

# Undergraduate students' attitudes about search data privacy in academic libraries: A qualitative research study

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# Literature and Rationale

- Demonstrating impact and evidence of improvement in academic libraries is important (Oakleaf, 2010; Prindle & Loos, 2017), particularly in the age of learning analytics (EDUCAUSE, 2011; Alhadad et al., 2015)
- Historically, libraries have valued privacy and resisted collecting search data (ALA, 2008; ALA, 1996; ALA, 2014a; Malinconico, 2011; Matthews, 2012; Shuler, 2004; Zimmer, 2013a)

# Literature and Rationale

- Limited data collection has affected libraries' ability to assess and improve (Matthews, 2012; Oakleaf, 2010)
- Evolving practices in libraries involve more data (Brown & Malenfant, 2017; Matthews, 2012; Oakleaf, 2018a; Oakleaf, 2018b)

# Literature and Rationale

- Handful of quantitative studies that lack methodological rigor and present mixed findings regarding student attitudes (Johns & Lawson, 2005; Sturges et al., 2003; Sutlieff & Chelin, 2010)
- Data Doubles research study (Jones et al., 2019; Jones et. al. 2020): undergraduates trust libraries and are comfortable with library search data collection. Most participants considering it for the first time.

[www.datadoubles.org](http://www.datadoubles.org)

# Purpose of the Study

...to understand undergraduate student attitudes about search data privacy in academic libraries and their preferences for how librarians should handle and use information about what students search for, borrow, and download.

# Research Questions

1. What are undergraduate students' attitudes about whether academic libraries should collect and maintain user search data, and why?
2. What are acceptable and unacceptable uses of students' library search data according to undergraduate students, and why?
3. In what ways do undergraduate student attitudes about search data privacy differ in the context of using academic libraries and commercial search engines such as Google?
4. What do students perceive as the risks and benefits of libraries collecting student search data, and how do these perceptions influence their search behavior?

# Research Questions

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# Research Design: Interpretive Description

Interpretive Description is a qualitative approach for research in applied disciplines designed to answer applied questions (Thorne, 2016).

Overview: semi-structured interviews with a constant comparative approach of data collection and analysis



# Sampling & Recruitment

- Initially convenience sampling with a purposeful approach (Maxwell, 2013)
- Then theoretical and maximal variation sampling (Glaser & Strauss, 1967; Thorne, 2016)
- Incentive: \$15 Amazon gift card

# Participants

- 53 VCU undergraduates interested; 27 interviewed
- Characteristics
  - Used academic libraries
  - Mostly women, but included men and two nonbinary/transgender students
  - Majority minority sample
  - High proportion of honors students
- Assigned pseudonyms in findings

# Data Collection

- Semi-structured interviews
  - Questions
  - Vignettes (Barter & Renold, 2000; Finch, 1987)

# Data Collection

Scenario C: An academic library maintains a record of each student's search data. The library uses the data to explore the relationship between use of library materials and academic success (like GPA and grades). When students have not used the library at all but are enrolled in courses that usually necessitate library use, librarians notify those students' academic advisors as an early warning that the student could have academic issues.

# Data Analysis

- In person and audio-recorded; professionally transcribed
- Inductive, emergent coding in Atlas.ti
- First & Second Cycle coding (Miles, Huberman, & Saldaña, (2014)

# Strategies for Enhancing Rigor

- Primary strategies from Lincoln & Guba (1985) and Thorne (2016)
  - Memoing and detailed account of procedures
  - Reflexive journaling
  - Clarifying findings through interviews with additional participants

# Findings

Theme: Academic libraries are mostly used for academics

- Library search data less personal than internet data
- Intellectual freedom matters

*...but I mean, libraries aren't getting a full picture of patrons just because our research is so skewed. Like I feel like if you were to look up like what I like, I'd be weirdly into like whatever project I have rather than like who I am.*

(Yoofi)

# Findings

Theme: Comfort with using data to benefit students

- Libraries are trusted
- “The least of my concerns”
- De-identification of user data
- Transparency and user control
- Preferences for privacy infrequent but strong and often related to bias/oppression



# Findings

Theme: Acknowledgement of different privacy-related perspectives or experiences

- Controversial or sensitive searches may require additional privacy
- People who are members of vulnerable populations may need more privacy

# Findings

Theme: Search data for improvement of library services/collections is acceptable

- Deleting search data is wasteful

*So... they already have the data, right? So, getting rid of it and not making use of it is a waste to me.*

(Stephen)

# Findings

Theme: Views on tailored search results are varied

- Uncertainty about net gain in convenience
- Limited exposure to varied research materials

# Findings

Theme: Library learning analytics are controversial

- Low library use: not indicative of a problem
- Mixed opinions about learning analytics
- Aggregate analysis okay, but why?

*...I don't know, the relationship between use of library materials and GPA... I just don't think that's enough to... draw any sort of conclusions generally about either students or about the source.*

(Kavya)

# Findings

Theme: Varied and ambivalent views on search data for preventing bad behavior

- Privacy should be sacrificed to save lives
- Privacy should be preserved
- Library search data will not protect public safety

# Discussion

- Trust in libraries affects privacy views, consistent with literature (Jones et al., 2019; Jones et al., 2020; Sutlieff & Chelin, 2010)
- Students are generally comfortable with search data collection in academic libraries, but with limits, also consistent with literature
- Trust could be lost if libraries do not meet user expectations or use data in ways students see as invasive

# Discussion

- Impersonal nature of academic libraries research affected undergraduates' perspectives
- Many students' views were more liberal than that of libraries/librarians; but not all, including some students in minoritized groups
- Libraries should consider technological solutions (de-identification) for protecting privacy and confidentiality

# Implications for Research and Practice

- Future research with a focus on perspectives from minority groups and other groups (graduate students, faculty, etc.)
- Possible quantitative instrument based on these themes to inform future practice



# Thank you!

# Questions?

References