been developed to recognize excellence in LGBTQ young adult books (e.g. Lambda Literary, n.d.; Gay, Lesbian, Bisexual, and Transgender Round Table, 2016), further demonstrating their proliferation and their merit, qualities which are often prerequisites for collection by libraries (Johnson, 2014, pp. 144-145).

5.1.2 Librarian and academic attitudes toward LGBTQ materials

There has been a fair amount of attention given to meeting the needs of LGBTQ patrons. Writers on the topic are, generally speaking, in agreement that this is a worthy goal that must be addressed. This has, for the most part, been expressed in the form of short essays and lists pleading the case for increased attention to the needs of LGBTQ patrons and presenting ideas for how to go about addressing them (e.g. Agosto, 2007; Manfredi, 2009; Rockefeller, 2009; Storts-Brinks, 2010; Rauch, 2011; Parks, 2012). Popular steps put forth include more frequent consultation of LGBTQ book lists, implementation of book talk programmes to connect patrons to materials, challenging of censorship (Zimmer and McCleer, 2014, Venuto, 2015; Antell et al., 2013), and expansion of LGBTQ collections with quality materials (Rockefeller, 2009). Studies that sample practicing librarians and graduate students of library science, although piecemeal, show that practitioners can be reluctant to purchase LGBTQ materials for their libraries if they feel that their community is too conservative to respond well to such materials (Rickman, 2015, p. 26). Although only covering librarians in the relatively conservative state of Arkansas, Rickman’s (2015) study showed that 91% of school librarians sampled had not participated in any LGBTQ-related professional development workshops (Rickman, 2015, p. 26). This aligns with the findings that, although some universities have been deemed to have adequate LGBTQ resources (e.g. Graziano, 2016), many libraries serving library and information sciences (LIS) students lack LGBTQ titles (Williams and Deyoe, 2015).

Oltmann’s (2016) study sampled librarians in both the southern and northeastern United States and found that all librarians surveyed thought that maintaining a good selection of LGBTQ materials “was important and valuable” (Oltmann, 2016, p. 7). She describes her results as a “saturated representation of the positive perspective”, but raises the possibility that librarians who disapprove of
collecting LGBTQ materials may not have agreed to participate in her research, skewing her sample toward those with positive viewpoints (Oltmann, 2016, p. 7, 15). This could be true for all the studies mentioned above, which also show an overwhelmingly positive view of LGBTQ collections and services. One study conducted via observation, rather than a survey, showed that most librarians appeared to be comfortable responding to teens’ queries regarding LGBTQ materials (Curry, 2005). This further indicates an overall positive attitude on the part of library and information science professionals and academics. Despite Oltmann’s (2016) self-identified saturation with the positive perspective, she does note highly variant levels of comfort and enthusiasm for including LGBTQ materials; in fact, some of her respondents corroborate Rickman’s (2015) findings that perceived community disapproval of LGBTQ topics instils a tendency for librarians to consider self-censorship when making acquisitions (Oltmann, 2016, p. 7-9). The atmosphere appears to be worse where services to children of LGBTQ parents are concerned – Campbell Naidoo (2013) found through interviews that although most of the public librarians they spoke to did not offer services for LGBTQ families, 52% of them did not see a need for improvement in this regard (Campbell Naidoo, 2013, p. 36).

5.1.3 Public library holdings of LGBTQ materials

The general consensus among scholars of librarianship is that there is a paucity of LGBTQ titles in libraries. There have been several studies of these holdings in public libraries, but many have taken place outside of the United States (e.g. Chapman, 2013; Boon and Howard, 2004; Yilmaz, 2014) and are thus less directly applicable to the current research. Notable recent studies of U.S. public libraries include Stringer-Stanback (2011) and Williams and Deyoe (2014). Stringer-Stanback (2011) focused on the effects of anti-discrimination ordinances on LGBTQ holdings and found no relationship between these ordinances and the size of LGBTQ collections, although she did find that areas with more diverse demographics tended to have more of these titles. Williams and Deyoe (2014) found that a third of public libraries with collection development budgets of at least $100,000 did not meet the researchers’ baseline measurements for diverse youth collections.
5.1.4 School library holdings of LGBTQ materials

The International Federation of Library Associations and Institutions (IFLA) addressed the subject of school library services to LGBTQ students in a special interest paper for the 69th General Conference and Council, which commented on the dire state of these services and concluded that (Clyde, 2003, p. 8):

In relation to meeting the needs of gay, lesbian and bisexual users of school libraries, or in relation to meeting the needs of school library users for realistic representations of homosexuality in our society, it is clear that school libraries generally have a long way to go, despite some outstanding examples of good service. Freedom of access to information and literature for young people, freedom of expression, access to information and books reflecting a diversity of views and lifestyles, freedom from the restraints of censorship — these rights, enshrined in the Universal Declaration of Human Rights and the Convention on the Rights of the Child, and in important professional documents, are beyond the experience of many (perhaps most) users of school libraries.

A few studies have focused on LGBTQ holdings in U.S. school libraries more recently; of particular note are Hughes-Hassell et al. (2013), Williams and Deyoe (2014), Oltmann (2015), and Pierce Garry (2015). Hughes-Hassell et al.’s (2013) results have already been mentioned in the introduction section of this project. Williams and Deyoe's (2014) study included school libraries in addition to public libraries; they found that 207 schools among their 843 schools studied held none of the LGBTQ books from their checklist. School libraries in the south, they found, held the smallest mean amount of LGBTQ titles at fewer than four per library (Williams and Deyoe, 2014, pp. 109-110). Even though Hughes-Hassell et al. (2013) and Williams and Deyoe (2014) both performed checklist studies on school libraries in the southern United States, it is hard to compare the results of these two studies, as they utilized different checklists and had quite different sampling techniques; one can simply say that neither team found the LGBTQ holdings in these schools to be sufficient. Oltmann (2015) did not query her schools’ OPACs for Hughes-Hassell et al.’s (2013) selected subject headings. Given that the current study will incorporate this aspect of Hughes-Hassell et al.’s (2013) study, it will be more directly comparable and thus better indicative of longitudinal trends in the collections. Oltmann (2015) does not make any judgments about whether the LGBTQ holdings that she found were sufficient, as this was not the focus of her study. Pierce
Garry (2015) also performed a checklist study and sampled high school libraries in the state of Ohio; her research revealed that nearly 70% of the libraries sampled had less than 25% of the items on her checklist. She compared this to a control checklist of other controversial titles and determined that LGBTQ titles were being collected at a one to three ratio as compared to other ‘controversial’ titles (Pierce Garry, 2015, p. 81). Additionally, Fisher (1995) performed a literature review and concluded that libraries had failed to meet the needs of LGBTQ students; however, much may have changed in the 21 years since her study.

Both Oltmann (2015) and Pierce Garry (2015) examined factors correlating with schools’ LGBTQ holdings. Oltmann (2015) sought to expand Hughes-Hassell et al’s (2013) research in order to establish correlations between LGBTQ holdings and school size, locale, antidiscrimination ordinances, demographics, and political affiliation. The only variables she found to be significant were school size and locale (i.e. urban versus rural), with larger schools holding more LGBTQ titles overall, and suburban and rural schools holding more non-fiction LGBTQ titles (Oltmann, 2015, p. 30-31). Pierce Garry (2015) examined factors correlating with the LGBTQ holdings of Ohio high school libraries – she found that the political lean of the school district, the certification of the school librarians, the size of the student body, and the percentage of minority students all significantly impacted the presence of LGBTQ books. This differs from Oltmann’s (2015) findings; further study is necessary to determine the truth of the matter. It is possible that Oltmann (2015)’s study is more generalizable due to her larger sample size. Neither Hughes-Hassell et al. (2013) nor Oltmann (2015) examined how teenagers actually used the LGBTQ materials in their school libraries.

5.2 Use of high school libraries’ LGBTQ materials

5.2.1 General LGBTQ information behaviour

There has been a fair amount of research done on how adults use LGBTQ library materials. These studies do not reveal a unified picture of library use by LGBTQ patrons; some (e.g. Joyce and Schrader, 1997) found high frequency of use, while others (e.g. Beiriger and Jackson, 2007) found low frequency. These studies were done on different
populations a decade apart, which may account for the differences in findings. The rise of internet use may be a contributing factor to the lower frequency of library use found by Beiriger and Jackson (2007); although one’s amount of internet use does not necessarily correlate inversely with one’s amount of public library use (Vakkari, 2012), over time LGBTQ adults may have taken to using the internet in lieu of public libraries as more information became available online, due to the fact that the internet provides more privacy (Hamer, 2003, p. 81). Adult study participants have generally reported low levels of satisfaction with their libraries’ LGBTQ collections (e.g. Goldthorp, 2007; Schaller, 2011).

5.2.2 LGBTQ information behaviour differs from other information behaviour

Measuring use and user satisfaction is important for any library service, but it could be argued to be especially important with regard to LGBTQ school children, considering both school librarians’ duty to support LGBTQ students and the positive link between self-affirmation and access to LGBTQ materials (ALA, 2004; Rauch, 2011). Additionally, the fact that disclosing an LGBTQ identity is still a complicated issue for many people (Legate et al., 2012) suggests that these students may have different patterns of information use when it comes to using LGBTQ materials or finding information that relates to their sexual or gender identities; this can be seen, for example, in Beiriger and Jackson’s (2007) study which found lower levels of in-person library use but higher levels of online information searching among transgender participants. Hamer (2003), when interviewing gay university-aged males, found that the “conditions most strongly linked to information seeking [were] the experience of fear and the concealment of information seeking activities”, to the point that some participants feared physically checking out LGBTQ materials (Hamer, 2003, pp. 80-81), leading to the most popular information seeking activity being using the internet to communicate with other gay people (Hamer, 2003, p. 84). This desire for privacy is corroborated by Mathson and Hancks (2007), who found that LGBTQ materials circulated 20% more by self-checkout than did a control group of books. Interestingly, they did not find a difference in how often LGBTQ and control materials were utilized in-house (Mathson and Hancks, 2007, p. 34). Considering the amount of bullying and harassment found by GLSEN (Kosciw et al., 2014), perhaps LGBTQ students would
prefer to search for LGBTQ materials in other spaces than at school, such as at public libraries or online. Wells (2014), in fact, designed an online database as part of her Master's project in order to serve LGBTQ teenagers who may want privacy in locating this material. If this is the case, it may be that larger LGBTQ collections in school libraries serve a symbolic purpose of showing LGBTQ students that they are welcome, instead of just being sources of information for these students. This would inform how librarians should store and promote such material. Mehra and Braquet (2011) touch on the creation of a welcoming atmosphere in the library to encourage patrons to come to the reference desk with LGBTQ queries – they suggest, among other things, displaying LGBTQ materials in order to make patrons more comfortable in the library (Mehra and Braquet, 2011, p. 411). As it stands, LGBTQ individuals are more likely to turn to online reference services than face to face ones due to “fear of stigma and rejection” (Thompson, 2010, as cited by Mehra and Braquet, 2011, p. 404).

5.2.3 Information poverty

Chatman’s (1996) theory of information poverty, shown below, provides valuable insight into LGBTQ information behaviour (Chatman, 1996, pp. 197-198):

1. People who are defined as information poor perceive themselves to be devoid of any sources that might help them.
2. Information poverty is partially associated with class distinction. That is, the condition of information poverty is influenced by outsiders who withhold privileged access to information.
3. Information poverty is determined by self-protective behaviors which are used in response to social norms.
4. Both secrecy and deception are self-protecting mechanisms due to a sense of mistrust regarding the interest or ability of others to provide useful information.
5. A decision to risk exposure about our true problems is often not taken due to perception that negative consequences outweigh benefits.
6. New knowledge will be selectively introduced into the information world of poor people. A condition that influences this process is the relevance of that information in response to everyday problems and concerns.

Hamer (2003) applied all but the second and sixth propositions of this theory to his findings regarding gay males’ information seeking (Hamer, 2003, p. 84-85).
Proposition one is apparent in the resources discussed above; LGBTQ people do see themselves as devoid of resources, and for good reason. Proposition five maps onto quite a few studies as well, as the desire for privacy is a recurring theme. Hasler et al. (2014) highlighted the importance of the privacy and community of internet groups across a broad spectrum of situations, the most discussed of which were mental health issues but which also included sexual identity. By searching for forum posts using various combinations of phrases such as “could never tell my parents”, they identified several indicators of information poverty present in these online forums (Hasler et al., 2014, p. 29).

5.2.4 Teenagers’ library use

Some scholars have done smaller scale projects that provide a more nuanced, although not necessarily generalizable, view of teenagers’ library use. Agosto (2007) noticed that the most popular uses for the public library included participating in club meetings, checking out or returning books, and attending library programs (Agosto, 2007, p. 58). Abbas et al. (2008), Agosto and Hughes-Hassell (2005), and Meyers (1999) all found that many teenagers have “widespread negative perceptions of libraries and librarians” that result in reduced library use (Agosto and Hughes Hassell, 2005, p. 161). Meyers (1999) even taps into the strong negative perception of libraries as ‘uncool’. Additionally, Pierce (2003) studied items in school libraries that appeared to be noncirculating and found that, actually, materials that are not circulating are sometimes no longer available because they have been lost or stolen, indicating that they are indeed used. She noted that materials relating to sex and drugs are among those that frequently disappear from collections. Other researchers found that teenagers tend to prefer using technology and electronic sources instead of going to the library to get information (Abbas et al., 2008; Vavrek, 2004). With regard to reading habits, which may of course influence library use, The Kaiser Family Foundation (2010) found that teenagers now read for pleasure an average of 25 minutes a day, up from 21 minutes a day in 1999 (Kaiser Family Foundation, 2010, as cited by Russo, 2012, p. 6).

5.2.5 Teenagers’ school library use
The ALA’s latest report on the condition of school libraries, published in 2009, found that circulation in school libraries had increased 9.5% between 1999 and 2007, regardless of the grade levels they served (ALA, 2009, p. 15). The 2012 report on a questionnaire by the American Association of School Librarians (AASL) found a mean of 313.3 individual visits to the school library per typical week (AASL, 2012, p. 11). This data is not filtered by school size or type, so it is impossible to say what percentage of high school students this figure actually represents; as high schools made up only 26% of the respondents, it is difficult to make substantive claims about them with this data (AASL, 2012, p. 3). Sin (2012) found that the better students’ high school libraries were, and the amount they used them, varied inversely with their public library use, and that while 67% of her population used the public library, 93% used their school library. Agosto (2007) surveyed 97 teenagers at two public libraries and found a significant difference in the frequency between teenagers’ public and school library use, with public libraries being used at least weekly at a rate of 69.1%, versus 17.5% for school libraries; however, she notes that “survey respondents have difficulty accurately quantifying their library usage” (Agosto, 2007, p. 58). The stark difference between the findings of these studies indicates that further research in this area is required.

5.2.6 LGBTQ teenagers’ library use

A limited number of studies have surveyed LGBTQ youth about their library use. Linville (2004) found that although most LGBTQ youth use public libraries, one third of youth who used the library specifically to gather information about LGBTQ topics were not able to find what they needed (Linville, 2004, as cited by Chapman, 2013, p. 546). Sanelli and Perreault (2001) asked LGBTQ teenagers about how faculty could better support their needs, and were told that LGBTQ love stories should be included in high school English classes’ curricula (Sanelli and Perreault, 2001, p. 74). Similarly, Mehra and Braquet (2006) interviewed LGBTQ youth in one Southern U.S. city and asked for input on how libraries could intervene in the coming out process; several of their participants said that they sought LGBTQ materials through the library (although not necessarily through physical resources). However, Kosciw et al. (2014), the largest and most generalizable study with 7,898 participants, most in grades 10-11 (p. xvi), found that only 44.2% of students said that they could find LGBTQ materials in their school
library (Kosciw et al., 2014, pp. 57-59). Oltmann (2016) touched on LGBTQ students’ school library use, but from the perspective of school librarians, not the students themselves; these librarians relayed stories of recent students finding “value and comfort” in their libraries’ LGBT collections (Oltmann, 2016, p. 15). There is a notable lack of studies that ask students in more depth about their use of school libraries’ LGBTQ material specifically, a gap which the current study begins to address.

5.2.7 Safe spaces

Libraries have an important role as safe spaces for many disadvantaged youth, including LGBTQ teenagers. Some of these teenagers report using the library as a sanctuary in which to hide from bullies (e.g. Barack, 2014, p. 40), and many librarians have noticed students who “find safety and solace among the stacks” (Betz, 2012, p. 2). Librarians and activist groups have discussed the creation of these spaces (e.g. Albright, 2006). Some librarians have discussed creating displays with LGBTQ books and listing other resources for these students in order to make them feel more at ease and to provide information up front for those who are not comfortable asking for it (Barack, 2014, p. 40). GLSEN (2012) provides a list of resources to help school librarians to make their libraries “safe and inclusive for LGBT youth” (GLSEN, 2012, p. 1). Among these is their Safe Spaces kit, which includes a sign for school staff to hang indicating that their rooms are inclusive atmospheres for LGBTQ youth (GLSEN, n.d.). Students who had Safe Space stickers and posters in their schools tended to view school staff more positively, and to feel more comfortable coming to them with LGBTQ issues (Kosciw et al., 2014, p. 73). Their guidance specifically for librarians also advises steps related to visibility, including having rules about respecting all visitors posted prominently and “[displaying] books and posters with diverse faces and families” (GLSEN, 2012, p. 2). This begs the question of how knowing the library has LGBTQ materials, perhaps through seeing them displayed, affects LGBTQ students who visit their school libraries.

6. Methodology

6.1 Mixed methods
Mixed methods was selected for this study because this approach allows the researcher to gain a more well-rounded picture of the topic (Denscombe, 2014, pp. 146-147); this is important for the study of LGBTQ use of school libraries because it has not been the subject of much previous research. Each method employed in a mixed methods study helps to compensate for the others’ weaknesses, and findings from each method can help to make sense of findings from other sections (Denscombe, 2014, p. 152, 160). In this case, the collection evaluation and circulation analysis, which were able to gather an impersonal picture of the topics under study, were strengthened by methodological triangulation with the survey questionnaire, which provided data about self-reported user behaviour and the reasons behind it. Mixed methods also allows for data triangulation – in this case, for what students report to be corroborated by what the other data communicates (Denscombe, 2014, p. 154).

6.1.1 Limitations of mixed methods

Conducting a multi-part study requires the researcher to be proficient in more than one method, which is both somewhat difficult and has the potential to divide one’s attention. This was addressed by scaling each segment of the study to a manageable sample size and depth, as discussed with the project supervisor, and by working on each section consecutively rather than concurrently. However, the researcher acknowledges that human error is possible in any research project.

Mixed methods can also take more time than other methods, which in this case meant that, due to the limited time frame of the project, the researcher could not delve as deeply into each part as would have be ideal (Denscombe, 2014, p. 161). Despite this, the study can act as an indicator for where to focus more in-depth future research; several possibilities for this are presented in the conclusion section.

6.2 LGBTQ collection evaluation

To investigate North Carolina schools’ holdings of LGBTQ materials, both a checklist study and a search of OPACs for LGBTQ-related subject headings were conducted during May 2016. Checklist studies, utilized by many other researchers of
LGBTQ-related librarianship (e.g. Chapman, 2013; Hughes-Hassell et al., 2013; Oltmann, 2015; Williams and Deyoe, 2014), are the most common method of evaluating library holdings (Moss, 2008, p. 149); they involve “checking for the inclusion of a core collection” as a method of collection evaluation (Hughes-Hassell et al., 2013, p. 6). As this part of the study was intended to be comparable to Hughes-Hassell et al.’s (2013) study, most of the same methodology was used. Deviations are explicitly noted.

6.2.1 Sampling

As Hughes-Hassell et al.’s (2013) population was public high school libraries in what is identifiable as the state of North Carolina, lists of public high schools in North Carolina provided the sampling frame. The frame was constructed by listing the school districts in each of North Carolina’s eight geographical districts and subsequently listing all public schools falling within each district as found on their official websites. Systematic stratified sampling was used in order to minimize regional differences (Hughes-Hassell et al., 2013, p. 5-6; Babbie, 2013, pp. 209-212). Every sixth school with a publicly searchable OPAC was selected from the list until seven schools had been chosen from each district; this number was agreed upon with the project supervisor as it was smaller and more feasible than Hughes-Hassell et al.’s (2013) n=125, but still large enough to provide a reasonable amount of data. If a school did not have a remotely searchable OPAC, another school was selected by the same methods and from the same district to replace it. Originally, 56 schools were sampled, but one was removed at a much later date after it was revealed by staff that it was a new school that had not yet hired a librarian and thus did not have an active library. As the sampling frame consisted of a total of 585 schools, the sample of n=55 represented 9.4% of the total population.

6.2.2 Preparing for and conducting the collection evaluation

The data was obtained by querying each school’s OPAC for Webber’s (2010) core collection, used by Hughes-Hassell et al. (2013), as well as for an updated list of books.³

³ For full list, see Appendix B.
that had come out in the years since Webber’s (2010) checklist was published. The more recent list comprised the books from the 2011-2016 Rainbow Book Lists\(^4\) which were specially denoted with asterisks as being most highly recommended, and which were listed as being appropriate for grades 9-12. Rainbow Books aimed younger audiences but deemed to be of interest to all ages were also included. The Rainbow Book List was selected as the basis for this checklist as it is created by the ALA’s GLBT Round Table and thereby holds some degree of professional authority (Rainbow Books, 2009). The Rainbow Book Lists were also used by Williams and Deyoe (2014), who conducted a similar study. The number of copies of each checklist title held by the sampled libraries was recorded on a spreadsheet.

In addition to being queried for the materials on these checklists, the selected OPACs were queried for LGBTQ-related subject headings in order to complement the results of the checklist search. The subject headings used were the Sears subject headings gay men, homosexuality, lesbians, and transsexualism (Miller and Bristow, 2007)\(^5\). The resulting materials’ titles, authors, and copyright dates were recorded on a spreadsheet; materials marked ‘lost’ were not recorded, as this meant they were no longer available through the library.

The Sears subject heading bisexuality was also used (Miller and Bristow, 2007), and the results recorded. However, as this term was not used by Hughes-Hassell et al. (2013), the materials located by using this subject heading were, for the sake of comparability, not incorporated until the circulation analysis. The mean number of LGBTQ materials held by each library, as identified by the relevant subject headings, was compared to the mean found by Hughes-Hassell et al. (2013) using the single-sample \(t\) test run on SPSS\(^6\).

6.2.3 Limitations of the collection evaluation


\(^5\) Hughes-Hassell et al. (2013) used a later version of the Sears headings, but the relevant subject headings that they listed had not changed from the earlier version accessed for this study. The later version was unable to be accessed expeditiously in the U.K.

\(^6\) IBM® SPSS® Statistics, Version 23.
While Moss (2008) raises the issue that comparing a list to a collection will exclude many materials that are LGBTQ but not considered ‘desirable’ by the checklist (her case study showed almost 70% were not identified through checklists alone), the addition of subject heading searches to this study will mitigate this, and at least catch materials that carry properly applied metadata. The lack of proper metadata being applied to these materials is, however, its own issue and has surely resulted in the accidental exclusion of some LGBTQ materials (Broadley, 2015, slide 14). Lundin (1989) raises the points that checklist studies are both highly arbitrary and that because new books are being published all the time, checklists quickly become obsolete (Lundin, 1989, as cited by Moss, 2008, p. 150). Books from the Rainbow Book List were added to address the issue of obsolescence by filling the gap between the time the first checklist was published and the current year; the Rainbow Book List, having been put together by the American Library Association, could be said for this reason to also be somewhat less arbitrary and subjective than other lists (Rainbow Books, 2009). Additionally, Sears subject headings were used to search the OPACs without knowing whether or not these were in fact the subject headings used by the libraries and their vendors. This was done for consistency, as Hughes-Hassell et al. (2013) used these headings as their search terms.

The single-sample t test is generally used to compare a sample mean to a population mean (Frey, 2016, p. 17); it has been used in this part of the study to compare the mean from the current sample with the mean from a larger sample, as it is the best statistic found to achieve this purpose. Because the exact assumptions of the test have not been met, it has not been used to claim a significant difference between these means.

6.3 Circulation analysis

The second part of the study, circulation analysis, was modelled off of Karen Gavigan’s (2014) study of graphic novel circulation in middle school libraries and is a well-documented method of studying the use of a collection (Johnson, 2014, p. 324). Gavigan (2014) used circulation data generated by school librarians through Follett/Destiny library management systems (LMS) to calculate the relative use factor.
(RUF) of the graphic novel subsets of these collections. The same was done in this study, but for the LGBTQ collections, rather than the graphic novel collections, of the school libraries sampled in the collection evaluation. This research took place during May and June 2016.

As of now, no previous studies have been identified which use circulation analysis or relative use factor to investigate the use of LGBTQ collections; however, this method has been used successfully in schools to gain practically useful pictures of poetry and the aforementioned graphic novel collections (Enochs, 2010; Gavigan, 2014).

6.3.1 Sampling

The population for this part of the study was made up of all the schools that were sampled during the collection evaluation, provided that contact email addresses for their librarians were publicly available online. Although many schools were contacted, only a few were actually able to provide their data, due to an increase in their job responsibilities accompanying the end of the academic year. The final sample size for this part of the study was n=6, the same as Gavigan's (2014).

6.3.2 Conducting the circulation analysis

All librarians for which contact information could be found were emailed and asked to provide circulation data about both their LGBTQ materials and their collections as a whole. In order to standardize the operational definition of LGBTQ materials between these libraries, each librarian contacted was provided with the list of LGBTQ materials found in their library during the collection evaluation phase of the study. The librarians were specifically asked to provide data regarding the total number of items in their libraries during the 2015-2016 school year, the total number of circulations during that year, the total number of copies of LGBTQ materials they held during that year, and the total number of circulations for each of these LGBTQ titles for this time period. This information was used to calculate the RUF for each school's LGBTQ holdings through the formula (percentage of library's total circulations that come from the subset under study)/(percentage of library's collection that this subset represents) = RUF, as
developed by Bonn (1974, pp. 272-273) and described by Gavigan (2014, p. 102). A RUF of 1 indicates that the subset of the collection under inspection circulates the same amount, proportionately, as the rest of the collection does. Higher RUFs indicate that the collection is overused and may need to be expanded, while lower RUFs indicate that the collection is underused and may need weeding (Gavigan, 2014, p. 102). The single-sample t test was performed in SPSS, just as in Gavigan’s (2014) study; this is a valid measure as to whether or not the RUFs found were significantly different from the hypothesized value of 1 (Frey, 2016, p. 17).

6.3.3 Limitations of the circulation analysis

The small sample size of n=6 raises questions of the generalizability of this part of the study; therefore, no attempt has been made to generalize the findings from this section to the population as a whole. However, the experiences of LGBTQ people at the sampled schools are still valuable and worth considering from a moral standpoint.

Circulation analyses done solely with data from school libraries themselves cannot usually account for e-books, as e-book circulation is often tracked by vendors and not through the school’s LMS (Johnson, 2014, p. 324). Only one of the libraries which provided circulation data had LGBTQ e-materials in their collection – these materials were not included when calculating the RUF for this library’s LGBTQ collection, as the lack of circulation data for them would have skewed the RUF to be lower than it actually was. As the majority of the schools sampled during the OPAC querying did not have any LGBTQ e-materials in their collections, the lack of data about their circulation does not, for the most part, affect the conclusions that can be drawn from this analysis. Additionally, circulation analyses do not account for in-house use or for the use of materials which are stolen from the library. The survey component of this study provides some measure of both in-house use and theft and is meant, in part, to rectify the shortcomings of the circulation analysis.

6.4 Survey questionnaire
During October and early November 2016, a survey questionnaire was conducted online to gather information about the use of LGBTQ materials from LGBTQ teenagers themselves. Administering surveys to measure user needs is quite common in the field of librarianship; many libraries use massive corporate survey tools such as LibQual+ to self-evaluate (Johnson, 2014, p. 325). Linville (2004, as cited by Chapman, 2013, p. 546), Joyce and Schrader (1997), and Beiriger and Jackson (2007), among others, have used questionnaires to measure the information needs and behaviours of LGBTQ people specifically, albeit LGBTQ adults.

6.4.1 Preparing the survey questionnaire

The questionnaire comprised primarily fixed alternative and multiple dichotomous questions for ease of data analysis and standardization of responses (Pickard, 2013, p. 211). Some scale questions were included in order to measure attitudes (Pickard, 2013, p. 212), and open-ended questions were included at the end, solely to ensure that the questionnaire had covered everything that the respondents felt was important. The survey was pilot tested and revised prior to distribution to ensure that its questions were straightforward and provided valid and reliable data (Pickard, 2013, p. 210). In order to conform to ethical standards, the survey was discussed with the project supervisor prior to distribution, and an introduction was added to the survey informing participants about the project, their right to anonymity and confidentiality, and their right to opt out at any time without negative consequences. It was created and distributed using the survey website Qualtrics, a service to which City, University of London is subscribed.

The acronym LGBTQ was specified in the survey questions to include pansexuality. Pansexuality is a relatively new term, especially among young people, which is used to describe attraction regardless of gender (Palermo, 2013; Belous and Bauman, 2016). LGBTQ content was defined quite broadly to include LGBTQ characters, themes, information, or anything else relating to LGBTQ identity. Public high schools

7 Qualtrics can be accessed via https://www.qualtrics.com/.
8 This term differs from bisexuality in that bisexuality traditionally recognises attraction to men and women, whereas pansexuality operates outside of the gender binary.
were specified not to include charter and early college high schools, as these are less likely to have typical library services and LMS; early college high schools, for instance, were discovered in the collection evaluation phase of the project to primarily utilize the libraries of local community colleges.

6.4.2 Target population, sampling, and survey distribution

The survey was intended to gather information from people who self-identified as LGBTQ, were at least eighteen years of age, and who, during the 2015-2016 academic year, had attended public high schools in North Carolina that had actively functioning school libraries. These qualifications formed the first four questions of the survey, and participants who did not meet them were screened out. 77 people attempted the survey; however, of these, only 21 both passed the screening questions and completed the survey in full. The requirement that students had attended high school during the 2015-2016 academic year was meant to reduce memory bias; for this reason, respondents were instructed to answer the survey questions with respect to only how they behaved during that year.

As LGBTQ teenagers are an invisible population, and thus cannot be sampled by creating any kind of sampling frame, non-probability sampling had to be employed during this part of the study (Denscombe, 2014, p. 33). For the purpose of online survey distribution, Denscombe (2014, p. 35) recommends using email lists that serve the population that one wants to reach. Given that there is no email list that serves the entire LGBTQ population, purposive sampling was employed to distribute the survey to groups that would likely contain the desired respondents (Babbie, 2013, pp. 190-191). To this aim, a list of 33 LGBTQ-related student organizations run through colleges and universities in the state of North Carolina was compiled by using a Google-generated list of these institutions and then visiting their websites to locate contact information for the relevant student organizations. The organizations were contacted and representatives were asked to distribute the survey link to their members. As this sample would skew the survey towards participants that have the means to attend higher education, the survey was also distributed through the non-higher education related channels of Twitter, Facebook, online forums, and, to a smaller extent, snowball
sampling via old colleagues of the author who were the correct age and had connections to the LGBTQ community. 9

6.4.3 Limitations of the survey questionnaire

The sample size of n=21 was smaller than recommended by Denscombe (2014, p. 50); however, as it is impossible to know the actual size of the population, it may be more comprehensive than expected. Generalizability to population will not be claimed. Additionally, Agosto (2007) noted that it appeared difficult for the respondents in their study to accurately quantify their library usage (Agosto, 2007, p. 58); although the survey was piloted with the aim of making sure the questions gave a good representation of respondent behaviour, further research is necessary to draw firm, generalizable conclusions about LGBTQ teenagers’ school library use.

Interviews would have perhaps provided more useful data and helped to establish a more nuanced picture of the issue; however, this was not feasible based on the limited time available for this section. In person interviews would not have been possible due to the researcher’s geographic distance from the population under study.

7. Results

7.1 Collection evaluation

The results of the collection evaluation have been analysed using many of the same measures as Hughes-Hassell et al. (2013) for the sake of comparison to their study.

7.1.1 Using subject headings

Figure 1 shows the number of titles from each school that were found by querying the OPACs for the subject headings of gay men, homosexuality, lesbians, and

---

9 For a list of the social media pages on which the survey was distributed, see Appendix D.
transsexualism. The number of titles found per school ranged from 3 to 107. The mean number of these titles held by each school was 37.6; a single-sample t test did not reveal a significant difference between the mean found in this study and Hughes-Hassell et al.’s (2013) stated mean of 35.7 (Hughes-Hassell et al., 2013, p. 6). This finding does not indicate that the amount of LGBTQ materials held by these libraries has changed significantly since 2013.

Figure 1. Number of titles with LGBTQ-related subject headings held per school

7.1.2 Using checklists

The schools’ catalogues were also checked for a list of core LGBTQ materials identified by Webber (2010); table 1 compares the results of the current study with those of Hughes-Hassell et al.’s (2013) that were found using the same checklist. The results presented in table 1 indicate sharp drops in the amount of schools with no

---

10 The tables and graphs in the results section were created using Microsoft® Excel® for Mac 2011, version 14.5.5 and Microsoft® Excel® 2014 (15.0.4701.1001).
LGBTQ titles, but roughly the same amount of schools holding quite low or quite high numbers of these titles.

| Table 1. Comparison of Hughes-Hassell et al.’s (2013) findings to current study |
|------------------------------------------|------------------------|------------------------|
| % of schools that held fewer than 5 LGBTQ fiction titles | Hughes-Hassell et al. (2013, pp. 8-10) | Current study |
| % of schools that held no LGBTQ fiction titles | 65.3 | 61.2 |
| % of schools that held more than 10 LGBTQ fiction titles | 19.3 | 5.5 |
| % of schools that held no LGBTQ non-fiction titles | 5.3 | 5.5 |
| % of schools that held no LGBTQ non-fiction titles | 95.2 | 78.2 |

The materials found using the updated checklist were roughly similar in proportion to those found using the Webber (2010) list. 45.5% of the schools held fewer than five fiction titles from the selected 2011-2016 Rainbow Book List titles, while 9.1% held none, and 16.4% held more than 10. Most of the schools, 76.4%, held none of the LGBTQ non-fiction titles from this checklist.

7.1.3 E-materials

36.4% of the schools held at least one LGBTQ title in electronic form, as identified through either the checklists or the subject heading queries. 60% of the schools with LGBTQ e-materials held fewer than five titles in this form.

7.2 Circulation analysis

The format of table 2 was adapted from Gavigan’s (2014) presentation of results regarding graphic novel collections in U.S. middle schools (Gavigan, 2014, p. 101); it shows the circulation data obtained from the sample of school librarians that was then used to calculate the percentage of the total holdings and circulation made up by the LGBTQ titles. Percentage of circulation divided by percentage of collection produced the RUFs, which ranged from 0.88 to 8.05, with a mean of 3.11 and standard deviation of 2.87.
Table 2. Collection and circulation data by school library

<table>
<thead>
<tr>
<th>Library</th>
<th>No. of items</th>
<th>No. of LGBTQ items</th>
<th>% of Collection</th>
<th>Total circulations</th>
<th>LGBTQ circulations</th>
<th>% of Circulation</th>
<th>RUF</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>8,443</td>
<td>20</td>
<td>0.24</td>
<td>2,033</td>
<td>24</td>
<td>1.18</td>
<td>4.98</td>
</tr>
<tr>
<td>B</td>
<td>20,977</td>
<td>51</td>
<td>0.24</td>
<td>5,380</td>
<td>18</td>
<td>0.33</td>
<td>1.38</td>
</tr>
<tr>
<td>C</td>
<td>13,186</td>
<td>28</td>
<td>0.21</td>
<td>1,543</td>
<td>8</td>
<td>0.52</td>
<td>2.44</td>
</tr>
<tr>
<td>D</td>
<td>12,733</td>
<td>84</td>
<td>0.66</td>
<td>2,750</td>
<td>16</td>
<td>0.58</td>
<td>0.88</td>
</tr>
<tr>
<td>E</td>
<td>21,575</td>
<td>62</td>
<td>0.29</td>
<td>9,467</td>
<td>219</td>
<td>2.31</td>
<td>8.05</td>
</tr>
<tr>
<td>F</td>
<td>12,534</td>
<td>24</td>
<td>0.19</td>
<td>4,467</td>
<td>8</td>
<td>0.18</td>
<td>0.94</td>
</tr>
</tbody>
</table>

A single-sample $t$ test performed on SPSS returned a sig. (2-tailed) value, or $p$-value, of 0.131. As this value is greater than the confidence interval of 0.05, or 95%, there is no significant difference between the mean RUF found in this sample and a hypothesized RUF of 1, which indicates that, at least at the current sample size, the LGBTQ materials cannot be said to circulate a significantly different amount from the rest of their collections (Gavigan, 2014, p. 102-103). The LGBTQ collections made up a mean of 0.31% of these libraries’ total holdings and 0.85% of their total circulations.

### 7.3 Survey questionnaire

All respondents were asked to verify that they were at least 18 years of age, self-identified as LGBTQ, and had attended a public high school during the 2015-2016 academic year that had a library from which students could check out materials. Respondents who answered negatively to any of these questions were immediately transferred to the end of the survey, and their data has not been included in this section. 21 respondents qualified for completion of the rest of the survey.\(^{11}\)

Qualified respondents were asked whether, to their knowledge, their school libraries held any LGBTQ materials (figure 2). 9 respondents (42.9%) reported that they

---

\(^{11}\) Individual response reports have been kept confidential, but can be provided to the supervisor upon request. The survey instrument itself is available in Appendix C.
knew their school library had these materials. 4 (19.1%) said that, to their knowledge, it did not. 8 (38.1%) were unsure.

**Figure 2. Did your school library have any books (or other materials) with LGBTQ content?**

7.3.1 Impact and use of school library LGBTQ materials

The 9 respondents who answered that they knew their school library held LGBTQ materials were shown the following questions about how this knowledge made them feel, how often they accessed these materials, and how they went about doing so.

8 respondents (88.9%) reported that knowing that their school had these materials made them feel either somewhat more comfortable or much more comfortable with knowing that they might be LGBTQ. 1 (11.1%) reported that it did not affect how comfortable they were with their identity (figure 3).

5 respondents (55.6%) reported that knowing that their school had these materials made them feel either much more comfortable or somewhat more comfortable expressing their identities at school. 4 respondents (44.4%) reported that it had no effect on how comfortable they were expressing their identity in this sphere (figure 3).
2 of the 9 respondents (22.2%) reported that during the 2015-2016 school year, they did not look for any specific books with LGBTQ content in their school libraries. 2 (22.2%) reported always being able to find specific LGBTQ books that they were looking for. 1 (11.1%) reported often being able to find specific materials, while 2 (22.2%) reported being able to find them about half the time. 2 (22.2%) reported not being able to find them often (figure 4).
1 (11.1%) of the 9 respondents reported that they checked out this material from their school libraries about once every few weeks; no one reported doing this more than that. 4 (44.4%) reported doing this every few months, while 4 (44.4%) reported never doing it (figure 5).

1 (11.1%) of the 9 respondents reported that using these materials in-house at their school library about once a week. 2 (22.2%) did so once every few weeks. 2 (22.2%) did once every few months, and 4 (44.4%) never did so (figure 5).

2 (22.2%) of the 9 respondents reported stealing materials with LGBTQ content once every few weeks. 1 (11.1%) reported stealing once every few months, and 6 (66.7%) reported never stealing (figure 5).

**Figure 5. Frequency of respondents’ methods of accessing school LGBTQ materials**

7.3.2 Properties of school libraries and their effects on use

All 21 respondents were asked the following questions.

The respondents were asked whether their school library had a self-checkout machine; only one responded that theirs did. Of the 20 respondents who either did not
have or did not know whether they had self-checkout machines at their schools, 14 (70%) said they would be more likely to look to their school libraries for LGBTQ materials if they installed these machines. 5 (25%) said that it would not affect their use, while one (5%) said that it would make them somewhat less likely to look in their school libraries for these materials (figure 6).

8 said they did not use any books (or other materials) with LGBTQ content at all. Of those that did, 2 (9.5%) said they used solely electronic LGBTQ materials, 2 (9.5%) said they used mostly electronic LGBTQ materials, 6 (28.6%) used primarily print or hard copy LGBTQ materials, and 3 (14.3%) used solely print or hard copy LGBTQ materials.

Respondents were asked whether their school libraries held e-materials; 2 responded that they did. Of the 19 respondents who either did not have or did not know they had e-materials available through their school libraries, 10 (52.6%) said that this would make them either somewhat or much more likely to look to these libraries for LGBTQ materials. 8 (42.1%) said that it would not affect their behaviour, while 1 (5.3%) said that it would make them somewhat less likely to look to these libraries (figure 6).

Only 3 respondents (14.3%) said that they felt that they could definitely trust their school librarians to provide good quality LGBTQ materials. Of the 18 respondents who said that they did not fully trust their school librarian to provide quality LGBTQ materials, 13 (72.2%) said that if their school librarian had seemed more trustworthy, they would have been more likely to look to their school libraries for these materials. 5 (27.8%) said that it would not affect their behaviour (figure 6).
7.3.3 LGBTQ student satisfaction

Respondents were asked about their levels of satisfaction with their school libraries’ LGBTQ collections and these materials’ accessibility. 7 respondents, or 33.3%, said that they were to some degree satisfied with their high school library’s collection of LGBTQ materials. 4, or 19.1%, said that they felt neither satisfied nor dissatisfied. 10 (47.6%) said that they were to some degree dissatisfied with this collection (figure 7).

Of the respondents who said they attempted to access these materials through their school library during the 2015-2016 school year, 5 (35.7%) said that they were to some degree satisfied with their experience accessing them. 3 (21.4%) said they were neither satisfied nor dissatisfied, while 6 (42.9%) said that they were to some degree dissatisfied (figure 7).
Figure 7. Respondents’ levels of satisfaction with their school library LGBTQ collections and experience accessing them

7.3.4 Sources of LGBTQ materials and reasons for their use

15 (71.4%) reported that they looked for LGBTQ materials at all, not just in their school libraries. 6 (28.6%) either did not or were unsure whether they had during the 2015-2016 school year. Respondents who indicated that they did seek out LGBTQ materials during this time were asked to estimate what percentage of the time they spent using various sources (figure 8); the mean percentage of time spent using each source was then calculated (figure 9). The most used sources were, by far, the internet and the public library. The internet was used a mean of 44.67% of respondents’ time, followed by the public library at 30.67%, bookstores at 16.33%, university libraries at 4.67%, and school libraries at 3.67%.
Figure 8. Percentage of respondents' time spent using various sources to look for LGBTQ materials

Figure 9. Mean percentage of time respondents spent using each source to look for LGBTQ materials
Respondents were asked to select all reasons they chose to look in each source for these materials; their responses are presented in tables 3-8. Due to the multiple dichotomous nature of these questions, the frequencies do not add up to 100%.

<table>
<thead>
<tr>
<th>Table 3. Reasons for using school library to look for LGBTQ materials</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>It was free to check out materials</td>
<td>5</td>
<td>83.3</td>
</tr>
<tr>
<td>This library was convenient for me to use</td>
<td>6</td>
<td>100</td>
</tr>
<tr>
<td>This library had self-checkout machines</td>
<td>1</td>
<td>16.7</td>
</tr>
<tr>
<td>This library had e-books or other e-materials</td>
<td>1</td>
<td>16.7</td>
</tr>
<tr>
<td>Someone recommended that I use this library to look for LGBTQ materials</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>I knew or believed that this library would have the LGBTQ materials I was looking for</td>
<td>2</td>
<td>33.3</td>
</tr>
<tr>
<td>I felt like I could look for LGBTQ materials in this library without being judged by other library users</td>
<td>2</td>
<td>33.3</td>
</tr>
<tr>
<td>I felt like I could look for LGBTQ materials in this library without being judged by the library staff</td>
<td>2</td>
<td>33.3</td>
</tr>
<tr>
<td>I felt like I could look for LGBTQ materials in this library privately, or without certain other people knowing</td>
<td>2</td>
<td>33.3</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 4. Reasons for using public library to look for LGBTQ materials</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>It was free to check out materials</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td>This library was convenient for me to use</td>
<td>8</td>
<td>80</td>
</tr>
<tr>
<td>This library had self-checkout machines</td>
<td>9</td>
<td>90</td>
</tr>
<tr>
<td>This library had e-books or other e-materials</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>Someone recommended that I use this library to look for LGBTQ materials</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>I knew or believed that this library would have the LGBTQ materials I was looking for</td>
<td>7</td>
<td>70</td>
</tr>
<tr>
<td>I felt like I could look for LGBTQ materials in this library without being judged by other library users</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>I felt like I could look for LGBTQ materials in this library without being judged by the library staff</td>
<td>4</td>
<td>40</td>
</tr>
<tr>
<td>I felt like I could look for LGBTQ materials in this library privately, or without certain other people knowing</td>
<td>8</td>
<td>80</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 5. Reasons for using university library to look for LGBTQ materials</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>It was free to check out materials</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>This library was convenient for me to use</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>This library had self-checkout machines</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
This library had e-books or other e-materials 0 0
Someone recommended that I use this library to look for LGBTQ materials 0 0
I knew or believed that this library would have the LGBTQ materials I was looking for 1 100
I felt like I could look for LGBTQ materials in this library without being judged by other library users 1 100
I felt like I could look for LGBTQ materials in this library without being judged by the library staff 1 100
I felt like I could look for LGBTQ materials in this library privately, or without certain other people knowing 1 100
Other 0 0

| Table 6. Reasons for using a physical store to look for LGBTQ materials |
|-------------------------------------------------|--------|--------|
| **Frequency** | **%** |
| This store was convenient for me to use | 9 | 81.8 |
| This store had self-checkout machines | 1 | 9.1 |
| Someone recommended that I use this store to look for LGBTQ materials | 1 | 9.1 |
| I knew or believed that this store would have the LGBTQ materials I was looking for | 9 | 81.8 |
| I felt like I could look for LGBTQ materials in this store without being judged by other library users | 4 | 36.4 |
| I felt like I could look for LGBTQ materials in this store without being judged by the library staff | 6 | 54.5 |
| I felt like I could look for LGBTQ materials in this store privately, or without certain other people knowing | 7 | 63.6 |
| Other | 0 | 0 |

| Table 7. Reasons for using the Internet to look for LGBTQ materials |
|-------------------------------------------------|--------|--------|
| **Frequency** | **%** |
| The online store or subscription service was convenient for me to use | 13 | 100 |
| I knew or believed that the online store or subscription service would have the LGBTQ materials I was looking for | 11 | 84.6 |
| Someone recommended that I use this online store or subscription service to look for LGBTQ materials | 1 | 7.7 |
| I could use the online store or subscription service privately, or without certain other people knowing | 11 | 84.6 |
| Other | 0 | 0 |

Each respondents’ preferred source or sources of LGBTQ materials were identified from the percentages that they gave regarding amount of use. Each survey response was then examined separately to determine the reasons each individual respondent had given as to why they chose to utilize their preferred source when
seeking LGBTQ materials; this data is displayed in table 8 and figure 10. The frequency percentages again do not sum to 100 due to the multiple dichotomous nature of the questions in this section.

Table 8. Respondents’ reasons for their most-used sources of LGBTQ materials

<table>
<thead>
<tr>
<th>Reason</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>It was free to check out materials</td>
<td>5</td>
<td>33.3</td>
</tr>
<tr>
<td>This library was convenient for me to use</td>
<td>14</td>
<td>93.3</td>
</tr>
<tr>
<td>This library had self-checkout machines</td>
<td>4</td>
<td>26.7</td>
</tr>
<tr>
<td>This library had e-books or other e-materials</td>
<td>2</td>
<td>13.3</td>
</tr>
<tr>
<td>Someone recommended that I use this library to look for LGBTQ materials</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td>I knew or believed that this library would have the LGBTQ materials I was looking for</td>
<td>14</td>
<td>93.3</td>
</tr>
<tr>
<td>I felt like I could look for LGBTQ materials in this library without being judged by other library users</td>
<td>3</td>
<td>20.0</td>
</tr>
<tr>
<td>I felt like I could look for LGBTQ materials in this library without being judged by the library staff</td>
<td>4</td>
<td>26.7</td>
</tr>
<tr>
<td>I felt like I could look for LGBTQ materials in this library privately, or without certain other people knowing</td>
<td>13</td>
<td>86.7</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Figure 10. Reasons for each respondent’s most frequently used source of LGBTQ materials
Finally, respondents were given the option to write in responses as to whether or not any other factors would influence them using their school libraries more often to find LGBTQ materials; only two respondents did so. Their answers are below:

“If the library had actively advertised their supply of the content.”

“The only LGBTQ books that I found were in a sexual health section to my knowledge. It was one or two small shelves with I believe less than a dozen books on the psychology of being LGBTQ. Granted, I don’t remember fully the exact number/topics, as I never checked them out, only perished them. As far as books just containing LGBT characters, I’m sure there were a few scattered throughout the library, but I was unaware of a way to search for those specifically in a cohesive manner. Also, as other students were put in charge of working in the library, I did not feel safe checking out any LGBTQ content”

8. Discussion

8.1 The current state of LGBTQ collections in North Carolina public high schools

8.1.1 Collection evaluation

Hughes-Hassell et al. (2013) determined that high school libraries in North Carolina were not providing an adequate selection of books with LGBTQ content to their students. As the current study did not find a significant difference from the previous study in the mean amount of LGBTQ materials these schools held, it can be tentatively concluded that their LGBTQ collections remain inadequate. In addition to looking at mean number of LGBTQ titles per school, Hughes-Hassell et al. (2013) compared the estimated percentage of LGBTQ students making up each student body to the percentage of LGBTQ materials making up each library collection. They found that that the mean amount of school libraries’ collections that were made up of LGBTQ materials was 0.4%, which they compared to an estimated LGBTQ high school student population of 5.9% (Hughes-Hassell et al., 2013, p. 6; Massachusetts Dept. of Ed., 2009, as cited by Hughes Hassell et al., 2013, p. 10). Although the only data gathered on collection percentage during the current study was collected during the circulation analysis, with
a very limited sample size of 6, the current finding of a mean of 0.31% does not indicate a significant change in this measure either.

### 8.1.1.1 Checklist versus subject heading searches

As Moss (2008) discovered, using the results of a checklist to measure how many LGBTQ materials a library holds can result in nearly 70% of these holdings not being identified. The results of the current study hint at a discrepancy between the amounts of materials found by checklist and subject heading queries. The checklist data from Webber’s (2010) list and the Rainbow Book List-based new list indicated that a large number of schools – 61.2% and 45.5%, respectively – held fewer than five LGBTQ fiction titles. Yet, the subject headings search revealed that only one school out of the 55 sampled had fewer than four titles total. As the data from both checklists indicates that libraries tend to hold more LGBTQ fiction books than LGBTQ non-fiction books, it seems unlikely that these non-fiction books are supplementing the totals enough to completely account for the discrepancy between the checklist findings and the subject heading query results. Williams and Deyoe (2014) also used the Rainbow Book Lists for their checklist, and found that approximately 25% of schools nationwide had none of these titles (Williams and Deyoe, 2014, pp. 109-110), again showing a much lower number of holdings than were returned by subject heading search in the current study. If schools are routinely collecting LGBTQ materials that are not on these lists, then either the lists are not as objective as one would hope, or schools are collecting materials that are not of the best quality.

### 8.1.1.2 E-materials

Although LGBTQ e-material holdings cannot be discussed longitudinally, as other studies do not report on them, the finding that only 36.4% of school libraries held any materials at all indicates that this is an area that may need improvement, albeit secondarily to other improvements, as the survey data indicates that the availability of e-materials is not as important to students as are other factors. From a collection development standpoint, this solution may save money for the libraries over time, as e-
materials cost less money to maintain and store; they are thus worth due consideration (Bunkell and Dyas-Correia, 2009).

8.1.2 Students’ perceptions

The questionnaire data collected corroborates the finding of low levels of LGBTQ material collection as far as the survey respondents are concerned; these respondents reported low levels of satisfaction with their schools’ LGBTQ selections, and several reported being unsure as to whether their school library held any of these materials at all. This is noteworthy, considering that, actually, all of the 55 libraries studied had some materials that were labelled with the relevant subject headings, and there was a noted drop in schools that held none of Webber’s (2010) suggested titles. This suggests that it is not enough to simply stock these materials; librarians must make additional changes to aid students in connecting with it, as will be discussed later, or alter the LGBTQ materials they purchase to align more with the respondents’ interests; this could be explained by a mismatch between the specific materials that respondents have sought out and the materials that their librarians have thought to include in their collections.

8.1.3 Importance

The survey data indicates that knowing LGBTQ materials existed in their school libraries had a somewhat positive effect on the survey respondents, both in terms of coming to terms with their own LGBTQ identities and with expressing these identities. As eight out of nine of the survey respondents answering this question indicated that knowing these materials existed in their school libraries increased their self-acceptance, and five out of nine indicated that it made them more comfortable expressing their LGBTQ identities in school, it can be said that these materials do have an important function in supporting students, especially in conjunction with their actual use; most respondents reporting heightened comfort levels did also utilize LGBTQ materials from their school libraries. This corroborates Oltmann’s (2016) findings that school librarians have watched students find “value and comfort” in their libraries’ LGBTQ collections (Oltmann, 2016, p. 15), and Rauch’s (2011) linkage between students’ self-affirmation and access to LGBTQ materials. One respondent indicated that knowing the
school library had these materials increased their comfort levels both in terms of identity acceptance and expression even though this respondent reported that they had never accessed these books through their school library. So, although the majority of these respondents benefitting from the knowledge of the existence of these materials are also reading them, they also appear to serve a purely symbolic purpose for this other respondent. The act of stocking and displaying these materials can thus be said to serve the same function as GLSEN Safe Space posters, which school staff display as shows of support for the LGBTQ community and which have been found to instil comfort and trust in students (Kosciw et al., 2014, p. 73). These findings align with Barack’s (2014) and Mehra and Braquet’s (2011) recommendations that librarians display these books as a way to help students feel at ease.

8.2 How heavily are North Carolina public high schools’ LGBTQ collections used?

8.2.1 Circulation

The findings imply that although it cannot be determined that North Carolina high schools’ LGBTQ collection circulation differs significantly from that of the rest of their collections, there are at least a few schools where these materials are used at a much higher rate. One of the sampled high schools’ LGBTQ collections was calculated to have an RUF of over eight times the rest of their collection. This school is located in one of North Carolina’s most populous and racially diverse districts, which was expected if these factors were to correlate with the rate of circulation of LGBTQ materials as it has been reported to do with the rate of collection, according to Stringer-Stanback (2011) and Oltmann (2015). However, the school with the lowest RUF was located in an even more populous and racially diverse district than the school with the highest RUF; thus, a larger sample size is needed to examine the effects of these factors.

8.2.2 In-house use

The survey respondents indicated a slightly higher frequency of using their schools’ LGBTQ materials in-house than of checking them out. LGBTQ materials have been found to be more likely to circulate via self-checkout than via the circulation desk
(Mathson and Hancks, 2007); in light of the fact that most survey respondents’ school libraries did not have self-checkout machines, the survey respondents’ preference for in-house use makes sense, as in-house use does not require interacting with those at the circulation desk who may not be sympathetic to LGBTQ information needs. One survey respondent, who reported feeling unsafe checking out LGBTQ materials due to the fact that their peers worked at the circulation desk, did in fact report using these materials in-house on occasion. This necessitates that the school library feel like a safe space in which these students can explore this material without experiencing the taunting that is reportedly widespread in U.S. high schools (Kosciw et al., 2014).

8.2.3 Theft

Both the literature and a comment by one of the librarians who provided circulation data indicated that theft might be a common way in which students access LGBTQ materials. The literature indicates that teenagers use young adult non-fiction at a rate much higher than circulation data can show, as theft of materials would by definition not involve official circulation and would, on a library management system, look the same as non-use (Pierce, 2003). Future studies should examine LGBTQ materials that appear to be non-circulating in order to factor in the possibility of theft. The survey respondents indicated that they did sometimes take these materials from their school libraries without checking them out, although slightly more survey respondents reported never stealing than never checking out or using LGBTQ materials in-house. However, it is possible that social desirability bias has caused the survey respondents to under-report this behaviour. Additionally, as schools may have different levels of security systems in their libraries, it is possible that the sample included respondents who attended schools that were more difficult to steal from. In retrospect, it would have been helpful to ask about this factor in the survey.

8.3 Where do LGBTQ public high school students look for LGBTQ materials?

8.3.1 Preferred sources of LGBTQ materials
The survey respondents reported that they primarily used sources other than their school libraries to locate LGBTQ materials. In fact, the school library was reported to be the least frequently utilized source of these materials, the order of preference being, from most to least often used, online sources, public libraries, bookshops, university libraries, and school libraries. The preference among the respondents for the public library is hardly surprising. Although Sin (2012) found that a higher percentage of students used their school libraries than their public libraries, she also noted that library service levels had a significant impact on students’ choice of library. As will be discussed later, most respondents did not trust their school librarians to provide quality LGBTQ materials, which is then consistent with their disuse of these libraries in favour of public libraries. The respondents’ reported disuse of school libraries is seemingly at odds with some of the circulation data collected – the schools studied during this part of the research indicated that students at the schools with high RUF are, at a bare minimum, checking out these materials, not to mention using them in house or stealing them. A larger sample size might indicate lower RUF levels than across the board than appear in the schools sampled here. However, a possible explanation of the difference could be that LGBTQ teenagers simply must read more than other teenagers to fulfil their information needs, and that their relatively high circulation statistics would be dwarfed in comparison to the amount of materials they access from other sources; this data, too, should be considered in the future. It is also worth noting that Agosto (2007) observed difficulty among the teenagers in her sample in accurately quantifying their library use (Agosto, 2007, p. 58); measures of this are best used as estimates. Regardless, it would behove school librarians and public librarians to work together to ensure that LGBTQ students are getting the support that they need.

8.3.2 Reasons behind preferred sources of LGBTQ materials

The reasons for these preferences are primarily convenience, a good selection, and privacy or secrecy, only one quality of which, convenience, respondents list the school library as actually embodying. Convenience was indeed the most common reason given for using the school library to look for LGBTQ materials. The most common reason given for using the public library, aside from the fact that it is free to check out materials from this source, was that respondents’ public libraries tended to have self-
checkout machines. The presence of a good LGBTQ selection still plays a large role in the choice of public libraries, and, indeed, Williams and Deyoe (2014) found that half of public libraries with higher budgets did in fact meet their requirements for an adequate LGBTQ collection. They also found that public libraries held much a higher mean number of LGBTQ books than did school libraries, potentially because public libraries simply have larger collections altogether. Although only one survey respondent provided their reasoning for using a university library, they indicated that this decision was based on its selection of LGBTQ materials, the privacy it afforded, and the fact that they would not have felt judged while using it. Physical stores were primarily used for their convenience and their selections. Online sources were used primarily for their convenience, selection, and privacy, all three of the qualities which respondents cited the most frequently as influential in their choice of sources.

### 8.3.2.1 Selection and privacy

The fact that a source’s perceived selection played a relatively large role in respondents’ choice to use that source, combined with the fact that most respondents were dissatisfied with their school library’s LGBTQ collections, indicates that school librarians may want to work on more proactively selecting LGBTQ books that are relevant to today’s teenagers. The issue of private browsing is also one that begs addressing; Adams (2014) recommends placing baskets of books on sensitive issues in various places around the library “for students who don’t want to be seen perusing specific Dewey areas” (Adams, 2014, p. 30). This is, in theory, a perfectly reasonable solution. However, as most of the schools studied in the collection evaluation segment of this study carried only one copy of many of their LGBTQ books, taking these books off the shelves and putting them elsewhere may decrease students’ abilities to find these books even further if they cannot locate them systematically in their assigned places. As discussed later, the ability to be found is already an issue for some respondents when looking for these materials.

### 8.3.3 Reasons behind using the school library to access LGBTQ materials
Two survey respondents actually reported that, for them, the school library provided a place in which to browse LGBTQ materials privately, or without certain other people seeing. This indicates that, for some students, threats exist outside of their school environments that are either absent or less pressing than they are at school. Wanting privacy from one’s parents when searching for information about sensitive topics is common among all teenagers (Adams, 2007). Revealing one’s sexual identity to one’s parents can, aside from being a private matter, be a large risk that can, in more extreme cases, result in homelessness (Potoczniak et al., 2009). Still, though, the school library was not the main source of LGBTQ materials for these two respondents; one favoured online sources, and one favoured the public library. The respondent favouring online sources reported privacy and the avoidance of judgement by others as factors affecting their preference; a possible explanation for this is that the respondent viewed online sources as offering a higher degree of privacy than their school library, despite both having these qualities. The respondent favouring the public library indicated that the difference between the school library and the public library that affected their preference was the availability of self-checkout machines and e-materials at their public library.

8.3.4 Desired changes to school libraries

The presence of self-checkout machines and of librarians who are viewed as trustworthy enough to provide quality LGBTQ materials were cited as having the strongest influence on whether or not respondents would have considered using their school libraries more for to meet this information need. Mathson and Hancks’ (2007) finding that LGBTQ materials circulate 20% more by self-checkout than do other materials indicate that this may indeed increase students’ use of their schools’ LGBTQ collections, although purchasing and installing self-checkout machines might prove prohibitively costly. The finding that trustworthiness of librarians’ provision of quality LGBTQ materials might have increased respondents’ use of their school libraries is corroborated by Agosto and Hughes-Hassell’s (2005) findings that many teenagers perceive both librarians and libraries in a negative light, which reduces their use of these resources.
The presence of LGBTQ e-materials, interestingly, was reported to be less of a concern to the respondents. This correlates with respondents’ reported preference of LGBTQ print materials as opposed to LGBTQ e-materials. However, this is seemingly at odds with many survey respondents’ reported preference for online sources of LGBTQ materials, which itself aligns with previous findings of strong preferences for online information seeking (e.g. Beiriger and Jackson, 2007; Hamer, 2003). In retrospect, it would have been helpful to include a follow-up question about whether the respondents tended to order physical materials or e-materials from these online sources. If they utilized websites to order print copies of LGBTQ materials, then this still makes sense. A minority of respondents, four, did report that they used either mostly or solely electronic materials, so these materials are still an important LGBTQ resource for librarians to consider as part of collection development.

8.3.5 Respondents who did not use LGBTQ materials from any source

One benefit of the way the sampling was conducted was that it allowed for the gathering of information about non-users of school library LGBTQ materials. Two respondents who did not report using any LGBTQ materials at all said that changes to their school library might positively influence their decision to use it as a source of LGBTQ materials. Specifically, they reported having self-checkouts, e-books, and a trustworthy librarian would make them somewhat more likely to look to this library. One reported dissatisfaction with their school library, while one reported ambivalence towards it. Three respondents who reported non-use of LGBTQ materials said that none of these features would influence their use at all, yet reported that they were somewhat satisfied or neutral with their school library’s LGBTQ selection, indicating that they either did not care about accessing LGBTQ materials or did not wish to disclose their behaviour. This indicates that librarians need to be proactive to connect these users with information that they may not even know they need.

8.4 What else characterizes students’ behaviour when seeking out LGBTQ materials?

8.4.1 Difficulty locating LGBTQ materials in the school library
Survey respondents who used the school library to look for specific LGBTQ books reported different levels of success actually finding the items for which they were looking, with three respondents responding that they could find specific LGBTQ materials more than half the time, two reporting being able to find them about half the time, and two reporting that they could not find them often. This and the mismatch in the perceived amounts of available literature versus the actual amounts of available literature suggests that school librarians need to make students more aware of how to query their OPACs productively, advertise these materials better, and/or ensure that the relevant metadata is being consistently applied to these materials.

Making students more aware of how to query OPACs effectively is especially important in light of the trust deficit apparent in the survey respondents. As most survey respondents did not trust their librarians to provide good quality LGBTQ materials, and only a third indicated that they used the school library because they felt the staff were not judgmental, it would be beneficial if, in conjunction with addressing the issue of trustworthiness, students were given instruction that increases their ability to locate these materials autonomously until such issues are addressed. It would also be beneficial to make students aware of precisely what subject headings the library or their vendor uses and to provide lists of the relevant subject headings relating to different topics.

One survey respondent identified active advertising on the part of the school library as a factor that they felt would increase their use of its materials. Advertising these materials, which could be done through inclusion in displays, direct recommendation to students, or “booktalk” programmes (Parks, 2012), among other methods, may lead change students’ perceptions of the range of LGBTQ materials available through school libraries, thereby increasing use of them through this source. In addition, increasing the amount of e-books, as well as making sure that students know whether their schools have e-books, should increase discoverability of these materials and help to connect students with them (Bunkell and Dyas-Correia, 2009). This would could decrease self-perceptions of information poverty, and also potentially increase trust in the librarians (Mehra and Braquet, 2011, p. 411).
Relevant metadata is not consistently applied. This is discussed in the literature (e.g. Broadley, 2015, slide 14) and also became apparent during the process of gathering data for the collection evaluation section of this study, as checklist materials that were present in the schools’ collections were not always retrievable via the relevant subject headings from the same schools. Even students who have received proper training will not be able to consistently locate LGBTQ materials if these materials are not labelled consistently. This is a crucial step in connecting LGBTQ students with materials that could be helpful to them.

8.4.2 Information poverty

The majority of the respondents’ patterns of behaviour when using LGBTQ materials align with Chatman’s (1996) theory of information poverty. Her first proposition is that the information poor “perceive themselves to be devoid of any sources that might help them” (Chatman, 1996, pp. 197-198). This is reflected in the current study with regard to respondents’ knowledge of and opinions about their school library’s selections. Although, as previously mentioned, all school libraries sampled during the collection evaluation did have LGBTQ materials, more than half of the survey respondents did not know this. Even respondents who reported looking for these materials in the school library, for the most part, did not make this choice because they believed that it might have what they were looking for; convenience played a much larger role in their decision to utilize this library.

Chatman’s (1996) second proposition relates to class, which was not a variable in this study; however, her third proposition, that “information poverty is determined by self-protective behaviors which are used in response to social norms” is very much in line with some of the survey responses (Chatman, 1996, pp. 197-198). Certainly, one of the survey respondents who provided a write-in response about factors that would positively affect their use of the school library met this condition when they said that “as other students were put in charge of working in the library, [they] did not feel safe checking out any LGBTQ content”. The heteronormativity well documented by Kosciw et al. (2014) that appears often times in the form of harassment and verbal abuse in
schools influences this respondent’s choice to protect themselves by not checking out LGBTQ books from their school library. The need to self-protect from heteronormativity can be observed among other respondents' reported desire for privacy as a reason for why they used their most used sources of LGBTQ materials. Chatman’s (1996, pp. 197-198) fifth proposition, that “a decision to risk exposure about [their] true problems is often not taken due to perception that negative consequences outweigh benefits” is also related to perceptions of safety which, according to Kosciw et al. (2014) is largely absent for LGBTQ youth in American high schools.

Chatman’s (1996) fourth proposition cites distrust in “the interest or ability of others to provide useful information” as a reason for any secrecy and deception used when seeking this information (Chatman, 1996, pp. 197-198). As only three survey respondents reported that they felt that they could definitely trust their school librarians to provide good quality LGBTQ materials, the fourth proposition may be present among them as well. Most survey respondents indicated that if their librarians had appeared more trustworthy with regard to providing quality LGBTQ materials, they would have been more likely to utilize their school library to look for them. The literature indicates that this lack of trust is not altogether unfounded; although many librarians do see the value in maintaining comprehensive LGBTQ collections there are also many who are uncomfortable with the inclusion of this material and/or who do not see a need to improve services to LGBTQ readers (Oltmann, 2016, p. 7; Campbell Naidoo, 2013, p. 36). The creation of a more welcoming environment for LGBTQ students in the library via, among other methods, displaying LGBTQ books openly, may increase students’ willingness to come to their librarians for help locating these materials instead of looking online or in other autonomous ways due to “fear of stigma and rejection” (Thompson, 2010, as cited by Mehra and Braquet, 2011, p. 404).

9. Conclusion

9.1 Summary of findings
Combining a checklist study with a subject headings search showed that public high school libraries in North Carolina do collect LGBTQ materials; however, they do not necessarily do so at a level that is considered sufficient by scholars such as Hughes-Hassell et al. (2013), and they do not collect many LGBTQ e-materials, the presence of which the respondents indicated would make them to some degree more likely to look to the school library for these materials. Despite the presence of at least a small number of print LGBTQ books at each library sampled during the collection evaluation phase, not all respondents were aware of the existence of these materials in their schools. Those who were aware generally reported that their comfort in their own LGBTQ identities and expressing them at school were positively affected by this knowledge. The limited circulation data collected showed that LGBTQ collections at different school libraries varied greatly in their intensity of use, and it is likely that these materials are used more than their circulation data reveals, as survey respondents did report both in-house use and theft of these materials. This finding is peculiar in that students who looked for LGBTQ materials at all reported that the school library was the place they spent the least amount of time trying to fill this information need, instead heavily favouring public libraries and online sources. The survey respondents’ choices of their most frequently used sources of LGBTQ materials were most positively influenced by convenience, good selections, and higher levels of privacy. The responses given indicated some difficulty in locating LGBTQ materials in their school libraries and the presence of most of the propositions put forth by Chatman (1996) in her theory of information poverty.

9.2 Academic significance

This study is valuable from an academic standpoint in that it points to further research that can and should be done in this area:

- The circulation analysis and survey questionnaire should be done with larger sample sizes and in different U.S. states to increase certainty of results.
- Circulation data about e-materials should be gathered from the vendors and compared to the circulation data on print materials.
The concept of librarian trustworthiness should be examined in more depth. What specific behaviours and qualities of a librarian lead students to trust, or not trust, in their ability to provide quality LGBTQ materials?

How do/can school librarians, public librarians, bookstore owners, and other information professionals work together when it comes to ensuring LGBTQ teenagers’ information needs are being met?

This study sampled people who identified openly enough as being LGBTQ to be associated with the LGBTQ-related groups and social media accounts through which it was distributed. What are closeted teenagers’ experiences using the school library to look for LGBTQ materials?

How does lack of support from parents affect use of LGBTQ materials?

This study is additionally valuable in that it is the first - as far as is known – which applies circulation analysis to the subject of LGBTQ material use, and which surveyed teenagers specifically about their preferences regarding LGBTQ material use in the school library. Although research in this area – and in much of library and information science in general – is somewhat piecemeal, due to the fact that it is relatively new, eventually enough research will be done to create a fully comprehensive picture of the LGBTQ information behaviour and the role that school library LGBTQ collections play in teenagers’ lives.

9.3 Practical significance

Many areas have been identified in the discussion of results that should be considered by practitioners:

- School librarians should ensure that attention is paid to selecting quality LGBTQ materials for their students.
- Due consideration should be given to the possibility of collecting LGBTQ e-books.
- Although the installation of self-checkout machines may be too costly to implement, school librarians should consider how students’ desire for privacy when checking out books – and when browsing - can be addressed in other ways.
- LGBTQ information needs should be discussed with local public librarians, as public libraries represent a considerably important source of this information.
- LGBTQ materials should be included in book displays in order to inform students that the library has these materials, and that the librarians are aware of LGBTQ students’ existence and information needs.
- Librarians should ensure that students know how to search for this material, and that the relevant metadata is in place.
- Steps should be taken to communicate librarians’ commitment toward providing students with quality LGBTQ materials.
- Librarians should potentially reconsider putting students in charge of the circulation desk, as GLSEN (Kosciw et al., 2014) has demonstrated the prevalence of student to student bullying with regard to LGBTQ identity, and LGBTQ teenagers may not feel safe checking out materials from their peers.
10. References


Hasler, L., Ruthven, I., and Buchanan, S., 2014. Using internet groups in situations of information poverty: Topics and information needs. *Journal of the Association for*
Horton, L., 2016. Meeting the needs of lesbian, gay, bisexual, transsexual, queer, or questioning students through the school library collection. *Teacher Librarian*, 44(1), pp. 20-22.


Lachman, S., 2014. North Carolina attorney general to stop defending state’s gay marriage ban. *Huffington Post*, [online] Available at: 

Lambda Literary, n.d. *About the Lambda Literary Awards*. [online] Available at: 


Lo, M., 2014. *2014 LGBT YA by the numbers*. [online] Available at: 


McCafferty, D., 2006. Love and accept yourself for who you are: An interview with Alex Sanchez. *Young Adult Library Services*, 4(4), pp. 10-12.


Oltmann, S.M., 2016. “They kind of rely on the library”: School librarians serving LGBT students. *Journal of Research on Libraries & Young Adults*, [online] Available at:


Rauch, E., 2011. GLBTQ collections are for every library serving teens!. Teacher Librarian, 39(1), pp. 13-16.
Redden, M., 2016. Transgender Americans fear for safety after Trump win: 'We are traumatized'. *The Guardian*, [online] 10 November. Available at:  


Russo, S., 2012. IT CAME FROM THE LIBRARY! *Young Adult Library Services*, 10(4), pp. 5-6.


11. Appendices

11.1 Appendix A: Reflection

The dissertation process was more difficult than expected, due in part to it coinciding with a particularly tumultuous period of time in my personal life. I would have liked to have been able to spend less time focused on my health, but completing and submitting this project under the circumstances does give me great faith in my ability to perform even better in my future endeavours when I am not faced with such obstacles.

In retrospect, I would have elected not to do mixed methods and would have conducted interviews. This would have enabled me to gain more detail than could be gained through the survey questionnaire. Conducting interviews would have been difficult due to my distance from the population in question, but a smaller sample size would have sufficed and could have been interviewed via chat or an online video call. The questionnaire and circulation analyses were the most important parts of the study, as the collection evaluation was updating a previous study that had been done quite recently. Although there was no way to know prior to conducting the study that conditions had not changed since the previous research was done, it was disappointing to discover no real difference between the data. If I were to redo this project, I would have focused solely on the other two parts, as they have more original value.

The final project differed from the proposal in minor ways, generally sticking close to it and using it as a roadmap. The idea to obtain a sample size for the circulation analysis component that was almost as large as the sample size from the collection evaluation component was impractical, considering the time of year during which the study was conducted. Since this part of the study was necessarily conducted at the beginning of the summer, many school librarians were preparing for the end of the school year and thus did not have time to provide data. There were even a few librarians who initially responded positively to my request who became too busy to fulfil it. Obviously, it is more important that they focus on their jobs, but this did decrease my sample size quite a bit, which undoubtedly detracted from the significance of the results.

I have gained considerable self-knowledge during this process, and it has forced me to confront my extreme discomfort with uncertainty. The most valuable lesson I
have learned is that there is, more often than not, more than one right answer for how to approach projects such as this. On a more practical note, doing the collection evaluations and the circulation analyses helped me to get experience using the Follett/Destiny library management system, which should be quite beneficial in the future due to its widespread use.

11.2 Appendix B: Checklists

11.2.1 Books from Webber’s (2010) core collection

11.2.1.1 Fiction

<table>
<thead>
<tr>
<th>Author</th>
<th>Title</th>
<th>Copyright year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bauer, Marion Dane</td>
<td>Am I Blue? Coming Out from the Silence</td>
<td>1994</td>
</tr>
<tr>
<td>Burd, Nick</td>
<td>The Vast Fields of Ordinary</td>
<td>2009</td>
</tr>
<tr>
<td>Chbosky, Stephen</td>
<td>The Perks of Being a Wallflower</td>
<td>1999</td>
</tr>
<tr>
<td>Dole, Mayra Lazara</td>
<td>Down to the Bone</td>
<td>2008</td>
</tr>
<tr>
<td>Freymann-Weyr, Garret</td>
<td>My Heartbeat</td>
<td>2002</td>
</tr>
<tr>
<td>Garden, Nancy</td>
<td>Annie on My Mind</td>
<td>1982</td>
</tr>
<tr>
<td>Hartinger, Brent</td>
<td>Geography Club</td>
<td>2003</td>
</tr>
<tr>
<td>Howe, James</td>
<td>The Misfits</td>
<td>2001</td>
</tr>
<tr>
<td>Levithan, David</td>
<td>Boy Meets Boy</td>
<td>2005</td>
</tr>
<tr>
<td>Peters, Julie Anne</td>
<td>Luna</td>
<td>2004</td>
</tr>
<tr>
<td>Ryan, Sara</td>
<td>Empress of the World</td>
<td>2001</td>
</tr>
<tr>
<td>Sanchez, Alex</td>
<td>Rainbow Boys</td>
<td>2001</td>
</tr>
<tr>
<td>St. James, James</td>
<td>Freak Show</td>
<td>2007</td>
</tr>
<tr>
<td>Wittlinger, Ellen</td>
<td>Hard Love</td>
<td>1999</td>
</tr>
<tr>
<td>Wittlinger, Ellen</td>
<td>Parrotfish</td>
<td>2007</td>
</tr>
</tbody>
</table>

11.2.1.2 Non-fiction

<table>
<thead>
<tr>
<th>Author</th>
<th>Title</th>
<th>Copyright year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alsenas, Linas</td>
<td>Gay America: Struggle for Equality</td>
<td>2008</td>
</tr>
<tr>
<td>Huegel, Kelly</td>
<td>GLBTQ: The Survival Guide for Queer and Questioning Teens</td>
<td>2003</td>
</tr>
<tr>
<td>eds.</td>
<td>Lesbian, Bisexual, Transgender, Questioning, and Other</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Identities</td>
<td></td>
</tr>
<tr>
<td>Author</td>
<td>Title</td>
<td>Copyright year</td>
</tr>
<tr>
<td>----------------------</td>
<td>------------------------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Albertalli, Becky</td>
<td><em>Simon vs. the Homo Sapiens Agenda</em></td>
<td>2015</td>
</tr>
<tr>
<td>Beam, Cris</td>
<td><em>I am J</em></td>
<td>2011</td>
</tr>
<tr>
<td>Bigelow, Lisa Jenn</td>
<td><em>Starting from Here</em></td>
<td>2012</td>
</tr>
<tr>
<td>Block, Francesca Lia</td>
<td><em>Love in the Time of Global Warming</em></td>
<td>2013</td>
</tr>
<tr>
<td>Bray, Libba</td>
<td><em>Beauty Queens</em></td>
<td>2011</td>
</tr>
<tr>
<td>Brezenoff, Steve</td>
<td><em>Brooklyn, Burning</em></td>
<td>2011</td>
</tr>
<tr>
<td>Cameron, Janet E</td>
<td><em>Cinnamon Toast and the End of the World</em></td>
<td>2013</td>
</tr>
<tr>
<td>Cart, Michael, ed.</td>
<td><em>How Beautiful the Ordinary: Twelve Stories of Identity</em></td>
<td>2008</td>
</tr>
<tr>
<td>Clark, Kristin Elizabeth</td>
<td><em>Freakboy</em></td>
<td>2013</td>
</tr>
<tr>
<td>Cronn-Mills, Kristin.</td>
<td><em>Beautiful Music for Ugly Children</em></td>
<td>2012</td>
</tr>
<tr>
<td>Danforth, Emily M</td>
<td><em>The Miseducation of Cameron Post</em></td>
<td>2012</td>
</tr>
<tr>
<td>Dos Santos, Steven</td>
<td><em>The Culling</em></td>
<td>2013</td>
</tr>
<tr>
<td>Eagland, Jane</td>
<td><em>Wildthorn</em></td>
<td>2009</td>
</tr>
<tr>
<td>Egloff, Z</td>
<td><em>Leap</em></td>
<td>2012</td>
</tr>
<tr>
<td>Farizan, Sara</td>
<td><em>If You Could Be Mine</em></td>
<td>2013</td>
</tr>
<tr>
<td>Farizan, Sara</td>
<td><em>Tell me Again How a Crush Should Feel</em></td>
<td>2014</td>
</tr>
<tr>
<td>Federle, Tim</td>
<td><em>Better Nate than Ever</em></td>
<td>2013</td>
</tr>
<tr>
<td>Goode, Laura</td>
<td><em>Sister Mischief</em></td>
<td>2011</td>
</tr>
<tr>
<td>Green, John and David Levithan</td>
<td><em>Will Grayson, Will Grayson</em></td>
<td>2010</td>
</tr>
<tr>
<td>Horner, Emily</td>
<td><em>A Love Story Starring My Dead Best Friend</em></td>
<td>2010</td>
</tr>
<tr>
<td>Johnson, Alaya Dawn</td>
<td><em>The Summer Prince</em></td>
<td>2013</td>
</tr>
<tr>
<td>King, A. S.</td>
<td><em>Ask the Passengers</em></td>
<td>2012</td>
</tr>
<tr>
<td>Lam, Laura</td>
<td><em>Pantomime</em></td>
<td>2013</td>
</tr>
<tr>
<td>Lo, Malinda</td>
<td><em>Ash</em></td>
<td>2009</td>
</tr>
<tr>
<td>Lo, Malinda</td>
<td><em>Huntress</em></td>
<td>2011</td>
</tr>
<tr>
<td>Author</td>
<td>Title</td>
<td>Copyright year</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-------------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Andraka, Jack, with Matthew Lysiak</td>
<td>Breakthrough: How One Teen Innovator Is Changing the World</td>
<td>2015</td>
</tr>
<tr>
<td>Bornstein, Kate</td>
<td>My New Gender Workbook: A Step-by-Step Guide to Achieving World Peace Through Gender Anarchy and Sex Positivity</td>
<td>2012</td>
</tr>
<tr>
<td>Golio, Laurel and Diana Scholl</td>
<td>We Are the Youth: Sharing the Stories of LGBT Youth in the United States</td>
<td>2014</td>
</tr>
<tr>
<td>Lowrey, Sassafras</td>
<td>Kicked Out</td>
<td>2010</td>
</tr>
<tr>
<td>Moon, Sarah, ed</td>
<td>The Letter Q: Queer Writers’ Notes to Their Younger Selves</td>
<td>2012</td>
</tr>
<tr>
<td>Setterington, Ken</td>
<td>Branded by the Pink Triangle</td>
<td>2013</td>
</tr>
<tr>
<td>Sheng, Jeff</td>
<td>Don’t Ask, Don’t Tell</td>
<td>2010</td>
</tr>
<tr>
<td>Various Authors</td>
<td>The Gallup’s Modern Guide to Gay, Lesbian &amp; Transgender Life (Series, 15 titles)</td>
<td>2009</td>
</tr>
</tbody>
</table>

11.2.2.2 Non-fiction
11.3 Appendix C: Survey instrument

Dissertation Questionnaire

Availability and Use of LGBTQ Materials in U.S. High School Libraries

Hello, Thank you for choosing to complete my survey. This survey is being done as part of a dissertation project to fulfill the requirements of the MSc Library Science course at City, University of London. It aims to find out whether or not high school libraries in North Carolina are making LGBTQ materials available to their students; it also seeks to learn about how (or if) students are making use of these materials. These questions are especially relevant for North Carolina in the wake of the passing of the controversial House Bill 2 (the ‘bathroom bill’). I am attempting to reach as many LGBTQ participants as possible who are at least 18 years of age, who attended high school in North Carolina in during the 2015-2016 academic year, and who had libraries/media centers in their high schools. Participants will be asked to confirm that they meet these criteria as part of the introductory section of the survey.

Participation in this survey is entirely voluntary. You may withdraw at any stage and for any reason by closing your browser window. If any questions are felt to be too personal or intrusive, you may withdraw without answering them. Withdrawal will not cause you to be penalized or disadvantaged in any way. This survey is completely anonymous, and your responses will be kept confidential; both the website used to create the survey and the computer on which results will be downloaded are password-protected. Other than myself, the only person who may see this data is my dissertation supervisor, Dr. Lyn Robinson. It will be kept until I receive the results of my dissertation, at which point it will be deleted. The survey should take less than 10 minutes to complete. Thanks, Rachel JordanRachel.Jordan@city.ac.uk

Are you at least 18 years of age?
• Yes
• No
If No Is Selected, Then Skip To End of Survey

Do you identify as lesbian, gay, bisexual (or pansexual), transgender, queer, or questioning (LGBTQ)?
• Yes
• No
If No Is Selected, Then Skip To End of Survey

Did you attend a public high school in North Carolina during the 2015-2016 academic year? If your high school was an early college or charter high school, please select NO (if unsure, please select NO).
• Yes
• No
If No Is Selected, Then Skip To End of Survey

Did your high school have a library/media center from which students could check out books or other materials (e.g. e-books, DVDs, CDs, etc.?)?
To your knowledge, did your school library have any books (or other materials) with LGBTQ content? In this survey, LGBTQ content refers to LGBTQ characters, themes, information, or anything else relating to LGBTQ identity.

- Yes
- No
- Unsure

If Yes Is Not Selected, Then Skip To Did your school library have self-che...

How did knowing that your school library had books (or other materials) with LGBTQ content affect how comfortable you felt with knowing that you were (or might be) LGBTQ?

- This made me feel much more comfortable
- This made me feel somewhat more comfortable
- This made me feel neither more nor less comfortable
- This made me feel somewhat less comfortable
- This made me feel much less comfortable

How did knowing that your school library had books (or other materials) with LGBTQ content affect how comfortable you felt expressing your LGBTQ identity in school?

- This made me feel much more comfortable
- This made me feel somewhat more comfortable
- This made me feel neither more nor less comfortable
- This made me feel somewhat less comfortable
- This made me feel much less comfortable

For the following questions, please report only how you behaved, or what you experienced, during the 2015-2016 academic year.

If you looked in your school library for any specific books (or other materials) with LGBTQ content, were you able to find them?

- I did not look for books or (or other materials) with LGBTQ content in my school library
- Yes, always
- Yes, often
- About half the time
- Not often
- No, never

How often did you check out books (or other materials) with LGBTQ content from your school library?

- Once a day (or more)
- Several times a week
• Once a week
• Once every few weeks
• Once every few months
• Never

How often did you physically spend time in your school library using its books (or other materials) with LGBTQ content without taking them outside of the library?

• Once a day (or more)
• Several times a week
• Once a week
• Once every few weeks
• Once every few months
• Never

How often did you take books (or other physical materials) with LGBTQ content from your school library without checking them out?

• Once a day (or more)
• Several times a week
• Once a week
• Once every few weeks
• Once every few months
• Never

Did your school library have self-checkout machines?

• Yes
• No
• Unsure

If Yes Is Selected, Then Skip To Of all the books (or other materials)...

If your school library had had self-checkout machines, would you have been more or less likely to use it to look for books (or other materials) with LGBTQ content?

• Much more likely
• Somewhat more likely
•Neither more nor less likely
• Somewhat less likely
• Much less likely

If you used any books (or other materials) with LGBTQ content during the 2015-2016 academic year, how many of these were electronic (e.g. e-books, e-audiobooks, etc)?

• I did not use any books (or other materials) with LGBTQ content
• I used only electronic materials
• I used mostly electronic materials
• I used about the same number of electronic materials as print or hard copy materials (e.g. print books, CDs, DVDs)
• I used mostly print or hard copy materials
• I used only print or hard copy materials

Did your school library have electronic materials (e.g. e-books, e-audiobooks) with LGBTQ content available for checkout?
• Yes
• No
• Unsure
If Yes Is Selected, Then Skip To Did you trust your school librarian t...

If your school library had had electronic materials (e.g. e-books, e-audiobooks) with LGBTQ content, would you have been more or less likely to use it to look for these materials?
• Much more likely
• Somewhat more likely
• Neither more nor less likely
• Somewhat less likely
• Much less likely

Did you trust your school librarian to provide high quality books (or other materials) with LGBTQ content?
• Yes
• Somewhat
• No
If Yes Is Selected, Then Skip To Overall, how satisfied were you with ...

If your school librarian had seemed more trustworthy when it came to providing high quality books (or other materials) with LGBTQ content, would you have been more or less likely to use your school library to look for these materials?
• Much more likely
• Somewhat more likely
• Neither more nor less likely
• Somewhat less likely
• Much less likely

Overall, how satisfied were you with your high school library's collection of books (or other materials) with LGBTQ content?
• Extremely satisfied
• Moderately satisfied
• Slightly satisfied
• Neither satisfied nor dissatisfied
• Slightly dissatisfied
• Moderately dissatisfied
• Extremely dissatisfied
Overall, how satisfied were you with your experience of accessing these books (or other materials) with LGBTQ content through your high school library?

- I did not attempt to access these materials through this library
- Extremely satisfied
- Moderately satisfied
- Slightly satisfied
- Neither satisfied nor dissatisfied
- Slightly dissatisfied
- Moderately dissatisfied
- Extremely dissatisfied

For the remainder of this survey, please continue to report only how you behaved during the 2015-2016 academic year.

During the 2015-2016 academic year, did you at any point look anywhere for books (or other materials) with LGBTQ content?

- Yes
- No
- Unsure
If Yes is Not Selected, Then Skip To Is there anything else that has not b...

When looking for books (or other materials) with LGBTQ content, approximately what percent of the time did you spend using each of the following sources? Please note that the total must add up to 100. Do not use any special characters in your response (e.g. %).

_____ Your school library
_____ A public library
_____ A college or university library
_____ A physical store (e.g. Barnes and Noble, Walmart, Best Buy, etc)
_____ An online store or subscription service (e.g. Barnes and Noble's website, Amazon.com, Netflix.com, etc)
_____ Other (please specify)

If you looked in your school library for books (or other materials) with LGBTQ content, why did you look here? Choose all that apply.

- I did not look in this library for books or other materials with LGBTQ content.
- It was free to check out materials
- This library was convenient for me to use
- This library had self-checkout machines
- This library had e-books or other e-materials
- Someone recommended that I use this library to look for LGBTQ materials
- I knew or believed that this library would have the LGBTQ materials I was looking for
- I felt like I could look for LGBTQ materials in this library without being judged by other library users
- I felt like I could look for LGBTQ materials in this library without being judged by the library staff
- I felt like I could look for LGBTQ materials in this library privately, or without certain other people knowing
• Other (please specify) ____________________

Carry Forward All Choices - Displayed & Hidden from "If you looked in your school library for books (or other materials) with LGBTQ content, why did you look here? Choose all that apply." If you looked in the public library for books (or other materials) with LGBTQ content, why did you look here? Choose all that apply.

Carry Forward All Choices - Displayed & Hidden from "If you looked in your school library for books (or other materials) with LGBTQ content, why did you look here? Choose all that apply." If you looked in a university library for books (or other materials) with LGBTQ content, why did you look here? Choose all that apply.

If you looked in a physical store for books (or other materials) with LGBTQ content, why did you look here? Choose all that apply.
• I did not use a physical store to look for books or other materials with LGBTQ content
• The store was convenient for me to use
• The store had self-checkout machines
• Someone recommended that I use this store to look for LGBTQ materials
• I knew or believed that the store would have the LGBTQ materials I was looking for
• I felt like I could look for LGBTQ materials in this store without being judged by other customers
• I felt like I could look for LGBTQ materials in this store without being judged by the staff
• I felt like I could look for LGBTQ materials in this store privately, or without certain other people knowing
• Other (please specify) ____________________

If you looked on an online store or subscription service for books (or other materials) with LGBTQ content, why did you look here? Choose all that apply.
• I did not use an online store or subscription service to look for books or other materials with LGBTQ content
• The online store or subscription service was convenient for me to use
• I knew or believed that the online store or subscription service would have the LGBTQ materials I was looking for
• Someone recommended that I use this online store or subscription service to look for LGBTQ materials
• I could use the online store or subscription service privately, or without certain other people knowing
• Other (please specify) ____________________

If you indicated that you used any other places to look for books (or other materials) with LGBTQ content, why did you use these places? Choose all that apply.
• I did not use other places to look for books or other materials with LGBTQ content
• The other place(s) provided materials for free
• The other place(s) were convenient for me to use
• Someone recommended that I use the other place(s) to look for LGBTQ materials
• I knew or believed that the other place(s) would have the LGBTQ materials I was looking for
• I felt like I could look for LGBTQ materials in the other place(s) without being judged by other users
• I felt like I could look for LGBTQ materials in the other place(s) without being judged by the staff
• I could use the other place(s) privately, or without certain other people knowing
• Other (please specify) ____________________

Is there anything else that has not been mentioned that would have made you more likely to use your school library to look for books (or other materials) with LGBTQ content?

Is there anything else pertaining to your use of books (or other materials) with LGBTQ content that you feel is important, but that was not covered by this survey? If yes, please explain.

11.4 Appendix D: List of social media pages used to distribute link to survey

• Facebook
  o FCKH8.com
    ▪  https://www.facebook.com/fckh8com/
  o Equality NC
    ▪  https://www.facebook.com/equalitync/
  o Progress North Carolina Action
    ▪  https://www.facebook.com/ProgressNorthCarolinaAction/
  o OutRaleigh
    ▪  https://www.facebook.com/OutRaleigh/
  o NC Queer TROUBLMakers
    ▪  https://www.facebook.com/NCTROUBLMakers/
  o NC Queer Youth Power Coalition
    ▪  https://www.facebook.com/ncqypc/
  o Author’s own Facebook profile page

• Twitter
  o Author’s own Twitter

  Author tweeted the link at and was retweeted by:

  o QueerNC (@QueerNC)
  o Malinda Lo (@malindalo)
  o Shira Glassman (@ShiraGlassman)

• Other
I. Working Title

Availability and Use of LGBTQ Materials in U.S. High School Libraries

II. Introduction

According to the American Library Association (2004), it is imperative to recognize the diversity of the community that one serves and to “strive to reflect that diversity by providing a full spectrum of resources” to this community (American Library Association [ALA], 2004). Although exact numerical data is unavailable, some millions of Americans self-identify as LGBTQ (Gates, 2011); thus, it is important for school libraries to recognize this population and to evaluate the availability and use of their LGBTQ collections in order to make sure their LGBTQ students are being adequately served.

This project will investigate the availability and use of LGBTQ books in high school libraries in the state of North Carolina. Hughes-Hassell et al. (2013) studied the availability of such materials in high schools in an unnamed southern state, identifiable as North Carolina based on information provided in the authors’ description of the state (Hughes-Hassell et al., 2013, p.5). They concluded that these materials were being
under-collected. The political climate surrounding LGBTQ rights has shifted in America since Hughes-Hassell et al.’s (2013) work, as marriage equality was passed on a federal level in 2015 (Obergefell et al. v. Hodges, 2015), giving all Americans the right to marry regardless of biological sex. This landmark in LGBTQ rights shows a shift in ideology that justifies a re-evaluation of LGBTQ holdings in libraries in the United States. This project will thus re-investigate the availability of LGBTQ books in high schools in the southern U.S. state of North Carolina and will compare the results to those of Hughes-Hassell et al. (2013); this will be done utilizing Hughes-Hassell et al.’s (2013) methodology (with minor additions and updates) of a checklist study and the querying of relevant LGBTQ subject headings in the sample high schools’ OPACs.

This study will then build on the topic of school libraries’ LGBTQ holdings by exploring the use of these materials. This exploration will be conducted via circulation analyses of the LGBTQ materials of the high schools whose OPACs were queried and by surveying recent high school graduates from the state in question to create a more rounded picture of this topic.

III. Aims and Objectives

Aims

This project aims to investigate whether or not school libraries are adequately collecting LGBTQ books, whether or not the books provided by these libraries are actually being used, and how.

Objectives

- To discover how many LGBTQ books are held by high school libraries in North Carolina, and how this has changed since Hughes-Hassell et al.’s (2013) study.
- To discover the frequency with which these books circulate.
• To determine, using the measure of Relative Use Factor, the intensity of use of these books.
• To discover whether high school students look to their school libraries for LGBTQ materials, or if they look elsewhere.
• To discover the reasons behind high school students’ use or non-use of these resources in their school libraries.
• To illuminate patterns and preferences of behaviour regarding the use of these materials.

IV. Scope and Definition

Scope

This project will be restricted to active high school libraries in North Carolina that have remotely searchable OPACs at the time of the research. It may also be restricted to libraries whose staff are willing and able to provide circulation data. Due to ethical considerations, the survey will be administered to students that are at least eighteen years of age, and thus are graduating or have graduated high school in 2016.

Definition

• LGBTQ is an acronym commonly used (e.g. by Cart and Jenkins, 2015) to refer to people who are not heterosexual or cisgender; it stands for lesbian, gay, bisexual, transgender, and queer/questioning.
• LGBTQ materials include, for the purposes of this study:
  • Materials (in any format) that are retrieved via querying an OPAC for the Sears subject headings (Miller and Bristow, 2007) of gay men, lesbians, transsexualism, homosexuality, and bisexuality.
  • Materials that may not necessarily carry the aforementioned metadata, but which have been identified as having “significant and authentic GLBTQ content” by the Rainbow Book Lists (Rainbow Books, 2009).
• A high school is a school serving grades nine through twelve, usually corresponding to ages fourteen through eighteen years.

• High school students in this case will be defined as people who attended high school in the state of North Carolina for the duration of (at least) the 2015 - 2016 academic year.

• Relative Use Factor is a measure of use that is calculated using circulation data. It is “the ratio of the percentage of circulations in a given subject area compared to the holdings’ percentage in the same subject area” (Bonn, 1974, as cited by Gavigan, 2014, p. 99).

**V. Research Context/Literature Review**

*Research Context*

This study follows on from a previous work, namely Hughes-Hassell et al.’s (2013) study, described above. This work was expanded by Oltmann (2015), who used slightly different methodology in that she used one of the same resources as Hughes-Hassell et al. (2013) to create her checklist, but did not query her schools’ OPACs for Hughes-Hassell et al.’s (2013) selected subject headings. Given that this study will incorporate this aspect of Hughes-Hassell et al.’s (2013) study, it will be more directly comparable and thus better indicative of longitudinal trends in the collections. Neither Hughes-Hassell et al. (2013) nor Oltmann (2015) examined the actual use of LGBTQ materials by school children.

Two major events have occurred that affect LGBTQ people in North Carolina since these two studies took place; these events further justify updating them. Firstly, as of 2014, several states had legalized same-sex marriage; however, North Carolina was not one of them (Lachman, 2014). The United States Supreme Court legalized same-sex marriage nation-wide in 2015 (Obergefell et al. v. Hodges, 2015). However, the political landscape in North Carolina still does not fully protect LGBTQ individuals; the second notable event is that North Carolina has passed a majorly controversial bill requiring people to use public bathrooms corresponding with the sex recorded on their birth certificates,
instead of the bathrooms corresponding with their gender identity; the same bill prohibited the passing of local non-discrimination ordinances (General Assembly of North Carolina, 2016).

Discrimination against LGBTQ high school students is still very much alive and has quantifiable negative effects on these students. The National School Climate Survey, conducted by the Gay, Lesbian, and Straight Education Network (GLSEN), is a biennial online survey of LGBT youth that measures their school experiences (Kosciw et al., 2014, p. xv). Their most recent study, conducted in 2013 and published the following year, found that many LGBT students still experience hostile school environments (e.g., 74.1% and 55.1% of LGBT students reported having been verbally harassed for their sexual orientation and/or their gender expression, respectively) (Kosciw et al., 2014, p. xvii). They found that students who experienced victimization or discrimination because of their sexualities or gender expression were more likely to miss school, had lower grade point averages, were less likely to have plans to attend post-secondary education, and were more likely to experience depression and low-self-esteem than students for whom bullying was not a concern (Kosciw et al., 2014, p. xviii). Savage and Schanding (2013, as cited by Oltmann, 2016) reported in a summary of recent literature that LGBT teenagers also experience heightened feelings of isolation and ostracism and are more likely to engage in drug use and risky sexual behaviour. Thus, this population is especially in need of support.

Additionally, the LGBTQ population has the right to be acknowledged and served appropriately (ALA, 2004).

The benefits expected from this project are thus:

- It will allow for an assessment of LGBTQ materials after the legalization of same-sex marriage, which should indicate more of these items as federal law becomes less discriminatory and attitudes change.
• Assessing the use of these materials will help librarians either justify expanding these collections, direct them toward ways to increase students’ use of them, or support students’ needs in other ways.

**Literature Review**

According to the literature, libraries have a role to play in supporting LGBTQ patrons. Simpson (2006) discusses the importance of a proactive approach to LGBTQ collection development for public library patrons, particularly youth. LGBTQ youth benefit from access to information by, for instance, gaining self-affirmation (Rauch, 2011).

There have been several studies of LGBTQ holdings in public libraries, but many have taken place outside of the United States (e.g. Chapman, 2013; Boon and Howard, 2004; Yilmaz, 2014). Notable recent studies of U.S. public libraries include Stringer-Stanback (2011) and Williams and Deyoe (2014). Stringer-Stanback (2011) focused on the effects of anti-discrimination ordinances on LGBTQ holdings and found no relationship between these ordinances and the size of LGBTQ collections, although she did find that areas with more diverse demographics tended to have more of these titles. Williams and Deyoe (2014) found that a third of public libraries with collection development budgets of at least $100,000 did not meet the researchers’ baseline measurements for diverse youth collections.

A few studies have focused on LGBTQ holdings in U.S. school libraries; of particular note are Hughes-Hassell et al. (2013), Williams and Deyoe (2014), and Oltmann (2015). Hughes-Hassell et al.’s (2013) results have already been mentioned. Williams and Deyoe’s (2014) study included school libraries in addition to public libraries; they found that 207 schools among their 843 schools studied held none of the LGBTQ books from their checklist. School libraries in the south, they found, held the smallest mean amount of LGBTQ titles at between three and four per library (Williams and Deyoe, 2014, pp. 109-110). Even though Hughes-Hassell et al. (2013) and Williams and Deyoe (2014) both performed checklist studies on southern school libraries, it is hard to compare the results of these two studies, as they utilized different checklists and had quite different
sampling techniques; one can simply say that neither team found the LGBTQ holdings in these schools to be sufficient. Oltmann (2015) sought to expand Hughes-Hassell et al.’s (2013) study in order to establish correlations between LGBTQ holdings and school size, locale, antidiscrimination ordinances, demographics, and political affiliation. The only variables she found to be significant were school size and locale (i.e. urban versus rural), with larger schools holding more titles overall, and suburban and rural schools holding more nonfiction titles (Oltmann, 2015, p. 30-31). Oltmann (2015) does not make any judgments about whether the LGBTQ holdings that she found were sufficient, as this was not the focus of her study.

There has been a fair amount of research done on how adults use LGBTQ library materials, but barely any on how children use them. These studies do not reveal a unified picture of library use by LGBTQ patrons; some (e.g. Joyce and Schrader, 1997) found high levels of use, while others (e.g. Beiriger and Jackson, 2007) found low levels. These studies were done on different populations a decade apart, which may account for the differences in findings. Adult study participants have generally reported low levels of satisfaction with their libraries’ LGBTQ collections (e.g. Goldthorp, 2007; Schaller, 2011). Linville (2004) is the only study located during this preliminary literature review that surveyed LGBTQ youth about their library usage; they found that although most LGBTQ youth use public libraries, one third of youth who used the library specifically to gather information about LGBTQ topics were not able to find what they needed (Linville, 2004, as cited by Chapman, 2013, p. 546). Fisher (1995) performed a literature review and concluded that libraries had failed to meet the needs of LGBTQ students; however, much may have changed in the 21 years since her study. Oltmann (2016) touched on LGBTQ students’ school library use, but from the perspective of school librarians, not the students themselves; these librarians relayed stories of recent students finding “value and comfort” in their libraries’ LGBT collections (Oltmann, 2016, p. 15).

Measuring use and user satisfaction is important for any library service, but it could be argued to be especially important with regard to LGBTQ school children, considering school librarians’ duty to support LGBTQ students (ALA, 2004) and the link between
self-affirmation and access to LGBTQ materials (Rauch, 2011). Additionally, the fact that disclosing an LGBTQ identity is still a complicated issue for many people (Legate et al., 2012) suggests that these students may have different patterns of information use when it comes to using materials or finding information that relates to their LGBTQ identities; this can be seen, for example, in how Beiriger and Jackson (2007) found lower levels of in-person library use but higher levels of online information searching among transgender participants. Considering the amount of bullying and harassment found by the GLSEN (Kosciw et al., 2014) study, perhaps LGBTQ students would prefer to search for LGBTQ materials in other spaces that at school, such as at public libraries or online. Wells (2014), in fact, designed an online database as part of a Master's project in order to serve LGBTQ teenagers who may want privacy in locating this material. If this is the case, it may be that larger LGBTQ collections in school libraries serve a more symbolic purpose of showing LGBTQ students that they are welcome, versus being actual sources of information for these students, which would inform how librarians should store and promote such material.

The literature supports this study’s methodology. Checklist studies, utilized by other researchers (e.g. Chapman, 2013; Hughes-Hassell et al., 2013; Oltmann, 2015; Williams and Deyoe, 2014) are the most common method of evaluating library holdings (Moss, 2008, p. 149). Using surveys to measure user needs is quite common in the library world; many libraries use massive corporate survey tools such as LibQual+ to self-evaluate (Johnson, 2014, p. 325). Linville (2004, as cited by Chapman, 2013, p. 546), Joyce and Schrader (1997), and Beiriger and Jackson (2007), among others, have used questionnaires to measure the information needs and behaviours of LGBTQ people specifically. As of now, I have not found anyone utilizing circulation analysis or relative use factor to investigate the use of LGBTQ collections; however, this method has been used successfully in schools to gain pictures of poetry and graphic novel collections (Enochs, 2010; Gavigan, 2014). 

Publications and resources that will assist in understanding the research problem and carrying out the project include but are not limited to:
VI. Methodology

This project will adopt a mixed methods approach consisting of a checklist study, circulation analysis, and a questionnaire. Mixed methods, which involve the use of both qualitative and quantitative methodologies integrated to form a more complete version of a topic (Tashakkori and Cresswell, 2007, as cited by Pickard, 2013), are appropriate for this project, as it will investigate, quantitatively, both availability and use, and will incorporate qualitative data to provide a full picture of students’ access to and use of LGBTQ materials in school libraries. Chapman (2013) employed a similar mixed methods approach in her study of LGBTQ materials in U.K. public libraries.

A checklist study will be performed by remotely searching the selected school libraries’ OPACs; this approach is appropriate for meeting the project objectives because, as mentioned above, this method has an established place in LIS research when it comes to evaluating library holdings (Moss, 2008, p. 149). It is imperative that a checklist study be performed, as one of the objectives is to see if availability has changed since Hughes-
Hassell et al.'s (2013) research. Thus, I will be adhering to their methodology for this section of the study, utilizing the same checklist and search terms. In addition to recreating their checklist study, I will use the American Library Association’s Rainbow Book Lists to add more recent novels to my own checklist, as, at the time of writing, Hughes-Hassell et al.’s (2013) checklist is six years out of date. The Rainbow Book Lists specify recommended grade levels for each of their books; I will use all their listed materials from 2011 to 2016 that are recommended for grades nine through twelve. I will, finally, add “bisexuality” as a search term to this part of the study, as bisexuality is a term that is included in the Sears list of subject headings (Miller and Bristow, 2007) but was not included by Hughes-Hassell et al (2013), despite bisexuality being part of the LGBTQ acronym. Only the data coming from utilizing Hughes-Hassell et al.’s (2013) exact methodology will be used for direct comparison to their study; the rest will be analysed separately. The only problem anticipated with this part of the study is that the schools selected may not have remotely searchable OPACs; if this is the case, others from the same geographic region will be selected to replace them.

A circulation analysis will be used to gain a picture of how these collections are actually used. This is suitable because calculating a collection’s relative use factor (RUF) is a recognized method for assessing how heavily a collection is used. RUF is a measure of the number of circulations within a subject area as compared to the number of holdings of the subject area (Bonn, 1974, as cited by Gavigan, 2014, p. 99); the subject area, in this case, will be comprised of the items identified as being held by each school library during the checklist study. Circulation data can be easily generated by librarians, although one potential problem with regard to this aspect of the study is that it necessitates that the librarians whose OPACs are queried during the checklist study are willing to send me this data. To address this problem, more schools than the desired fifty or so will be contacted and list-checked, assuming that not all of the list-checked schools will provide circulation data. Circulation analyses also exclude in-house use, and often e-resources (Johnson, 2014, p. 324), but questions about the use of these materials can be added to the questionnaire to partially compensate for this.
Finally, an online survey questionnaire of eighteen-year-old LGBTQ individuals will be carried out; this is appropriate as questionnaires are frequently used in LIS to gather data of the sort that I would like to gather; namely, data about information behaviour, user preferences, user satisfaction, and the like (Johnson, 2014, p. 325). They are suitable for reaching a "large and geographically dispersed community...from a larger sample size than would be possible using any other technique", and can also offer both anonymity and confidentiality to the participants (Pickard, 2013, p. 207), qualities which are all desirable for this study. The questionnaire will be comprised of dichotomous, multiple dichotomous, and rank order questions; different types of questions will be included both to gather information at different levels of depth and to be more engaging for the survey respondents (Pickard, 2013, p. 210-211). A common problem with surveys is that they do not necessarily reach people who are nonusers (Johnson, 2014, p. 326); in this case, I will target LGBTQ youth who attended high school in North Carolina in general and will thus be including nonusers of school libraries. The link to the survey will be distributed purposively to Facebook groups of incoming college freshmen in North Carolina, as these students will be both old enough to meet ethical guidelines but young enough to be able to vividly recall their experiences in their high school libraries. Potential participants will be asked at the outset of the questionnaire not to continue if they are not eighteen years of age, do not self-identify as LGBTQ, or did not attend high school in North Carolina; not being able to definitively ensure that everyone responding meets these criteria is one of the drawbacks of administering surveys online (Pickard, 2013, p. 222), but there is no good way to circumnavigate this without going to more effort than is practical for an exploratory questionnaire at this level of study.

VII. Work Plan
VIII. Resources

This project will require the following resources, which are already in possession:

- Laptop computer
- Internet connection
- Online survey software (Qualtrics or SurveyMonkey)
- Email account
- Microsoft Office Suite
IX. Ethics

Although the questionnaire would be best administered to ninth through twelfth grade students, most of these students are not eighteen years old, rendering them a vulnerable population. Instead, only eighteen year olds will be surveyed.

All respondents will be informed that they can opt out at any time with no consequences, and that they are protected by complete anonymity. Participants in the pilot survey, likely fellow City University London students, will be given consent and information sheets; results of the pilot survey will remain entirely confidential.

Ethics checklist

Part A: Ethics Checklist

<table>
<thead>
<tr>
<th>If your answer to any of the following questions (1 – 3) is YES, you must apply to an appropriate external ethics committee for approval:</th>
<th>Delete as appropriate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Does your project require approval from the National Research Ethics Service (NRES)? (E.g. because you are recruiting current NHS patients or staff? If you are unsure, please check at <a href="http://www.hra.nhs.uk/research-community/before-you-apply/determine-which-review-body-approvals-are-required/">http://www.hra.nhs.uk/research-community/before-you-apply/determine-which-review-body-approvals-are-required/</a>)</td>
<td>No</td>
</tr>
<tr>
<td>2. Will you recruit any participants who fall under the auspices of the Mental Capacity Act? (Such research needs to be approved by an external ethics committee such as NRES or the Social Care Research Ethics Committee <a href="http://www.scie.org.uk/research/ethics-committee/">http://www.scie.org.uk/research/ethics-committee/</a>)</td>
<td>No</td>
</tr>
<tr>
<td>3. Will you recruit any participants who are currently under the auspices of the Criminal Justice System, for example, but not limited to, people on remand, prisoners and those on probation? (Such research needs to be authorised by the ethics approval system of the National Offender Management Service.)</td>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>If your answer to any of the following questions (4 – 11) is YES, you must apply to the Senate Research Ethics Committee for approval (unless you are applying to an external ethics committee):</th>
<th>Delete as appropriate</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Does your project involve participants who are unable to give informed consent, for example, but not limited to, people who may have a degree of learning disability or mental health</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>problem, that means they are unable to make an informed decision on their own behalf?</td>
<td></td>
</tr>
<tr>
<td>5. Is there a risk that your project might lead to disclosures from participants concerning their involvement in illegal activities?</td>
<td>No</td>
</tr>
<tr>
<td>6. Is there a risk that obscene and or illegal material may need to be accessed for your project (including online content and other material)?</td>
<td>No</td>
</tr>
<tr>
<td>7. Does your project involve participants disclosing information about sensitive subjects?</td>
<td>No</td>
</tr>
<tr>
<td>9. Does your project involve invasive or intrusive procedures? For example, these may include, but are not limited to, electrical stimulation, heat, cold or bruising.</td>
<td>No</td>
</tr>
<tr>
<td>10. Does your project involve animals?</td>
<td>No</td>
</tr>
<tr>
<td>11. Does your project involve the administration of drugs, placebos or other substances to study participants?</td>
<td>No</td>
</tr>
<tr>
<td><strong>If your answer to any of the following questions (12 – 18) is YES, you should consult your supervisor, as you may need to apply to an ethics committee for approval.</strong></td>
<td>Delete as appropriate</td>
</tr>
<tr>
<td>12. Does your project involve participants who are under the age of 18?</td>
<td>No</td>
</tr>
<tr>
<td>13. Does your project involve adults who are vulnerable because of their social, psychological or medical circumstances (vulnerable adults)? This includes adults with cognitive and/or learning disabilities, adults with physical disabilities and older people.</td>
<td>No</td>
</tr>
<tr>
<td>14. Does your project involve participants who are recruited because they are staff or students of City University London? For example, students studying on a particular course or module. (If yes, approval is also required from the Project Tutor.)</td>
<td>No</td>
</tr>
<tr>
<td>15. Does your project involve intentional deception of participants?</td>
<td>No</td>
</tr>
<tr>
<td>16. Does your project involve identifiable participants taking part without their informed consent?</td>
<td>No</td>
</tr>
<tr>
<td>17. Does your project pose a risk to participants or other individuals greater than that in normal working life?</td>
<td>No</td>
</tr>
<tr>
<td>18. Does your project pose a risk to you, the researcher, greater than that in normal working life?</td>
<td>No</td>
</tr>
</tbody>
</table>
If your answer to the following question (19) is YES and your answer to all questions 1 – 18 is NO, you must complete part B of this form.

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>19. Does your project involve human participants? For example, as interviewees, respondents to a questionnaire or participants in evaluation or testing.</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Part B: Ethics Proportionate Review Form

If you answered YES to question 19 and NO to all questions 1 – 18, you may use this part of the form to submit an application for a proportionate ethics review of your project. Your dissertation project supervisor will review and approve this application.

<table>
<thead>
<tr>
<th>The following questions (20 – 24) must be answered fully.</th>
<th>Delete as appropriate</th>
</tr>
</thead>
<tbody>
<tr>
<td>20. Will you ensure that participants taking part in your project are fully informed about the purpose of the research?</td>
<td>Yes</td>
</tr>
<tr>
<td>21. Will you ensure that participants taking part in your project are fully informed about the procedures affecting them or affecting any information collected about them, including information about how the data will be used, to whom it will be disclosed, and how long it will be kept?</td>
<td>Yes</td>
</tr>
<tr>
<td>22. When people agree to participate in your project, will it be made clear to them that they may withdraw (i.e. not participate) at any time without any penalty?</td>
<td>Yes</td>
</tr>
<tr>
<td>23. Will consent be obtained from the participants in your project, if necessary? Consent from participants will only be necessary if you plan to gather personal data. “Personal data” means data relating to an identifiable living person, e.g. data you collect using questionnaires, observations, interviews, computer logs. The person might be identifiable if you record their name, username, student id, DNA, fingerprint, etc. If YES, attach the participant information sheet(s) and consent request form(s) that you will use. You must retain these for subsequent inspection. Failure to provide the filled consent request forms will automatically result in withdrawal of any earlier ethical approval of your project.</td>
<td>Not applicable</td>
</tr>
<tr>
<td>24. Have you made arrangements to ensure that material and/or private information obtained from or about the participating individuals will remain confidential? Provide details: Surveys will be administered online to anonymous participants; no personal information will be collected about any participants. Information about participants’ geographic</td>
<td>Yes</td>
</tr>
</tbody>
</table>


region will be collected, but each geographic region participants can select from includes several counties in the state of North Carolina, so this information is not particularly specific or identifying. Survey data will be analysed and presented as an aggregate, and raw data will never be shared with anyone barring the dissertation supervisor. This data, once collected, will not be uploaded to any public webpages or to the Cloud.

<table>
<thead>
<tr>
<th>If the answer to the following question (25) is YES, you must provide details</th>
<th>Delete as appropriate</th>
</tr>
</thead>
<tbody>
<tr>
<td>25. Will the research involving participants be conducted in the participant’s home or other non-University location? <em>If YES, provide details of how your safety will be ensured:</em></td>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Attachments (these must be provided if applicable):</th>
<th>Delete as appropriate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant information sheet(s)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Consent form(s)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Questionnaire(s)**: -Will be sent to supervisor for approval prior to administration.</td>
<td>No</td>
</tr>
<tr>
<td>Topic guide(s) for interviews and focus groups**</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Permission from external organisations (e.g. for recruitment of participants)**</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

X. Confidentiality

Specific schools may be given numbers in the final project write-up instead of being identified by name. Pilot study participants will be handled as mentioned above. Other issues of confidentiality are not foreseen.

XI. Bibliography


Lachman, S., 2014. North Carolina attorney general to stop defending state’s gay marriage ban. *Huffington Post*, [online] Available at:


Rainbow Books, 2009. *About.* [online] Available at:  
http://glbltrt.ala.org/rainbowbooks/about [Accessed 12 May 2016].


### 11.6 Appendix F: Ethics checklist

#### Part A: Ethics Checklist

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>If your answer to any of the following questions (1 – 3) is YES, you must apply to an appropriate external ethics committee for approval:</strong></td>
<td></td>
</tr>
<tr>
<td>1. Does your project require approval from the National Research Ethics Service (NRES)? (E.g. because you are recruiting current NHS patients or staff? If you are unsure, please check at <a href="http://www.hra.nhs.uk/research-community/before-you-apply/determine-which-review-body-approvals-are-required/">http://www.hra.nhs.uk/research-community/before-you-apply/determine-which-review-body-approvals-are-required/</a>)</td>
<td>No</td>
</tr>
<tr>
<td>2. Will you recruit any participants who fall under the auspices of the Mental Capacity Act? (Such research needs to be approved by an external ethics committee such as NRES or the Social Care Research Ethics Committee <a href="http://www.scie.org.uk/research/ethics-committee/">http://www.scie.org.uk/research/ethics-committee/</a>)</td>
<td>No</td>
</tr>
<tr>
<td>3. Will you recruit any participants who are currently under the auspices of the Criminal Justice System, for example, but not limited to, people on remand, prisoners and those on probation? (Such research needs to be authorised by the ethics approval system of the National Offender Management Service.)</td>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>If your answer to any of the following questions (4 – 11) is YES, you must apply to the Senate Research Ethics Committee for approval (unless you are applying to an external ethics committee):</strong></td>
<td></td>
</tr>
<tr>
<td>4. Does your project involve participants who are unable to give informed consent, for example, but not limited to, people who may have a degree of learning disability or mental health problem, that means they are unable to make an informed decision on their own behalf?</td>
<td>No</td>
</tr>
<tr>
<td>5. Is there a risk that your project might lead to disclosures from participants concerning their involvement in illegal activities?</td>
<td>No</td>
</tr>
<tr>
<td>6. Is there a risk that obscene and or illegal material may need to be accessed for your project (including online content and other material)?</td>
<td>No</td>
</tr>
<tr>
<td>7. Does your project involve participants disclosing information about sensitive subjects?</td>
<td>No</td>
</tr>
<tr>
<td>9. Does your project involve invasive or intrusive procedures? For example, these may include, but are not limited to, electrical stimulation, heat, cold or bruising.</td>
<td>No</td>
</tr>
<tr>
<td>Question</td>
<td>Answer</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>10. Does your project involve animals?</td>
<td>No</td>
</tr>
<tr>
<td>11. Does your project involve the administration of drugs, placebos or other substances to study participants?</td>
<td>No</td>
</tr>
</tbody>
</table>

If your answer to any of the following questions (12 – 18) is YES, you should consult your supervisor, as you may need to apply to an ethics committee for approval.

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. Does your project involve participants who are under the age of 18?</td>
<td>No</td>
</tr>
<tr>
<td>13. Does your project involve adults who are vulnerable because of their social, psychological or medical circumstances (vulnerable adults)? This includes adults with cognitive and/or learning disabilities, adults with physical disabilities and older people.</td>
<td>No</td>
</tr>
<tr>
<td>14. Does your project involve participants who are recruited because they are staff or students of City University London? For example, students studying on a particular course or module. (If yes, approval is also required from the Project Tutor.)</td>
<td>No</td>
</tr>
<tr>
<td>15. Does your project involve intentional deception of participants?</td>
<td>No</td>
</tr>
<tr>
<td>16. Does your project involve identifiable participants taking part without their informed consent?</td>
<td>No</td>
</tr>
<tr>
<td>17. Does your project pose a risk to participants or other individuals greater than that in normal working life?</td>
<td>No</td>
</tr>
<tr>
<td>18. Does your project pose a risk to you, the researcher, greater than that in normal working life?</td>
<td>No</td>
</tr>
</tbody>
</table>

If your answer to the following question (19) is YES and your answer to all questions 1 – 18 is NO, you must complete part B of this form.

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>19. Does your project involve human participants? For example, as interviewees, respondents to a questionnaire or participants in evaluation or testing.</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Part B: Ethics Proportionate Review Form**

If you answered YES to question 19 and NO to all questions 1 – 18, you may use this part of the form to submit an application for a proportionate ethics review of your project. Your dissertation project supervisor will review and approve this application.

**The following questions (20 – 24) must be answered fully.**

Delete as appropriate
<table>
<thead>
<tr>
<th></th>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>Will you ensure that participants taking part in your project are fully informed about the purpose of the research?</td>
<td>Yes</td>
</tr>
<tr>
<td>21</td>
<td>Will you ensure that participants taking part in your project are fully informed about the procedures affecting them or affecting any information collected about them, including information about how the data will be used, to whom it will be disclosed, and how long it will be kept?</td>
<td>Yes</td>
</tr>
<tr>
<td>22</td>
<td>When people agree to participate in your project, will it be made clear to them that they may withdraw (i.e. not participate) at any time without any penalty?</td>
<td>Yes</td>
</tr>
<tr>
<td>23</td>
<td>Will consent be obtained from the participants in your project, if necessary?</td>
<td>Not applicable</td>
</tr>
<tr>
<td></td>
<td>Consent from participants will only be necessary if you plan to gather personal data. “Personal data” means data relating to an identifiable living person, e.g. data you collect using questionnaires, observations, interviews, computer logs. The person might be identifiable if you record their name, username, student id, DNA, fingerprint, etc. If YES, attach the participant information sheet(s) and consent request form(s) that you will use. You must retain these for subsequent inspection. Failure to provide the filled consent request forms will automatically result in withdrawal of any earlier ethical approval of your project.</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Have you made arrangements to ensure that material and/or private information obtained from or about the participating individuals will remain confidential? Provide details: -Surveys will be administered online to anonymous participants; no personal information will be collected about any participants. Information about participants’ geographic region will be collected, but each geographic region participants can select from includes several counties in the state of North Carolina, so this information is not particularly specific or identifying. Survey data will be analysed and presented as an aggregate, and raw data will never be shared with anyone barring the dissertation supervisor. This data, once collected, will not be uploaded to any public webpages or to the Cloud.</td>
<td>Yes</td>
</tr>
</tbody>
</table>

If the answer to the following question (25) is YES, you must provide details

<table>
<thead>
<tr>
<th></th>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>Will the research involving participants be conducted in the participant’s home or other non-University location? If YES, provide details of how your safety will be ensured:</td>
<td>No</td>
</tr>
</tbody>
</table>
### 11.7 Appendix G: Letters to school librarians requesting circulation data

**11.7.1 Introduction**

Hi _____,

My name is Rachel Jordan and I’m a Master’s student on the Library Science MSc course at City University London. I am currently working on my dissertation – the U.K. equivalent of a U.S. Master’s thesis.

My dissertation is focused on the use and availability of LGBTQ materials in high school media centers in North Carolina (although I’m attending school in the U.K., I’m a North Carolina native). It will be comprised of a checklist study, circulation analyses, and a survey questionnaire, all designed to examine what LGBTQ materials are available via the high school library and how students use them.

To get my sample, I compiled a list of every public high school in the state by district; every 6th school from my list was checked for a remotely searchable OPAC, and schools with these OPACs were selected for study; your media center was selected from my list and meets this criterion. I would like to ask for your help in my study by providing me with some of your circulation statistics. My goal for this part of the project is to be able to calculate the Relative Use Factor/intensity of use of the LGBTQ holdings in each collection in my sample to gain a general picture of this factor across the state. Every school will remain anonymous in my final dissertation.

---

<table>
<thead>
<tr>
<th><strong>Attachments (these must be provided if applicable):</strong></th>
<th><strong>Delete as appropriate</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant information sheet(s)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Consent form(s)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Questionnaire(s)**:</td>
<td>See Appendix C.</td>
</tr>
<tr>
<td>-Was discussed with supervisor prior to administration.</td>
<td></td>
</tr>
<tr>
<td>Topic guide(s) for interviews and focus groups**</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Permission from external organisations (e.g. for recruitment of participants)**</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
I am currently compiling a list of LGBTQ materials from each of my selected libraries using both a checklist and certain subject headings. If you are able to help, I will send you a list of the titles in your library that I’ve found using these methods; I would then need statistics about how many copies of each book you have in your library, and circulation data per title, as well as your total number of holdings and total circulations for this past school year.

I know that the end of the school year is a busy time for high school faculty and staff. I would be immeasurably grateful to you if you were able to assist me with this project by giving me access to the data that I need from your Destiny system. If you are able to help, please let me know. I will be sending out lists of the books that I need stats for about as soon as possible (by early June at the latest), but I just wanted to introduce myself and my project first and to ask for your help. If you have any questions about either myself or the project, please do let me know. 😊

Thank you for your consideration,

Rachel

11.7.2 Instructions for participating librarians

Hello again,

The information I need is number of copies per title, number of circulations for each title from this school year, total number of circulations for your library for this year, and total number of items in your library. If it is possible to not include offsite copies in these counts that would be marvelous.

The titles I need information about are in the attached list. 😊

Thanks again so much,

Rachel