

Goldsmiths, University of London

Library Search User Experience Report July/August 2022

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Executive Summary

This report details a small research project, conducted at Goldsmiths, University of London, by the Systems Library team in June-August 2022. The project aims to understand user experience and feedback surrounding our Library Search (referred to as LS throughout this report), for the purpose of driving improvements in accessibility and usability. The research methodology included interviews with Goldsmiths Library Team members, who described issues they had personally experienced, as well as those reported to them by LS users (students, staff, and alumni). Research questions and objectives were extracted from these interviews, which were later used to design an electronic survey. The survey was distributed throughout the university, and responses were analysed using the coding technique known as “content analysis”.

Key findings:

- While user satisfaction with the LS is partially present, resource unavailability is a pervasive and large reason why many users prefer to use informative tools outside of the Goldsmiths’ LS.
- Awareness, and thus use of the LS’ facilities, is interlinked with students’ awareness of the Library Induction tool. Most, subsequently, agree that the Induction tool should be relocated to a more noticeable section of the LS.
- The success of incorporating marketing techniques to expand information-seeking is contingent on the search scope of the technique, and the strength of its relationship to departmental Reading Lists.
- The accessibility and usability of the LS are interlinked with how efficiently users can locate library materials and move around the physical library space with little restriction.
- Most users do not engage with the mobile version of the LS, and this is largely because of technical functionality problems throughout the site.
- While many users do not encounter inclusivity issues frequently, there are still many points that users suggest could enhance the current state of inclusivity within the LS.

It was recommended that future studies should explore alternative research methods to achieve a higher sense of validity for user response. Observational techniques, like usability

testing, are particularly suggested because this would be practical in recruiting a sample from a variety of user backgrounds (e.g., different levels of study, marginalised groups, etc.). This would require a longer time frame to complete the project if this method was chosen, which may also give room to explore and quantify the state of resource availability using Mann's (2015) Full-Text Availability Model. Moreover, Pizarro's (2021) method of decolonisation and diversification provides a basis for future research to implement and test as a method to improve current states of inclusivity within the Goldsmiths library.

Introduction

Structure of Goldsmiths' Library Search

The Goldsmiths Library Search is characterised by simple search box inputs, located at three different entry points (see Appendix A). These input elements allow users to enter keywords, which enables the retrieval of different entry types (e.g., articles, journals, books, e-books, etc.); however, the search functionality of each type differs slightly. Specifically, the entry point listed as Figure A1 allows for simple searches, while Figures A2 and A3 provide the option to refine searches based on physical or electronic attributes. Figure A3 offers an additional option for more complex search behaviours by allowing users to operate the “Advanced Search” functionality. Advanced Search refers to the ability to narrow search input according to specific attributes the resource may have or lack (e.g., author, language, publication date, etc.). The search page for each entry point is presented in a list, detailing the title, entry type, and whether the resource is available online or within the library. Each item is listed with the option to cite and bookmark library materials, in addition to the ‘Refine My Results’ – a filter which allows users to select criteria such as author, collection type, and subject.

Deconstructing the Library Search

It is important to understand how each element of the LS could contain barriers that influence the discoverability of library materials. Carden and her colleagues (2016) took the approach of dividing the interactive functions of the virtual library catalogue, and the output generated from these interactions into two distinct and defining features of the user journey. Applied to Goldsmiths' digital platform, the LS can thus be dissected into two constituents: the usability of its front-end interface (i.e., the interactive features that define and narrow search results); and the extent that data output is both easy to find and accessible within the physical and digital space. Carden and her colleagues' approach of compartmentalization can be used to assess why some digital catalogues may not be a user's initial choice as a library discovery tool (Larose et al., 2016) – including the relevance of this statement to Goldsmiths' LS. This report

consequently aims to identify the level at which users experience the most problems within our own library discovery tool, in order to enforce improvement.

The research work of the Imperial College London Library Information Systems (LIS) team (2016) is used as a blueprint for this report, particularly because they highlight their findings as the foundation to understanding both their university's digital structure, and for the wider digital environment of the library and information services industry. We apply and extend their findings, as well as address their recommendations for future research, while evaluating points of the Goldsmiths LS that the Imperial team did not cover.

Front-end Interface

The front-end interface refers to the elements of the LS that users can interact with to access search results (Kenzie Academy, 2020). Regarding Goldsmiths LS, this would include both the Library Homepage and the features provided by the library system, Primo. The reading list, interconnected with Primo, is a system that Larose and colleagues (2016) had acknowledged was a determining factor in the use of the LS as a starting point to discovery and information-seeking. They recommended that future research could explore ways to better integrate the reading list and their LS, in order to view the role of reading lists in user discovery. However, Goldsmiths' reading list system is arguably interlinked with the LS through the bookmarking system within Primo. Therefore, the recommendation from the Imperial LIS team within the context of Goldsmiths, could be extended by investigating user awareness, and use, of the bookmarking system, to inform about the role of reading lists.

With this, it is important to explore the extent that other interactive features of the discovery interface may contribute to the utility of the LS experience. For example, Damarell and her colleagues (2018) noted the significance of the filter feature in retrieving LS page results. In relation to Goldsmiths, this places attention on the Special Collections and Archives (henceforth referred to as SCA) division – which is both a part of the library space, and a facet of the LS filter. Yet, being a less frequented location in the library – as stated by the manager of the Goldsmiths SCA – questions are raised about how much information-seeking behaviours

towards its physical space is reflected in its digital shift. Hence, this report also aims to both understand how useful this facet is in information retrieval, and if having more facets within the filters will help better integrate the physical and digital space of the SCA.

Data Output

The search results webpage, refined by features like those mentioned above, is the provision that drives the use of the LS, because it is where users expect to find information that is relevant and specific to their needs (Smyth, 2019). Referring to physical resources, Larose and her colleagues (2016) specifically brought attention to their users' association of their LS as a method of locating items that are in the library space. In relation to Goldsmith's interface, this would mean that we can improve both the navigability of the library space, and the harmony between the LS and the library space by evaluating the location information provided by LS, and how successfully it steers users to records for physical entry types.

The ability for users to locate both electronic and physical entry types is associated to the resource's availability (Mann, 2015) – that is, the extent to which users can obtain access to the library collections (Nisonger, 2007). Encounters with electronic resource errors (e.g., broken links), or alternatively, the processing or absence of library materials can be a barrier to information-seeking (Nisonger, 2007). Consequently, gauging both how often these barriers are faced could influence the perception of usability and convenience (Mann, 2015). Nisonger also suggested implementing ways of addressing issues with resource availability to reduce the cognitive load of information-seeking (Gentile, 2020). Hence, adopting strategies from search tools within other industries, could be an effective, albeit unconventional, way of enhancing the Search's capacity to facilitate the discovery process. For example, the e-commerce domain utilizes a method, known as Value Stacking, that provides product recommendations (either of different entry types, or resources with similar content) based on previous searches. Thus, this report will also evaluate how users would respond to applying e-commerce marketing techniques to encourage further information-seeking on the Goldsmiths Search tool.

Accessibility

Accessibility is defined as the process of securing the LS from barriers to interaction or access (Petrie et al, 2015). The Imperial LIS team (2016) had also emphasised the importance of guidance during introductions to their LS, as they had indicated that the user's experience is arguably dependent on their awareness of those features. This subsequently brings attention to a feature of the Goldsmiths' LS known as the Library Induction tool, which offers users information about navigating the Search. User awareness of the Library Induction is linked to all facets of the Goldsmiths LS, such that evaluating its utility can inform us about the extent that users perceive themselves to have easy access to the resources in the LS. As a result, this report also aims to understand the current interactions with the Library Induction, and consequently, the ways in which we can enhance attention to this feature. From this, the Imperial LIS team had also mentioned that future research should examine information-seeking behaviours in systems used to access the Search outside of the library, particularly on mobile devices. In the previous section, we mentioned accessibility to be the user's capacity to use the Search without barriers to interaction, this section is focused on accessibility in the context of mobile devices. And so, applied to the Goldsmiths LS, we will also evaluate issues that users may face when accessing the LS from mobiles when compared to using a desktop or laptop device.

Negative emotional experiences are also a determining factor in the future use of the LS, and so previous LS studies had recommended that future research should explore what these experiences are, and how they are integrated into the Search tool (Larose et al, 2016). In the application of this point to the Goldsmiths digital space, we chose to view negative emotional experiences through the lens of accessibility and inclusivity. This decision was made to acknowledge that Libraries, and therefore its Searches, are built on institutions that exclude, or contribute to the othering of, those within the intersections of diversity (Carden et al, 2016). In fact, Appleton (2016) had laid inclusivity, particularly ethnography, at the core of user experience research. Ethnography is described as the process of investigating how particular cultural groups interact with the product (Mara & Mara, 2015), and is thus important in retrieving data that is more representative of its users (Priestner & Borg, 2016a). In relation to this project, it should be noted that while we are not looking at a particular ethnic group, we do

acknowledge that it is important to consider how the library experience can differ according to cultural background. Ergo, another aim of this report is to encourage libraries to encompass a more inclusive digital environment, by investigating barriers to users' digital welfare. More broadly, this project will deconstruct the Search tool to identify and address insensitive rhetoric within the Goldsmiths LS that affect those of different ethnic or cultural backgrounds, the LGBTQ+ community, and those with disabilities.

Overall, this report will not only assess user perspective regarding current attributes and system performance, but also propose design alternatives or additions to the Goldsmiths LS. Responses of staff and students – both undergraduate and postgraduate – of all academic departments will thus be used to identify inhibitors to information retrieval.

Methodology

Research Sample

29 users were recruited to participate in the study (Staff 31.03%; Student 71.34%). Participants included staff, as well as undergraduate, postgraduate and alumni students of Goldsmiths, University of London. Users were from all departments within Goldsmiths – although they were not asked to specify which department they belonged to, neither were students asked about their level of study. The sample was recruited from Goldsmiths' staff and student electronic newsletters, blog, and exclusive university networking site – Goldsmiths Connect. The survey was additionally promoted on the university's social media accounts, and via emails sent to staff and students.

Prior to beginning the survey, users were provided with an online information sheet, and link to GDPR information on the Goldsmiths website. Moreover, subjects were informed of their right to withdraw, and were given the option to proceed with the survey as a form of consent. There were no exclusionary criteria for the research sample, to ensure that this research project contained data that was representative of the Goldsmiths environment. Respondents were also

given the opportunity to win one of 25, £5 Word Bookshop vouchers, if they chose to do the survey.

Research Plan and Procedure

A table demonstrating the approach taken to plan and create the UX project can be seen in Appendix B. To retrieve survey questions that were asked to users, researchers of this project had organised interviews with representatives of the different Library teams. These teams included: E-resources, Reading List and Digital Assets, Special Collections & Archives, Reader Services, Subject Librarians, and the Library Acquisitions teams. The interviews were recorded with the consent of the teams, after which each interview was transcribed. Answers to the research questions were then extracted and summarised into survey questions for users. Questions asked to the teams highlighted common issues that have been reported in the past, as well as problems that have personally been experienced by the Library Teams.

Library Team Interview Questions:

- What are some common questions that are brought to you in relation to LS?
- Are there any difficulties/oddities of the LS system?
- How the LS links into different systems (e.g., full text online articles; the reading list system; the availability of information provided via Symphony)?
- Accessibility or inclusion related areas – Is there a way you think the LS could be more inclusive? What issues have you encountered that compromise accessibility and inclusion?

Research objectives, especially within this LS Project, create guidelines for data collection, and analysis. Specifically, it influences data interpretation by directing attention to how user behaviour alters or may be patterned based on what activity or functionality is being looked at. This is important for targeting areas of concern by laying out how activities will be carried out, and from this, what we are looking to learn from users. Accordingly, interviews with the

different library teams also explored what each team desired to understand from users – i.e., the research objectives – through the research project.

Research objectives:

- Follow up on, and address areas of further research suggested by Imperial LIS (2016).
- Evaluate the factors that influence students' and academics' decision to use Goldsmiths' LS as a primary source of information-seeking, by using qualitative methods to extract a) what resources students and staff prefer to use, and b) why they choose to use these tools over the Goldsmiths' LS.
- Integrate current awareness of resource availability in the LS, with feedback about employing automated, e-commerce marketing techniques to increase the scope of information-seeking.
- Review the extent that the LS provides the necessary tools for our students and staff to navigate its specific features (e.g., the Special Collections & Archive filter options, and the bookmark feature) on different technological devices including smartphones.
- Identify, deconstruct, and improve accessibility and inclusivity issues by asking users within different minority groups of all university departments to explain any encounters that could create a negative experience within the Library Space.

The LS survey consisted of a series of open and closed questions that were compiled into Microsoft Forms. The survey directed users to questions depending on the way they answered to ensure that users' individual experiences were captured. The Library UX research questionnaire can be seen in Appendix C.

Methodological Choices

The choice to use a qualitative method was maintained because its quantitative alternative (e.g., the number of loans) does not provide sufficient room to understand our user's personal impressions and subjective experience of the digital environment (Priestner & Borg, 2016b). However, contrary to the studies previously mentioned in this report, the use of a survey as the

method of data collection was decided to be a more efficient way of user recruitment and information retrieval, as opposed to the observational method used. Under the time restrictions of this project, a goal that the researchers had was to capture as much information from users possible, in the amount of time that the data collection period was prescribed (a week and two days). An observational method in our study would imply that only a small number of participants would be able to partake in the execution of the study because it compromises convenience. For example, users do not have the freedom to complete the observational task in their own time as they do in a survey collection method. Such conditions would restrict the applicability of their findings – especially that of the information-seeking behaviour demonstrated in their sample – to not only other users within their university, but other Search tools in Higher Education. The research conducted by the Imperial LIS team (Larose et al, 2016) had used this same technique under similar time restrictions – which had incited later criticisms that the research method used was neither inclusionary, nor generalizable to the wider university community (Larose & Barron, 2017). Ergo, this report had used an electronic survey with the aim to recruit a larger, more representative sample, that does not classify, and therefore exclude minority groups within the university.

The report also had to take account of budgetary restrictions, which reinforced the decision to use a survey. To elaborate, interviews with the library teams produced the desire to understand user perspective regarding ideas for adding new features to the LS. Observation methods like usability testing would require participants to test out this new feature and offer their insights. However this would require the budget to develop and design a digital prototype. In the absence of this budgetary fund, a survey is arguably the most convenient way to communicate such a change to the LS, while receiving feedback from students.

Data Collection Method

Larose had used the grounded theory to analyse their results. However, this approach generates a large amount of data, and so has been criticised as being time-consuming (Hussain et al, 2014) – which may become a hindrance in our time-sensitive conditions. Ergo, this report

uses a methodology derived from the grounded theory known as content analysis. This method similarly requires coding of qualitative data, however, does not seek for relationships between the categories of data coding in order to create a theory (Cho & Lee, 2014). Instead, this method of analysis allows us to simply understand the components that impact the Goldsmiths LS (Cho & Lee, 2014).

From this, we coded users' responses manually to acquire more accurate keywords from user responses primarily using deductive coding. To elaborate, deductive coding is comprised of organizing keywords within the responses into pre-determined categories of analysis: ease of use, accessibility, inclusion, SCA, bookmarking and reading lists, availability, and accessibility. These categories will fall under units of meaning – which indicates how these themes are treated by responders (i.e., whether responses were positive, negative, indicate uncertainty, or are unaware). Inductive coding was used as a secondary level of qualitative analysis, in which sub-coding was created as patterns emerge in user responses. A summary table of codes can be seen in Table D, demonstrating how users responded within each category or theme, and the number of users that responded.

Results

General Use of the Library Search

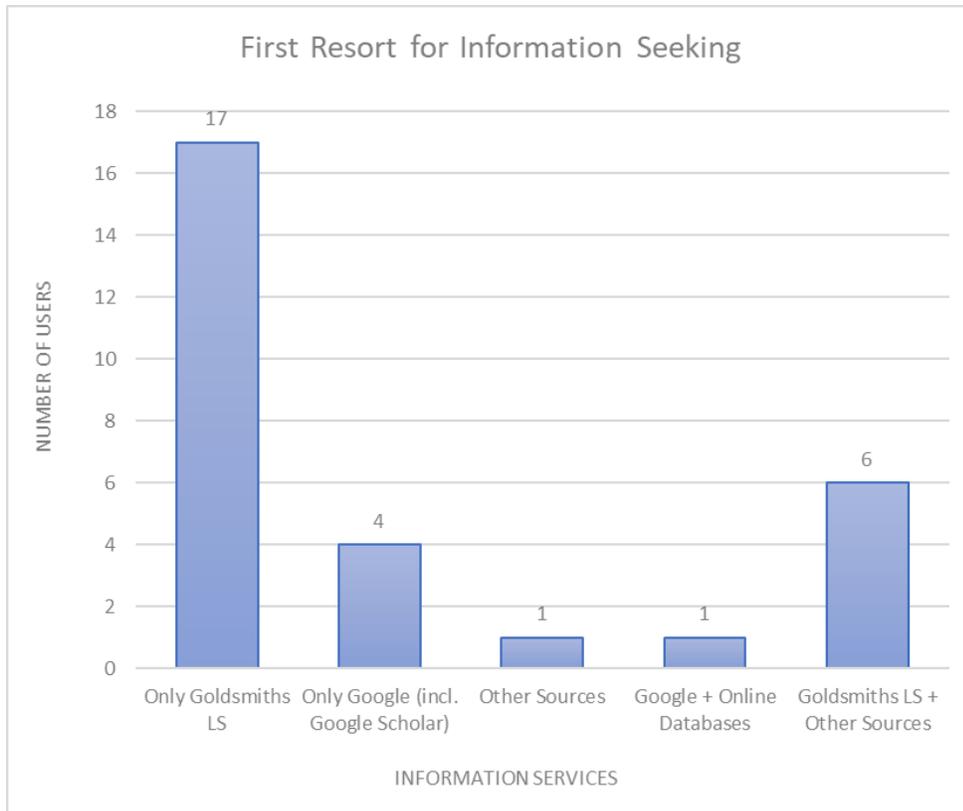
Most users had indicated that the Goldsmiths Library Search was their first resort in information retrieval. However, Goldsmiths' LS was also often used in combination with supplementary informational services. These services were Google (including Google Scholar), other libraries, online databases (e.g., Sage, Jstor), or sources outside of those mentioned (see Figure 1) – with more individuals using the LS with Google services. Among Staff, 77.78% had preferred to use LS alone, while a minority preferred using Google either with the LS (11.11%), or as a sole source (11.11%). This is in comparison to 50% students who preferred to use the LS alone, more than to other (Google 15%; Other Services 5%), or a combination of (30%), informational services.

When asked to name which services they used outside of our LS, the following responses were given:

- Sci-Hub
- LibGen
- ResearchGate
- The British Library
- Semantic Scholar
- Senate House Library
- Sage
- NIH
- PubMed

46 negative codes relating to the search were made by both students and staff, wherein most issues focused on browsability and technical issues of the LS. Browsability refers to the ease at which users can conduct an initial search for resources beyond broad searches for the title and author of resources. Within this particular category of code, 9 users had stated that there are too many search results – which was described by one user as “overwhelming”. Technical functionalities refer to the performance of existing features in the LS which may lead to usability issues. Despite 3 individuals stating that the LS was both “easy to navigate” and “very straightforward”, 9 users had expressed challenges with the LS regarding this theme. One user had noted they had managed “to access one very sought-after textbook online, during a very short but crucial window of essay deadlines and the whole website crashed and logged me out”. Further common themes and codes developed to indicate the reasons as to why the LS was a secondary site for information-seeking can be found in Table E.

Figure 1



Note: Figure 1 demonstrates the informational services that students and staff use as a first resort when seeking information. “Other Sources” refers to resources outside of the ones mentioned in the survey.

Front-end Interface: Bookmarking and Reading List Systems

In judging the user experience regarding the bookmarking function, we first aimed to understand users’ awareness of the bookmarking function. Within this, 68.97% of the 29 users recruited had stated that they were aware of this function, while 31.03% individuals did not have this same awareness of the function. Of those who were aware of this function, 19 had proceeded to report the frequency at which they used the tool. In this, the majority of users (36.84%) rarely used the bookmarking function, 26.31% were found to never use it, while the remaining users either sometimes (10.53%), often (10.53%) or always (15.79%) used the function. None of the nine staff recruited always used the function, however their use was distributed between often (22.22%), sometimes (11.11%), rarely (33.33%), or never (33.33%) interacting with the function. Alternatively, among 11 students who answered this question,

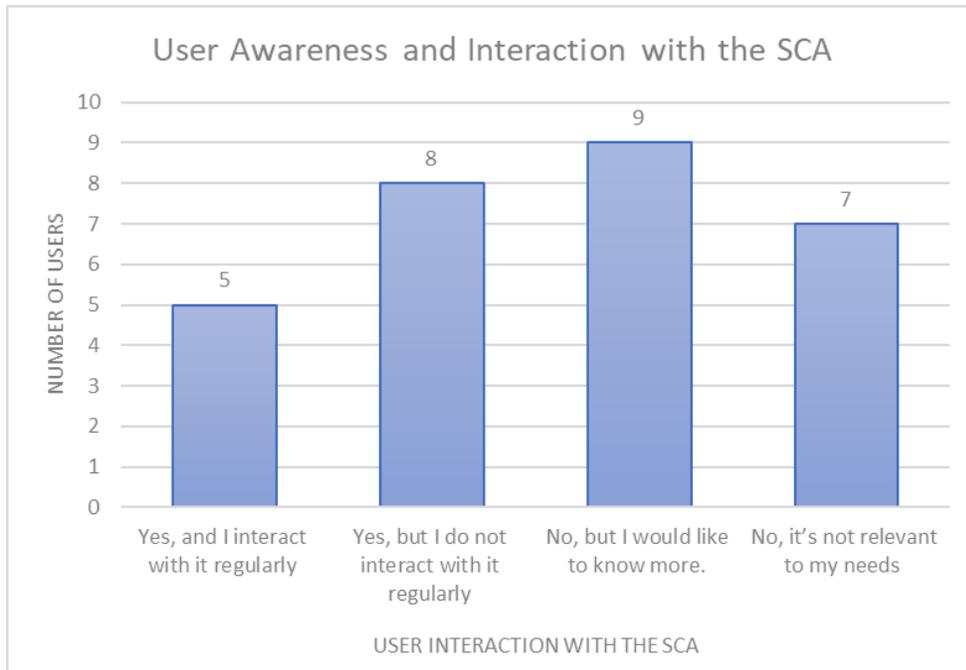
27% stated to always use this function, compared to those who sometimes (18.18%), rarely (36.36%), or never (18.18%) used it.

Regarding what users use the bookmarking tool for, four users' comments were coded as having positive units of meaning, in which they engage with the bookmarking function for its connection with the reading list system. Three of these users had specifically mentioned its capacity to create reading lists for personal and academic reading – a shared purpose of the function with three others who stated they would use the bookmarking system to pin reading for later use. In addition to this, one user had stated that they appreciate the “APA citation” tool, while another similarly struggled with “exporting citations” and “...the formatting of RIS files...”. A further two users had mentioned that the bookmarking function was not useful to them. One of these users had stated that they “...generally prefer self-hosting” – that is, using their own bookmarking system – because it “enables me to work across different sites, and also be sure I won't lose them.”. Further insights into the purpose that users interact with the bookmarking function can be seen in Table F1.

Front-end Interface: Special Collection and Archives

A sizable percentage of users (31.03%) did not have awareness of, and thus did not interact with, the SCA filter – however a desire to understand more about the filter was a prevalent experience with students and staff alike. 17% were aware, and interacted with the filter facets regularly, and 28% did not interact with the facets despite their awareness of the filter (See Figure 2). Users who were familiar with the filter were then asked if current facets of the SCA filter were sufficient to satisfy user information-seeking need, from which they had stated, but not what collections they were interested in. Many individuals had highlighted an interest in the Special Collections and Archives, including women's art, " goldsmiths textiles collection", “Artist books, art collections” (See Table F2). However, outside of the SCA, users also requested literature like folklore, mythological texts, and fiction. Despite this information, one negative code in the previous “General Use” section stated that they found it “challenging to search by theme and refine to a particular library collection”.

Figure 2



Note: Figure 2 demonstrates user awareness and interaction of the SCA (Special Collections and Archives).

Data Output: Availability of Resources

Another prominent recurring theme in user's general experience of the LS was difficulty with resource availability. Specifically, in explaining why the LS is not their initial method of information discovery, seven users consistently mentioned that there were "not enough e-books", or "some articles are not found, or... are not [on the LS]". This raised questions about how often issues with availability within the Search are encountered. It was found that many of the 29 responders recruited (41.38%) sometimes experience issues with finding electronic resources on the LS (see Figure 3). However, the majority of users (82.80%) ranged between being extremely to somewhat capable of finding similar, available resources to satisfy their discovery needs (see Figure 4).

In the circumstance of resource unavailability, the design suggestion, Value Stacking, was proposed in order to provide similar, alternative resources to users. Although people think it would be useful for “looking beyond the Reading List”, many of those who mentioned both positively and negatively coded comments regarding the feature, stated that the utility of this feature is dependent on the search scope. That is, the usefulness of the design suggestion, based on the specificity of the recommendations. Specifically, one of three individuals who mentioned both positive and negative comments stated that “it may be helpful”, however they “search for a specific” resource. Such concerns were shared with all of those who solely have negative evaluations regarding the subject, and some even suggested that having recommendations for different versions of the unavailable resources would be one of the only ways this feature could be beneficial to them. Thus, this provides both technical suggestions for the feature, concerns for the library’s resource availability, and accuracy of recommendations. Technical design suggestions, particularly provided by those who had mentioned both positive and negative responses, were made to explain how the feature could be useful to them. One user stated that basing “recommendation on title/subject terms as well as other factors such as inclusion on a reading list” would be helpful for making searches more personalized to the user and their search needs. The remaining codes can be viewed in Table G1.

Figure 3

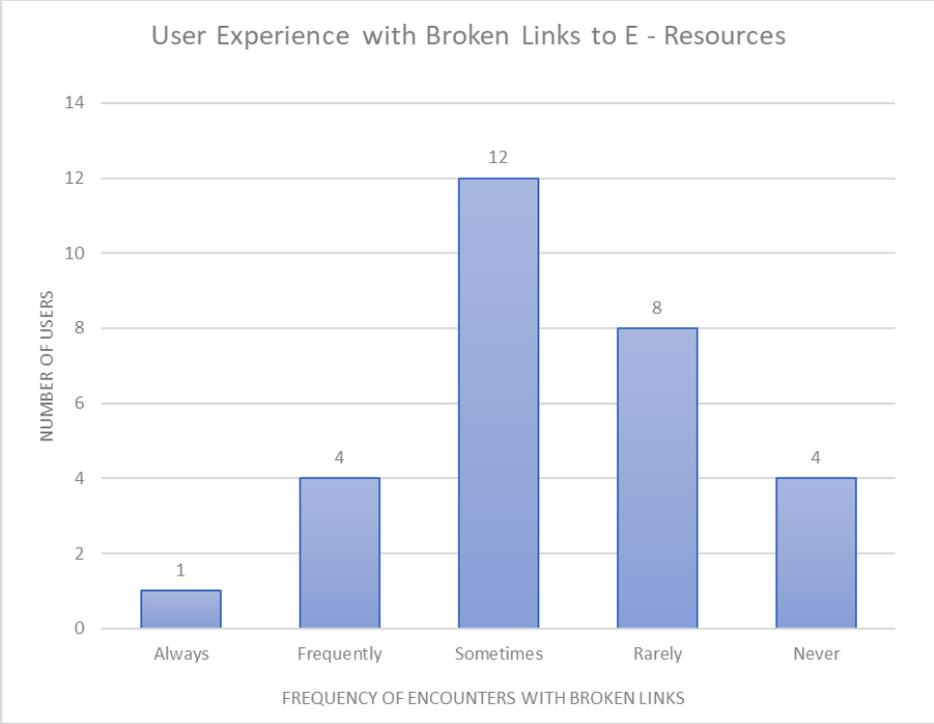
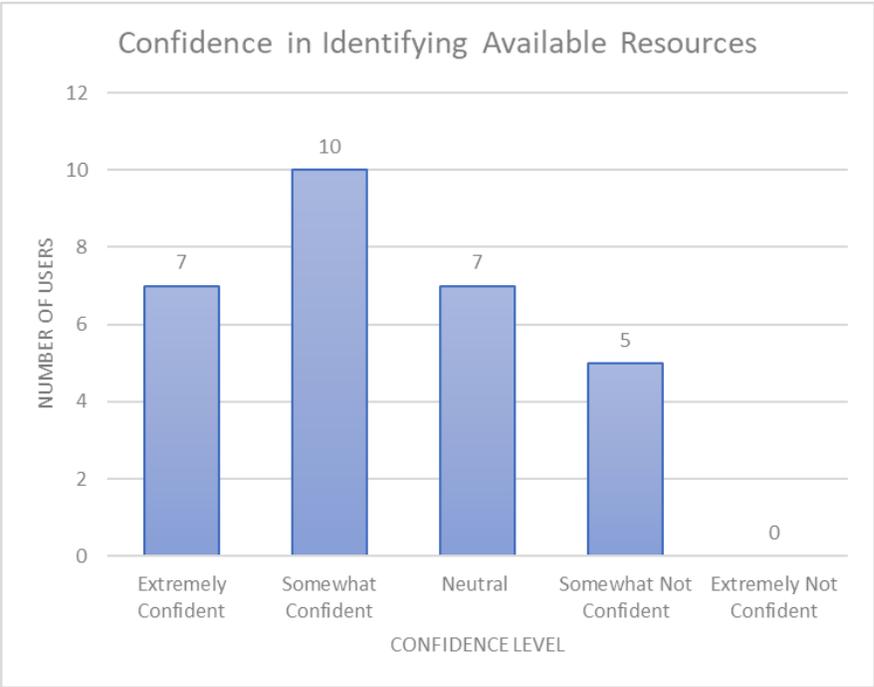


Figure 4



Data Output: Locating Physical Resources

When evaluating the extent that users struggle to locate physical entry types within the library space, based on the location information provided on the LS. Location information refers to a feature of the Search that acts to connect the physical and digital library space. Users use the location information of the LS to navigate and retrieve the desired library material. 62.07% of people answered that they were typically able to follow the guidance by the LS. This contrasted with users that stated that the location information was sometimes clear (24.14%), or not clear at all (13.79%).

Eight users recurrently had trouble locating library material based on the information provided by the LS to varying degrees. While one user stated that they only struggled to “find magazines”, another had found difficulty with “which floor, what location within the space [and] ... which on the shelf” to find their relevant library materials. Some of these issues were because “there are so many books”, and because some individuals “did not realise [the books] continued on either side of the corridor”. Three of the five individuals who did not have trouble locating resources within the library space, had still acknowledged usability issues with accessing the library materials. These three users, along with five of those who were negatively coded, provided technical design suggestions with a recurrent theme. These suggestions included implementing a “digital ... [and] physical map”, requests for a “...library tutorial”, and improving “signposting... especially for books on the bottom and top shelves”. The latter proposal expressed concerns about the accessibility to both signposting, and to the shelves themselves for those with a physical disability. One user also suggested “...it would be good for the webpage to show a diagram of the bookshelf right on the page which shows the 'code' of the book, so that users don't have to click more things to look for the map”, which would provide an alternative method of finding the item in the library. Find the rest of the user’s coded experience by locating physical items in Table G2.

Accessibility: Library Induction

While 27.59% of individuals regularly use the Library Induction, there is a split between a lack of knowledge regarding its presence and location in the LS (34.48%), and no use of the tool despite this knowledge (34.48%; see Figure 5). One user (3.45%) was aware of its presence but lacked knowledge about its location. The succeeding question asked users about changing the location of the Library Induction to encourage use from which four options were provided. These options were: as part of the menu buttons (very top of the page; 42.85%); as part of the Library Search search-bar (21.43%); it should stay in the same location (in the text boxes underneath the library search search-bar; 17.86%); or none of the above (17.86%). User responses can be seen in Figure 6. The five users who chose the latter option (none of the above), were then asked where they would prefer the Library Induction to be located – to which four of these five users responded.

Three of the four respondents had mentioned visiting the LS to view the Induction, and still encountering difficulties with locating the function, therefore demonstrating usability, and technical functionality concerns with its current placements. In fact, because one individual was unable to find the Induction, they were unable to provide suggestions as to where they would prefer the feature to be. From this, two users had provided technical design suggestions, including placing the Induction “near the search bar”, and “embedding ... links into the search tool.” Find further information about these results in Table H1.

Figure 5

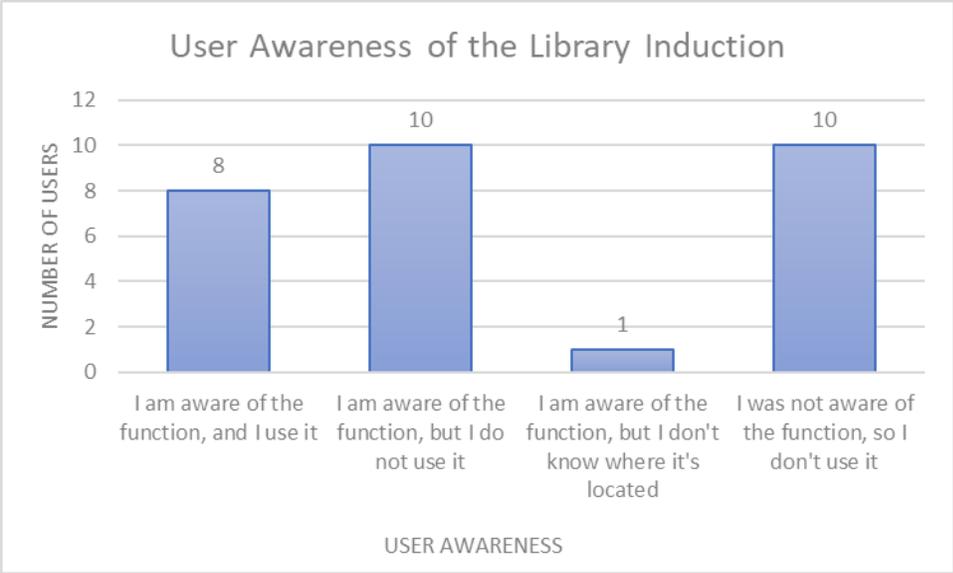
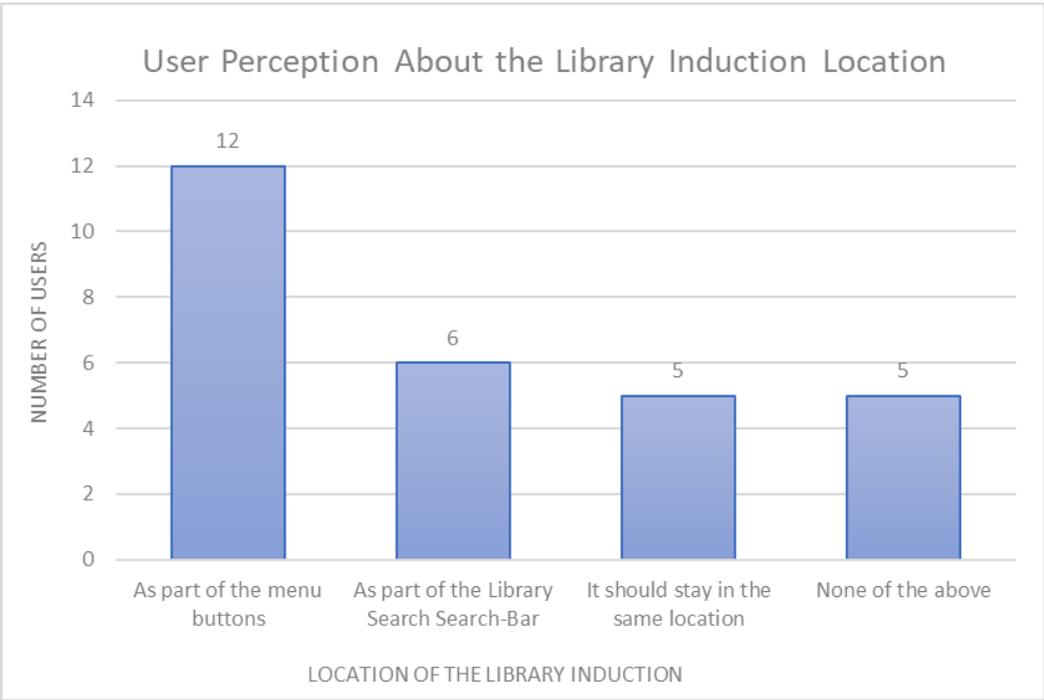


Figure 6



Accessibility: Mobile Accessibility

Of the 22 respondents to this question, 10 users mentioned that they do not access the LS using their mobile devices, particularly because the LS is "...not particularly useable on desktop, so I dread to imagine what it's like on mobile.". This is reinforced by a negatively coded comment from the General Use section of this report, who had expressed that "...searching on a phone... doesn't always give the best/optimal display". This negative sentiment towards the mobile version of the LS was shared with those who brought up difficulties accessing important features of the LS. For example, two individuals had brought up that "... the filters are hard to find..." on the mobile version, while another had mentioned that "the [advance] search options aren't there". There were additional issues with technical functionalities, whereby "the page doesn't resize to the phone screen." as stated by one user, leading another user to "have to zoom out to see the full lines of text, [but this] makes the font size too small". "These issues had led one user to present an idea for technical design, including making a simple mobile app to reduce accessibility issues. This solution would also help address the issue another user had raised about not using the online mobile version of the LS due to difficulty with accessing this version from their browser. However, a lot of focus would need to be placed on promoting the app to users, especially because it was mentioned that one student was unaware of the current online mobile version of the LS, but would find it useful to have access to such. The remaining user insights regarding mobile accessibility can be found in Table H2.

Accessibility: Inclusion in the Library Search

Users were then asked about how the LS could be altered to facilitate navigation of the LS for those with disabilities, whereby nine responses were received from the 29 users of the previous question. Although five of these individuals had not encountered such experiences, one user had stated that there are "too many actions to do makes it harder to navigate when your mind is already going miles per hour." This supports another user's suggestion to "adopt search UX design best practices" based on Russell-Rose and Tate's (2013) recommendations. These

recommendations highlighted the benefits of improving accessibility of the search experience for all users. See Table H3 for further information about user suggestions for inclusivity.

24 users had later responded to questions regarding encounters with insensitive or offensive labels in the LS. Of these, 79.17% of users had stated that they had not encountered offensive labels in the LS, in contrast to 8.33% who had experienced such within the Search. Three individuals who faced the latter experience had subsequently stated that there were instances of insensitive terminology or content including “past research [that] has been ableist, sexist and so on.” (See Table H4). Within these encounters one user had brought up that there is a divide in what labels and terminology are acceptable for use or “...has been reclaimed...” in library material. For example, “the word queer is used for many books, journal... on the Library Search, and some people get twitchy about that (I do sometimes), but at the same time I recognise that it is a word that has been reclaimed by the LGBTQIA community...”. Despite this, four other individuals encountered no issues with inclusivity regarding labels or terminology – with one user even concluding that “I have had really good experiences in the library”. Such sentiments were continued in two other users when enquiries regarding how sufficiently the LS’, including its resources, is inclusive of different minority groups. In fact, one user had mentioned that “I think Goldsmiths is very conscious of these issues”, while another had believed that “...accessibility tools are in place”. All users who had presented negative evaluations of the accessibility of the Search tool, as well as three other users, had also presented individually unique, and detailed technical design suggestions to improve it (see Table H5). These suggestions can be viewed below:

- “Include good cataloguing subject headings which are currently acceptable and SEE/SEE ALSO references with a bracketed synonym for ‘Out of date heading’ or similar”.
- “Something that would be amazing ... would be to have a little symbol with each paper that could quickly signify the gender of the researcher, LGBTIQ+, ethnicity if disabled etc. This way you could choose... a study on LGBTQ+ done by an LGBTQ+ member ...etc.”
- “A feature reflecting location of author would be helpful to allow for less Eurocentric results.”

- “... it could have more on Latin-America.”
- “...linking in reading lists with a specific inclusive focus so they appear somewhere near the top of the search results list would help build on the inclusivity. For example, if you're searching for UK History, and there are reading lists that are focused on Black UK history or LGBTQIA+ UK history they would appear near the top of the results for that search.”
- “Have more option to change the view, font and colours of the page to make it more accessible, also a grid view alternative.”

These ideas greatly contrast one user who questioned why the LS needed to be accessible to minority groups. This perception, however, remained infrequent in users, as 20 other individuals in the succeeding section of the survey had largely supported design suggestions to create a space within the Library Search specifically for reporting issues with accessibility or inclusivity. Four technical design suggestions, some of which are listed below, were also proposed by users to improve the usability and accessibility of the feature:

- “Perhaps a little dropbox for comments would be helpful?”
- “I like this idea - if it worked in a similar way to ‘report a broken link’, where the user didn't need to make much effort to flag up something, that would be good.”

One particular technical design suggestion emphasized placing “...clear and robust processes for reviewing and actioning all reports.” to ensure that the user reports of such issues are validated, and change is enforced. User perception regarding this possible feature of the LS can be seen in Table H6.

Discussion

Analysis

Regarding the general use of Goldsmiths’ LS, it could be inferred that users prefer to use other information services because LS often presents a vast number of items in the search results, and this can make the browsing experience difficult. Resource availability appears to have a

similar impact on user's choice to use the LS, which would suggest that Goldsmiths Library needs to provide access to more or different resources to help users access the resources they want. This is tied into the technical functionality of the Goldsmiths Search, as the system's capacity to communicate the availability of resources via the search results was consistently described to be inadequate throughout the survey. Therefore, a more strict and reliable system needs to be implemented to inform users about the availability of items, and subsequently increase the trust that users have in the ability of LS to present the most accurate information. Regular Quality Assurance testing – that is, executing tests on the website for defects and bugs (Mateen et al, 2017) – would be helpful to ensure that the webpage's technical functionalities do not interfere with the user's ability to obtain their discovery goals (e.g., preventing the site from crashing).

Awareness of both the SCA filter and the bookmarking function appears to be interlinked to the awareness and use of the Library Induction. To elaborate, it can be inferred that the Induction's ability to inform users about the presence, location, and navigation of front-end functions, means that interactions with the Induction, as well as both the SCA and bookmarking features are proportional. This is arguably demonstrated in similarities between the percentage of individuals who lack awareness about Library Induction (34.48%), the bookmark function (31.03%), and SCA facets (31.34%). Going forward, improving the use of the two front-end features means making the Library Induction more visible to users – many of whom largely recommended shifting its current location to the menu i.e., the top of the library homepage.

In order to facilitate the location of physical resources, a digital map, as well as signposting in the physical library, is widely recommended as an additional feature of the LS, in order to better inform users of where they can find a library item. This would be especially useful for first year students who are unfamiliar with how the library is structured, or individuals who do not use the library often. It is also recommended that regular shelf checks are administered, as users have also brought up the issue of misplaced or missing library materials. These checks will therefore improve user perception of resource availability, reduce browsing time, as well as enhance the browsability of the physical space. Additionally, something that the University College of Cork, Ireland (2022) had implemented – of which could also aid Goldsmiths – was

informing users of a “reshelving area” near their help desk, which contains books that have been returned. This clearly communicates to the users the stage of availability that their desired library item may be in, and thus contributes to improving the integration between the physical and digital library space, as well as user perception of this integration.

Availability is a prominent issue that users have recurrently discussed, which received a mixed reception. If the Value Stacking technique was to be implemented into the LS, it is important to use recommendations based on the content of resources rather than the title or author. This would ensure that the recommendations to users are not only accurate, but satisfy their discovery needs by supplying information based on aspects of the resource that users require for their search. Users’ recurrent desire for a specific library item was met with the suggestion of providing different material versions of the same item that they were initially looking for. This introduces the idea of using this recommendation system to redirect users to services, like browser extensions or open access sites, where this resource is available – something that Subject Librarians of Goldsmiths had proposed. This should allow students to not only “...go beyond their reading list” but also decrease the amount of time it takes to find resources (i.e., the browsing speed).

Regarding the front-end functionalities, those who were aware of the bookmarking function appreciated that it was a useful tool that could be used to help them to create their own reading lists, and there were few technical functionality difficulties that could hinder the use of this function. The bookmarking system offers a means for both students and staff to interact with each other by curating and sharing resources specific to their degree specialty. However, more focus could be placed on improving the formatting of RIS files (a standard citation file format), as one individual had faced difficulties downloading and exporting citations. Users highlighted in the discussion about refining searches using Library Collection, that they were generally interested in more textile and music facets, as well as different material types with a theme surrounding art. They also specifically emphasized their interest in Special Collections and Archives material, but one user provided a technical design suggestion to include “... a sentence to explain [each] collection ... when you hover the term”. This suggestion may

therefore solve current difficulties that another user has mentioned having when searching the collection based on its theme.

Despite the user suggestion to create an app to facilitate access to mobile use by preventing the inconvenience of browser use, it is still recommended that further development is needed to improve the functioning of the LS on mobile devices. Difficulty with locating the filter function and the live chat, as well as poor page resizing can be inferred to prevent users from accessing the LS on mobile devices. User references to the absence of the top menu means that if the Library Induction was relocated to this area, the feature would be unavailable on the mobile device, therefore the capacity for information-seeking is greatly reduced because important, and arguably defining, factors of the LS are missing or have functionality defects. However, it is arguable that the user suggestion to create an app with functioning facets – and good marketing promotion – is still greatly dependent on the performance of the desktop application. This is especially the case as one user had stated that they avoid mobile use due to the current poor usability of computer use; ergo, improving both computer and mobile accessibility to digital features and library resources could have a positive symbiotic and mutual effect.

By investigating emotional experiences through the lens of inclusion in the LS it was found that, while the majority of users do not have experiences with accessibility issues, steps are still needed to facilitate the use of the LS for some. Through user responses regarding outdated terminology in library catalogue records, it is inferred that discussions need to be had to address and improve the inclusivity of LS, and therefore, the library service. Within the Inclusion section above, users also suggested design improvements to enhance the emotional experiences that are tied to inclusivity. Based on the detail of each design suggestion within this section, it is clear that – despite some perceptions that inclusion is not the library's responsibility – it is important to minority groups who perceived a need for better representation to have their voices heard and implemented within both the Search and the library space. Design suggestions by the authors of this report regarding the creation of a space where occurrences that deviate from accessibility and inclusion can be reported were greatly supported. However, it was implied that such a space would only hold merit if reports were

regularly reviewed, and action was taken to address such, and further, if raising such reports was as simple as the process of reporting "...a broken link...".

Limitations: Time Restrictions

Many decisions made regarding our research methodology were influenced by the time restrictions of this project. One thing to note is that, although a survey was proposed as a more efficient approach of recruiting a large sample (Karine & Barron, 2017), an increased time frame to complete the study would generate an opportunity to directly view how users operate the Search tool via usability testing. Usability testing would provide the capacity to observe how representative users interact with the digital space by providing them with test scenarios – defined as the instructions given to users to carry out certain tasks in the Search (Moran, 2019). The naturalistic setting suggested above, in which LS users are observed working through realistic test scenarios, would assumably be important for improving the accessibility of the system at a technical level. But on another level, this test scenario and observational setting would also be important for expanding the LS' current state of inclusivity, as minority groups could specifically be recruited. To elaborate, while a larger sample was obtained with our survey method – and thus a greater sense of generalizability – responses were still arguably not reflective of those within institutionally oppressed groups. Responses that questioned the ethos of inclusion for minorities pose as evidence of this, because it shows that the Inclusion section of our report may not have been completed by those in marginalized groups – ergo questioning the reliability of some responses. This may have been exasperated by the time window in which the survey was conducted – being both outside of the academic year, and at a less busy time for the library (e.g., December or April). In these conditions, it becomes a lot more challenging to recruit users in regular present interaction with the front-end features of LS – namely this timeframe would be whilst there are lots of deadlines afoot, and thus more frequent use of the LS. Conducting research in a time span of this study where many students have not completed their studies for the year would not only engage a larger sample, but would also provide the opportunity for a more targeted recruitment of users. Consequently, increasing both the length

of time that this project was to be conducted, and shifting the window in which the survey was conducted could improve the validity of user responses.

Increasing the duration of time given to conduct the study may also enable the ability to capture intragroup variability – that is, the similarities and differences among underrepresented communities. A good example of this type of variability within diverse communities is the polarisation in response towards the use of historically derogatory terminology in the titles, like the term “queer” – as mentioned by one user. They had specified that whilst some people had considered the term acceptable to use, others were conflicted about its use, even though it has arguably been reclaimed by the LGBTQIA+ community. Consequently, lengthening the time frame to permit a greater diversity of respondents can help instigate necessary reflection, critical analysis, and change – which can be started by these kinds of conversations.

Moreover, longitudinal research would also allow for a greater comprehensive exploration of the LS’ efficiency over time. Specifically, an extended time frame would provide information about the ease of the Search’s use across the different years of study (first year, second year etc.). This would inform us of whether experience with, and perceptions of, the LS improves relative to the amount of time users have spent within the university. Thus, such an approach would further inform us about the emphasis that needs to be placed on providing more support and tutorials to those within the first years of university. An extended period to conduct this project would also provide us with the opportunity to explore a variety of other user backgrounds. For example, exploring the difference in use of, and satisfaction with, the Search tool between students and staff, and further, between users in the different departments of the university. This could help us better integrate the library with the different academic departments and recognize trends in the issues raised by the different user backgrounds. Consequently, exploring a variety of backgrounds would ensure greater coverage of LS use, in responses and in participant variation, and further facilitate the identification of fundamental concerns with the LS that need to be changed.

Limitations: Budget Restrictions

Aspects of the survey required users to conceptualize design suggestions from the authors of possible LS features. However, there were instances in which users were unable to answer, or misunderstood, conceptualization questions due to confusion surrounding its functionality or an inability to visualize the idea. A larger budget would permit the development of a prototype which poses the conceptualization to the users in a clearer manner, and this would also allow us to conduct techniques such as usability testing using the prototype. Specifically, observing how users can adapt to new revisions of the site could also inform about how much assistance they may require if these features were implemented, as well as how they perceive such changes as useful to them. And while using an expanded budget on implementing prototypes into the user experience research would therefore require more time for designing the research project (Del Fiol et al., 2016), it would promote detailed responses from users, by giving users the opportunity to raise concerns about the search as they approach it.

Limitations: Inter-rater Reliability

Replicability is important for ensuring reliability, that is, establishing confidence in results due to the consistency at which it occurs (Nosek & Errington, 2020). Coding is a very subjective method of analysis in that it relies on the assessor's interpretation. Thus, the ability to replicate our responses both within Goldsmiths, and in other universities may become difficult because of specific issues with inter-rater reliability. This is the extent that two or more assessors can agree on both defining the code and organizing responses into each code. To elaborate, while there was some agreement on, yet due to time-restraints, codes were not agreed upon by all authors, nor were responses revised to ensure that codes were accurately reflected by responses. Hence, a way to target this restriction to obtaining sufficient reliability would be to ensure multiple revisions of the code and opportunities of discussion if difficulties arise with the arrangement of responses into code (Sattler et al., 2015). Despite this limitation, this research project was intended to be an outline of concerns with the LS that users felt needed to be

identified and addressed, and so this project can still be used as a foundation for future studies – which could refine our codes, and subsequently replicate our findings.

Future Research

Resource availability, or rather the lack thereof, was a recurring theme brought up throughout the survey when exploring the sections of Goldsmiths' LS, thus depicting the extent that this topic is interlinked with many facets of user experience. This calls for further research to delve into the specifics of resource availability within the library, perhaps by proceeding with a quantitative research design. This idea is developed from Mann's (2015) availability model and research project, which had provided a basis for deconstructing and solving the availability issue in the context of e-resources within libraries. In this, they had mentioned employing a troubleshooting tool known as Full-Text Availability Model (FTA) to quantify the number of electronic resources that are unavailable within the library. The FTA model classifies all materials both within the physical and online space according to the level at which errors occur during the full-text request process. In the electronic space, classification of system errors in this process included issues with obtaining the desired material from the library's link resolver (known as SFX in Goldsmiths), and target errors – which allude to issues with obtaining full-text materials from their vendor(s). With a total of six categories of system errors that could lead to resource unavailability, the capacity to quantify resource availability would subsequently routinely upkeep and configure link resolver systems, and improve vendor-library collaboration, among other benefits (Mann, 2015). Mann's (2015) study had produced a statistically significant increase in resource availability (86.5%) from their university's previous availability rate of 62.5%. Therefore, while conducting such a study would require a long timeframe to troubleshoot all electronic items in resource availability and address all levels of system errors, this method is likely to resolve and prevent recurrent encounters with availability issues.

As mentioned earlier, the method of analysis used in this project, coding, is too reliant on the researchers' interpretation of users' answers. Consequently, it was suggested that the empiricism of usability testing is something that can be used and built upon in future studies. In

fact, such a decision is emphasised by Foley (2022) who had mentioned that successful UX research is determined by observation because this method can offer a greater sense of internal validity. That is, how much we can trust responses based on the extent that they reflect the truth within our population (Patino & Ferreira, 2018). This does not render the survey research method, and subsequent use of coding, invalid or inappropriate within this project (Hoekman Jr, 2009), but rather suggests that more research could be done to confirm, refute or elaborate on the responses of this project. Hoekman Jr (2009) had particularly specified that within UX research, user responses should be reinforced or exposed by both quantitative and observational methods to reveal their true perspectives. Having the capacity to carry through usability testing therefore gives room for a higher extent of accuracy, especially as obtaining the consent to record users during session ensures that user information-behaviours can be reviewed. Consequently, future research could use a more naturalistic approach to improve the LS with a greater extent of accuracy.

Future research both within Goldsmiths, and in universities outside of it should take on methods of decolonising research and diversifying their physical and electronic resources. The Liberate Our Library scheme has started discussing the diversification and decolonisation of the Goldsmiths Library, and so this group acts as a foundation for the steps that future universities could implement. The Goldsmiths Liberate team consists of Director of Library Services, Subject Team Leader, Head of Discovery Services, Digital Assets & Systems, Acquisitions, Special Collections & Archives, Reader Services and the student union (SU). This team creates discourse around how to create a space for oppressed groups of society, and further identifies how to create space for more representative voices within the library, teaching and learning. This team appears to have a positive impact on the current state of accessibility and inclusivity within Goldsmiths, as many users had no encounters with problematic or exclusionary language or content in the LS – with one user going so far as to say that “Goldsmiths is very conscious of these issues”. Researchers of other universities could therefore begin implementing a similar scheme to understand how their perception of inclusivity has improved after the implementation of such a group.

Something both Goldsmiths and other universities could do to enhance this strategy of inclusion is to extend Pizarro's (2021, p. 13) pilot study within the context of their environment. Pizarro's (2021, p. 13) study aimed to count the number of materials within the library that contained insensitive terminology that puts those within minority groups at a disadvantage through harmful rhetoric. She did this by inspecting her library's descriptions of archives that were made when these materials were first catalogued via keyword searches, from which she had found that 11.36% of her library's material contained these insensitive terminologies. Her aim was not to change this catalogue, but rather to provide warnings and context where necessary – for example, include a quotation mark to highlight direct speech from the author as opposed to factual or acceptable language. Conducting this research would mean that the Liberate Our Library strategy would have research to further direct their discourse and implement change. Implementing the technical design suggestions provided by users when discussing inclusivity, for example incorporating and testing Russell-Rose and Tate's (2013) recommendations for designing the search experience, could improve accessibility for everyone.

Decolonising the LS, however, goes beyond its library materials, as the search results page, as well as the filter facets, could also be assessed and rearranged to decentralise the white, cisgender male author. Specifically, three particular respondents who had made comments in relation to the background of the authors that appear frequently on the results page. One user provided a technical design suggestion "... to have a little symbol with each paper that could quickly signify the gender of the researcher, LGBTIQ+, ethnicity if disabled etc. This way you could choose... a study on LGBTQ+ done by an LGBTQ+ member ...etc.". The second had mentioned that they would like to have "...a feature reflecting [the] location of author would be helpful to allow for less Eurocentric results". The topics highlighted by these respondents indicate that perhaps most of the results they get are white, cisgender male authors. This is more directly indicated by the third respondent who had stated: "... linking in reading lists with a specific inclusive focus so they appear somewhere near the top of the search results list would help build on the inclusivity...". They had proceeded to give an example of "...if you're searching for UK History, and there are reading lists that are focused on Black UK history or

LGBTQIA+ UK history they would appear near the top of the results for that search.”. Therefore, this alludes to a need to dissect how the logistics of the LS privileges authors of a particular background, i.e., straight white cisgender men. Reforms could be premised on these users’ suggestions to begin targeting this issue by analysing the current condition of the LS – something that, had this project had more financial and time freedom, could also have been explored. Future studies at Goldsmiths, and at other universities are recommended to undertake these user design suggestions to present authors from marginalised communities at the top of the results page by anatomising, reconstructing, and subsequently, diversifying the search results itself.

Future research within Goldsmiths is further encouraged to assess how usability can be improved if user technical design suggestions, like the request for a digital map to facilitate user navigation of both the LS and physical space, could create a stronger association between the two spaces. Additionally, testing suggestions for implementing a dropbox feedback section would open a means of constant dialogue between students and librarians about LS that operates beyond the survey. Further technical research could be focused on developing a mobile app prototype to assess potential improvements to mobile accessibility, increased interaction with LS, and why users prefer desktop over mobile.

Conclusion

Overall, this project viewed heterogeneity in the use of the Goldsmiths Library, with a particular focus on our digital discovery platform known as the Library Search. In accordance with Larose and colleagues’ (2016) request for future research to explore user perception of the library discovery platform as a first resort, we found that consistent encounters with resource unavailability within our Search tool had been a large reason users preferred to use other information providers (e.g., Google). This could be improved by conducting a qualitative project using FTA Model to quantify and identify the cause of unavailability in both physical and electronic materials. However, referring to mobile use, individuals do not use the mobile version, not only because the current difficulties with the desktop are expected to be reflected

in the mobile version, but also because there are a multitude of issues with the current facilities – i.e., technical functionality issues – within the mobile version. Improving the general usability of the Search tool could also be enhanced by working with the other resources, rather than contending with them. To elaborate, by recommending browser extensions that may increase the scope of information-seeking via the Value Stacking method, users may refer to Goldsmiths' LS to obtain more information-seeking services to improve the perception of availability. Consequently, by integrating user design suggestions and mainstream marketing techniques, Goldsmiths could be an avenue for both information discovery and information-referral. Moreover, while Goldsmiths does have a strong basis for expanding inclusivity in the library with the Liberate Our Library project – something that other universities are encouraged to implement – a way to expand and fuel the current discussion surrounding diversification of our library material is by applying Pizarro's (2021, p.13) method of applying context to terminology within the catalogue records on the LS system. This would be a way to strike a balance between recognizing and tackling problematic language while maintaining the nuance ascribed in the original text. Users were predominantly aware of the bookmarking tool, and mentioned its significance in connecting users to their academic departments, specifically through their required reading lists. Similarly, SCA had comparable extents of user awareness, with users expressing interest in more collections than currently present. However, with the considerable number of individuals that are unaware of both facilities, as well as the similarities between this number and those unaware of the Library Induction, perhaps improving promotion of the Library Induction could better inform users about the bookmarking system and SCA filter.

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Appendix A

Entry Points into the Library Search

Below are the three entry point links to accessing the virtual library catalogue of Goldsmiths, University of London.

Figure A1

<https://www.gold.ac.uk/library/using/finding-resources/library-search/>

Figure A2

<https://www.gold.ac.uk/library/>

Figure A3

https://librarysearch.gold.ac.uk/primo-explore/search?vid=44GOL_VU1&lang=en_US

Appendix B

UX Project Plan

Below the shows the UX Project Plan used to carry out this research project in Goldsmiths, University of London.

Week 1	<ul style="list-style-type: none">• Project officially starts.• Schedule weekly project team meetings.• Define project roles/responsibilities at first meeting.• Share project plan/schedule with project team.• Review LS. Highlight external links into LS; Including different routes/connections into it (e.g., Symphony, Enterprise, SFX, Reading lists, Libguides/Library Induction, mobile version).• Share reading lists with project team.• Organise interviews with staff regarding research questions and objectives• Initial look at the format and content of questionnaire and how many people can be targeted.• Background reading for research project.• Consider where survey will be promoted/shared based on target audience and format (e.g. Student union, newsletters, social media, blog posts etc.).• Decide on incentives for participating in research.
Week 2	<ul style="list-style-type: none">• Interviews with representatives of Library Teams - E-resources, Reading List and Digital Assets, Special Collections & Archives, Reader Services, Subject Librarians, and the Library Acquisitions teams.• Decide where/ when to advertise and contact any other depts (e.g., student newsletters) for publication dates.• Drafting consent form/information form.• Drafting survey form / response / thank you for participating email.

Week 3	<ul style="list-style-type: none"> • Open and run survey from beginning of the week. • Promote to target audience. • Ask library staff to share widely in Goldsmiths. • Finalise survey form/response/thank you email. • Collate responses as responses come in.
Week 4	<ul style="list-style-type: none"> • Continue to run survey till Tuesday. • Decide on report format/content. • Close survey on Tuesday 5th July.
Week 5	<ul style="list-style-type: none"> • Collate responses. • Distribute vouchers to participants. • Draft report.
Week 6	<ul style="list-style-type: none"> • Finalise report.
Week 7	<ul style="list-style-type: none"> • Report extension. • Proofread.
Week 8	<ul style="list-style-type: none"> • Report extension. • Share report with library staff. • Publish report. • Add report to Goldsmiths Research Online (GRO). • Project sign-off

Appendix C

[PDF of the Library User Experience Questionnaire](#)

The survey below demonstrates the questions that the Library Teams of Goldsmiths, University of London wanted to understand from users of the Library Search. Users were directed to questions depending on the way they answered particular questions.

Library Search Questionnaire

Hello, and welcome to the Library Search Questionnaire. The following section will explain the study's purpose, after which you can choose whether to continue with the study.

What is the purpose of the study?

The questionnaire aims to capture your experience and feedback about the Goldsmiths' Library Search discovery platform.

What is the Library Search?

The Library Search is a tool that helps you seek resources like hardcopy and electronic articles, books, and journals within and outside of Goldsmiths University Library. Please be as honest as possible about your experience with this tool so that we can make as many improvements as possible.

What will happen to me if I take part?

You will be asked to complete short questions about your opinions about navigating the Library Search webpage. You will then do the same about the data that is outputted when you search for particular results. Finally, you will be asked about the inclusivity and accessibility of the Library Search tool. Questions will generally be about any issues you have faced, and what you would like to change (or keep the same) about the Library Search. The survey should last approximately 20 minutes.

General Data Protection Regulations and Confidentiality

To comply with GDPR, any personal data collected within this survey, including your name and email address, will not be shared with a third party, neither will it be used to contact you for purposes outside of this survey. Your information will also be disposed of upon completion of the survey.

Goldsmiths' full GDPR policy for research can be found under the Useful Resources link on this page <https://www.gold.ac.uk/graduate-school/essential-information/>

Do I have to take part?

Participation is voluntary, however, while questions are not anticipated to be discomforting or distressing, you are still free to withdraw at any time, without giving a reason.

What will happen to the results of the research study?

The results of the research will be written up as a report and uploaded to Goldsmiths' Research Online (GRO - <https://research.gold.ac.uk/>), and will be used to view any improvements that can be made to the Library Search. The data will not be attached to you or identifiable in any way.

What are the possible benefits of taking part?

Participating in the survey will help us to improve the Library Search. Furthermore, if you choose to provide your email at the end of the study, you will be entered into a prize draw for one of 25, £5 Word bookshop vouchers.

Who to contact if you have questions?

If you would like to withdraw your data, or have any questions please contact either the project manager Ash Green (a.green@gold.ac.uk); or you can contact any of the project team: Sarah Rex-Lawson (s.rexlawson@gold.ac.uk), Adil Rehman (adil.i.rehman@gold.ac.uk), Davina Dhallu (d.dhallu@gold.ac.uk).

...

1. Are you a student or a member of staff?

Student

Staff

2. What is the first search tool you use to access physical and electronic resources (e.g. books, journals, articles)?

Goldsmiths Library Search

Google including Google Scholar

Other Libraries

Online databases (e.g. Sage, Jstor)

Other

3. If you have stated that you use other sources as a first resort to information seeking, can you name examples of these sources, and explain why you use these tools instead of Goldsmiths' Library Search?

Enter your answer

4. Can you describe what issues you have faced when using Goldsmiths' Library Search that may affect your decision to use the tool as a first resort? (e.g. issues with bookmarking, difficulties finding physical and/or electronic resources etc...)

Enter your answer

In this second section, we'll focus on how you find information, the availability of resources, and how this information appears on the Library Search.

5. How often do you typically encounter broken links to e-resources in Library Search?

- Always
- Frequently
- Sometimes
- Rarely
- Never

6. If the physical or electronic resource that you want is unavailable, how confident do you feel about identifying other available versions of the resource (e.g. different editions, online electronic copies), or similar resources in the Library Search?

- Extremely confident
- Somewhat confident
- Neutral
- Somewhat not confident
- Extremely not confident

Value Stacking Recommendations

Value Stacking is a technique that many e-commerce websites do. It offers products that are similar or related to your previous search.

7. If the journal, article or book you want is unavailable, how you would feel if Library Search was to offer recommendations of similar, available resources, and why?

Enter your answer

Now, we want to know about your experience with locating physical resources in the library.

8. When looking for periodicals, journals, reviews, serials or magazines, does the Location information provided on Library Search give clear guidance about where you can find a physical copy of the item in the library?

- Yes
- Sometimes
- No

9. Can you describe what issues you have locating physical resources using the guidance provided by the Library Search? Do you have any suggestions for improvements? (e.g. a digital map of the library space, a library tutorial etc...)

Enter your answer

This section will ask you about particular features of the Library Search.

The bookmark function

The bookmark tool in the Library Search allows you to record any resources that you may be interested in, all of which later appear on your personal reading list.

10. Are you aware that this bookmark feature is available when you search for a resource in the Library Search?

Yes

No

11. How frequently would you say you use the bookmark tool?

Always

Often

Sometimes

Rarely

Never

12. Can you please describe what you use the bookmark tool for? (e.g. to create reading lists, exporting it etc...)

Enter your answer

Special Collections & Archives

Special Collections & Archives is a part of the library space, and many of the collections can be filtered through in the Library Search. The collections include the Women's Art Library, and various other special collections that inform about music, theatre and performing arts. Many of these collections can be narrowed down using the filter.

13. Are you aware of, and do you interact with, the special collections filter option?

- Yes, and I interact with the filter regularly
- Yes, but I do not interact with it regularly
- No, but I would like to know more.
- No, it's not relevant to my needs

14. What particular collections do you use and what collections and archives would like to see more of in the filter section? (e.g. the culture and society collection, the Theatre and Ireland collections, the Women of Colour Index etc...)

The full collections guide can be viewed here: <https://gold.ac.uk/library/special-collections/guide/>

Enter your answer

This final section will ask about the accessibility of the Library Search

The Library Induction

The Library Induction feature provides a tutorial of how to use the bookmarking function to create reading lists, the filters, how to loan resources, as well as other features and functions of the Library Search.

Online Library Induction 2021-22: <https://gold.libwizard.com/f/Getting-started-with-the-library>

15. Did you know that the Library Search offered this function, and do you use it?

- I am aware of the function, and I use it
- I am aware of the function, but I do not use it
- I am aware of the function, but I don't know where it's located
- I was not aware of the function, so I don't use it

16. Can you explain why you don't use this function?

Enter your answer

17. What do you think about changing the current location of the Library Induction on the Library Search?

Enter your answer

18. Where on the Library Homepage would you prefer the Library Induction to be located?

- As part of the menu buttons (very top of the page)
- As part of the Library Search search-bar
- It should stay in the same location (in the text boxes underneath the Library search search-bar)
- None of the above

19. Where would you suggest the Library Induction should move to?

Enter your answer

Mobile accessibility

20. Do you face any difficulties with finding information when using the Library Search on mobile devices? And what are these issues? (e.g. think about features such as using the advanced search filter, signing into your account, or changing the font size)

Enter your answer

Accessibility and Inclusion

This subsection will ask you about any feature or aspect of the Library Search that you believe could be changed to be a safer space for its users of different disabilities, those of different racial or ethnic background, and those within the LGBTQ+ community.

Please note that you are not obligated to answer the following questions, especially if it causes you any discomfort. If you do not fall within a minority, or prefer not to provide information on this subject, please skip these questions.

21. Have you encountered aspects of the Library Search that could be altered to facilitate navigation of the webpage, or finding physical or online resources for those with disabilities? What are these aspects, and how can they be changed to be more accessible?

Please provide specific example if you can.

Enter your answer

22. Have you encountered labels or titles that are insensitive or offensive to marginalised communities within the Library Search?

- Yes
- No
- Not sure

23. Can you provide thoughts about your experience?

Enter your answer

24. Do you think that the Library Search, as well its resources sufficiently reflect inclusivity? And how do you think the Library Search could improve inclusivity?

Enter your answer

25. Please provide your thoughts on what you think about creating a space or button within the Library Search specifically for reporting issues with accessibility, or inclusivity.

Enter your answer

The End!

Thank you for your time!

We are making this survey to identify and improve Goldsmiths' discovery tool (Library Search). We are aware that the survey only scrapes the surface of many important conversations and improvements that need to be made to not only the Library Search, but also the Library itself. This survey serves to act as a foundation to more in-depth research that aim to target these issues too, and therefore create a safer and more accessible space for both students and staff.

If you would like to be entered into the prize draw to be one of 25 to win £5 Word bookshop tokens, please enter your email below. We would like to reiterate that your data, including the email you provide us, will not be used to contact you in any way, neither will it be given to any third parties.

If you felt distressed at any point of the survey, would like to withdraw your data, or would like to contact us for any questions or feedback please email the project team Sarah Rex-Lawson (s.rexlawson@gold.ac.uk), Adil Rehman (adil.i.rehman@gold.ac.uk), Davina Dhallu (d.dhallu@gold.ac.uk). If you would prefer to contact the project manager, please email Ash Green (a.green@gold.ac.uk).

26. Put your Email here!

Enter your answer

Appendix D

Summary Table of Codes

The table demonstrates the units and categories of analysis used to code user responses to all survey questions. The unit of meaning refers to how users responded within each category or theme – which were: positive, negative, unsure, and unaware. Categories of code fall under these units, which refer to the patterned themes that occur within each response. The number of users who responded in the stated units are also listed in the table below.

Table D

Total units and codes depicting user experience with Goldsmiths' Library Search

	Positive	Negative	Unsure	Not applicable	Unaware
Usability	16	22			
Utility/Usefulness	5	2			
Convenience		3			
Collection		2			
Search Scope	5	7			
Browsing Speed	1	3			
Accuracy & Relevance of Results	1	7			
Inclusion for Minority Groups	2	9	1	3	

No encounters (with insensitive terminology)	7				
Terminology/content	1	4			
Mobile Accessibility		1			1
Mobile Use				10	
Accessibility	5	11			
Browsability		10			
Technical Functionalities	1	19			
Technical Design Suggestions	9	21			
Availability of Resources		13			
Getting Feedback	3				
SCA		1			
Book marking & Reading lists	7	4			
Exporting	1				
Later Use	3				
Self-Hosting		1			

No explanation	8	2	5		
Location Information	5	8			
Signposting		3			
Misplaced Books		2			
Library Induction Location			1		

Appendix E

Table of Codes: General Use

Below is a table demonstrating the user's general use of the Library Search, as well as their perceptions regarding such.

Table E

Units and codes for questions users' General use of the Goldsmiths Library Search

	Positive	Negative
Usability	3	4
Convenience		3
Browsing Speed		3
Accuracy & Relevance of Results		5
Mobile Accessibility		1
Accessibility		3
Browsability		9
Technical Functionalities		9
Availability of Resources		7
SCA		1
Book marking & Reading lists	1	1

Appendix F

Table of Codes: Front-end Interface

Table of codes regarding the features of the front-end interface (e.g., the bookmarking function, the Special Collection and Archive Filter and collection etc...)

Table F1

Codes and units highlighting how users interact with the bookmarking system

	Positive	Negative
Usability	3	
Utility/Usefulness		1
Accessibility	2	
Exporting	1	
Technical Functionalities	1	
Availability of Resources		1
Later Use	3	
Self-Hosting		1
Book marking & Reading lists	4	
No explanation		1

Table F2

Codes for topic collections that users are interested in

Early Manuscripts /Transcriptions	Literature & Fiction	Cultural Policy	International Cultural relations	Special collections & archives	Women's Art	Art	Format
1	2	1	1	5	3	2	1

Textiles	Technical Design Suggestions	Translation Studies	Unsure
1	2	1	2

Appendix G

Table of Codes: Data Output

Table of codes regarding the features that are related to the LS' Data Output (e.g., the availability, location of physical items etc...).

Table G1

User perspective regarding Value Stacking as a design addition to the Goldsmiths Library Search

	Positive	Negative
Usability	3	
Utility/Usefulness	5	1
Search Scope	5	7
Browsing Speed	1	
Accuracy & Relevance of Results	1	1
Accessibility	1	
Technical Design Suggestions	5	3
Availability of Resources		1
Book marking & Reading lists	2	2
No explanation	5	1

Table G2

Effectiveness of the Location information on the LS in guiding users through the physical library space

	Positive	Negative
Usability		8
Location Information	5	8
Collections		2
Browsability		1
Signposting		3
Accuracy		1
Accessibility		5
Technical Design Suggestions		8
Inclusivity		1
Availability of Resources		4
Misplaced Books		2
No explanation	2	

Appendix H

Table of Codes: Accessibility

Table H1

Where users would prefer the Library Induction tool to be on the LS

	Positive	Negative	Unsure
Usability		3	
Technical Design Suggestions		2	
Technical Functionalities		3	
Library Induction Location			1

Table H2

Issues users face accessing the Library Search on a mobile device

	Positive	Negative	Not applicable	Unaware
Usability	1	6		
Technical Functionalities		6		
Technical Design Suggestions		1		

Mobile Use			10	
Mobile Accessibility		4		1
No Explanation	4			

Table H3

User perspective regarding how the LS could be altered to facilitate navigation for those with disabilities

	Positive	Negative	Not Applicable	Unsure
Usability		1		
Accessibility		1		
Technical Functionalities		1		
Technical Design Suggestions		2		
Inclusion		1	2	1
No Encounters	4			

Table H4

User experience with insensitive terminology within the Library Search

	Positive	Negative	Not Applicable
Terminology/content	1	3	

Inclusion		1	1
No Encounters	3		

Table H5

User perception regarding overall inclusivity and accessibility of the Library Search and its resources

	Positive	Negative	Unsure
Terminology/content		1	
Inclusion	2	6	
Accessibility	1	3	
Technical Design		6	
Suggestions			
Reading Lists		1	
No explanation	1		3

Table H6

User perception regarding the creation of a space for reporting issues with accessibility, or inclusivity

	Positive	Negative	Unsure
Usability	6		

Accessibility	1		
Getting Feedback	3		
Technical Design Suggestions	4		
No explanation	6		1