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Search, Report, Wherever You Are: A Novel Approach to Assessing User Satisfaction with a Library Discovery Interface

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Search, Report, Wherever You Are: A Novel Approach to Assessing User Satisfaction with a Library Discovery Interface

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Purpose and Goals

Our Discovery Environment

- In Summer 2018, the U-M Library launched a new discovery interface, Library Search: https://search.lib.umich.edu
    - Facilitates the discovery of the Library's resources, collections, spaces, and expertise
    - Uses a custom user interface
- It was iteratively assessed over the course of its design and development through numerous user research methods and usability testing

For a technical overview of Library Search, see https://search.lib.umich.edu/technical-overview.

Survey on Catalog Search Satisfaction

However, Library Search still wasn't quite meeting user needs.

So we created a tool that we could use to:

- Get a baseline measure of overall user satisfaction with catalog searching
- Use again over time to assess whether improvements to Library Search correspond to increases in satisfaction

Methods

Focus on one area of interface

U-M Library's discovery interface has 6 categories:

Our focus: **Library Catalog**

- Critical area of interest from the library staff and faculty
- U-M Library currently migrating from Aleph to Alma

Key goal: Solicit feedback based on respondents' areas of expertise, not based on canned searches generated by assessment team

Our Approach

Our choice of methodology was informed by:

- The need to obtain feedback in a timely manner
- Did not have staff time for methods such as 1:1 interviews
- The need to facilitate some interaction with the catalog search interface

Participants' interactions with the catalog were mediated by Qualtrics

- Allowed us to guide many more people through searching and reporting in a short period of time

Participants

Survey invitation sent to 96 U-M library employees whose work involves using search interface (survey open from December 6-19, 2019)

- 40 provided usable data; 36 completed whole survey
  - 42% response rate; 90% completion rate
- Participants represented 5 library divisions
  - Most in Research and Learning & Teaching
- Time working in library
  - < 2 years: 8%
  - 2 to 5 years: 22%
  - 5 to 10 years: 8%
  - > 10 years: 58%
  - Prefer not to say: 3%

Questions about Three Search Types

- **Known item search**: user wants an item that is known to be in the catalog
  - Specific title, author, ISBN

- **Known set search**: user wants one of a known group of things
  - A piano concerto by Beethoven, an introduction to chemistry

- **Exploratory search**: user wants item(s) on a general topic
  - Video games, botany

- Item(s) appear as expected in results?
  - If not, explain
- Satisfaction with:
  - **Position/relevance** of desired item(s)
  - **Speed** of returned results
  - **Sufficiency of info** in item record (known item only)
  - **Ability to determine availability** (known item only)
  - **Clarity regarding item location** (known item only)

Example of search and report question

IMPORTANT

In the first three sections of this survey you will be asked to open other tabs in your browser. For your convenience, always keep the tab with the survey open.

(Note: you can return your most recent spot in the survey if you close the survey tab by mistake.)

Back   Next

Section 1 of 4: Searching for a Known Item

STEP 1: INSTRUCTIONS

Below is a link to the Catalog. Once in the Catalog:

- Please enter the title of an item that you know to be in the Catalog.
- Look at no more than the first two pages of results.
- Then click 'Next' in the survey.

Click here to open Catalog Search in a new tab.

Back   Next

Example of search and report question

Additional Questions

- **Current satisfaction**
  - For participants who used interface in previous two weeks
    - Speed of current version
    - Relevance of results in current version
    - Overall satisfaction with current version

- **Relative satisfaction**
  - For participants who recalled using the interface in its early form (one year prior)
    - Speed compared to a year ago
    - Relevance of results compared to a year ago
    - Overall satisfaction compared to a year ago

Findings

Known Item Searches

Known Item in Search Results

Saw item as expected	75%
Saw item but not as expected	18%
Didn't see item	3%
Other	5%

Satisfaction with Position of Known Item

Very satisfied	49%
Moderately satisfied	43%
Moderately dissatisfied	5%
Very dissatisfied	3%
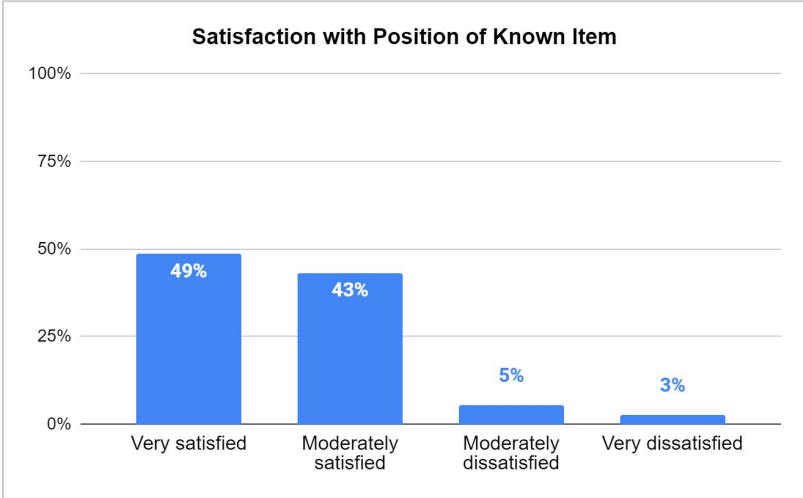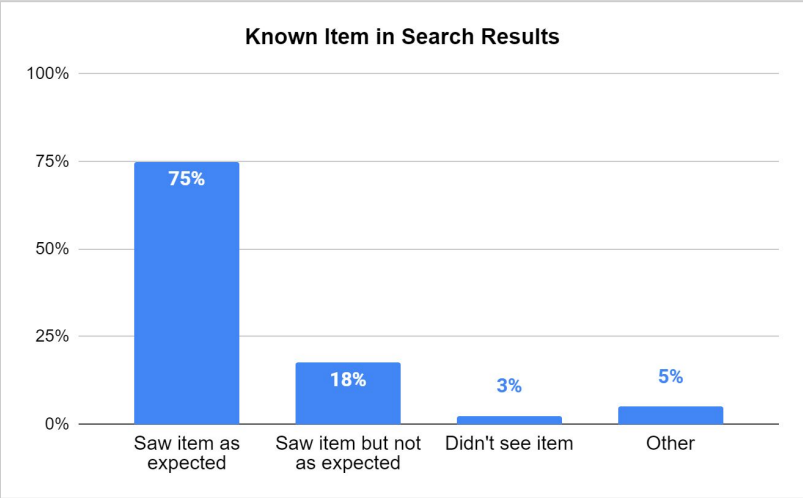
Known Item Searches

We learned a good deal from searches with unexpected results

Methodology allowed developers to recreate results and see comments. E.g....

- Faceless+killers&library=All+libraries
  - "I see separate records for different formats (i.e., physical copy and ebook) of the same edition, but I would expect to see one record with different holdings."

- Teaching+translation+%3A+programs%2C+courses%2C+pedagogies&library=U-M+Ann+Arbor+Libraries
  - "Since the title is long, I did not expect to see so many results. My title is on top but it is disconcerting to see so many irrelevant hits."

- new+york+times&library=U-M+Ann+Arbor+Libraries
  - "The actual NYT should be first and then the index. The Special Collections stuff is confusing to patrons. And why do the Proquest versions have their own entry?"

Known Set Searches

Expected Results in Known Set Search
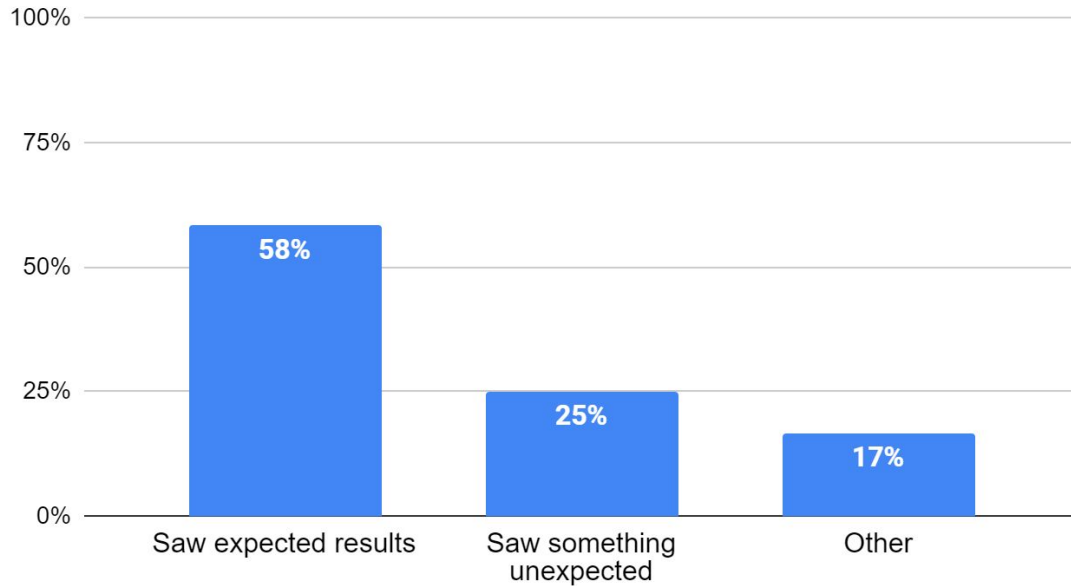
Similar results with satisfaction about **position** (90% satisfied) and **amount of information presented** (83% satisfied)

Known Set Searches

Examples of comments about unexpected results:

- harry+potter&library=U-M+Ann+Arbor+Libraries
  - "I expected to see 'Harry Potter and … [rest of titles of 8 books and movies]', and NOT 'Field Guide to Harry Potter,' or '60 minutes. Harry Potter produced by Rome Hartman' three times!"

- Hamlet&Library=All+libraries
  - "The first three items listed are special collection items. I would rather see circulating copies in the top slots. None of the items on the first page were by Shakespeare (or about the play by Shakespeare)."

Exploratory Searches
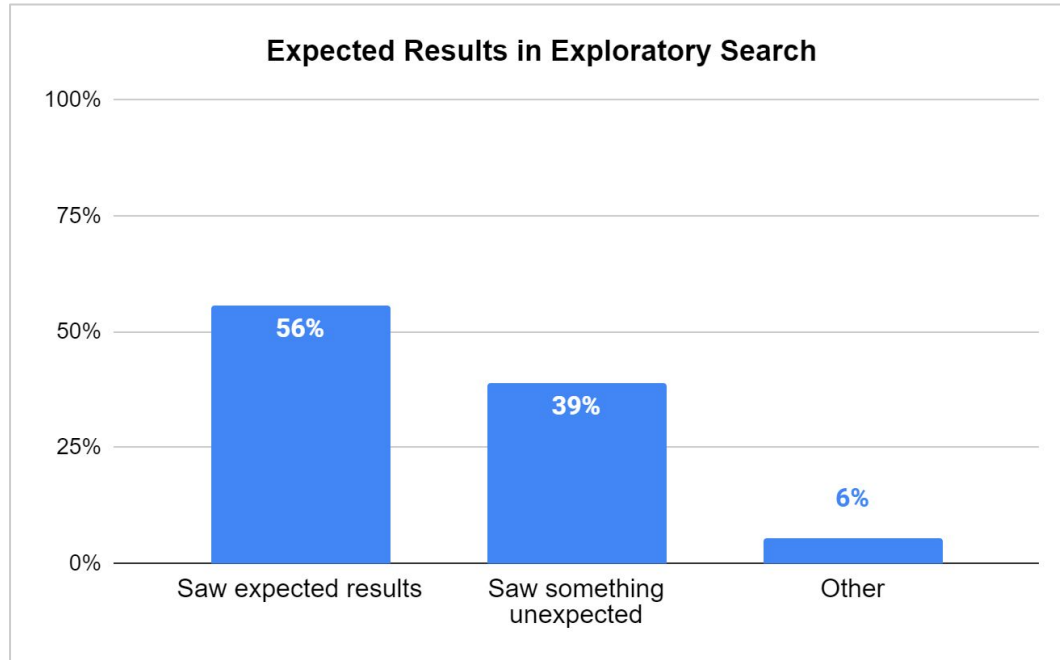
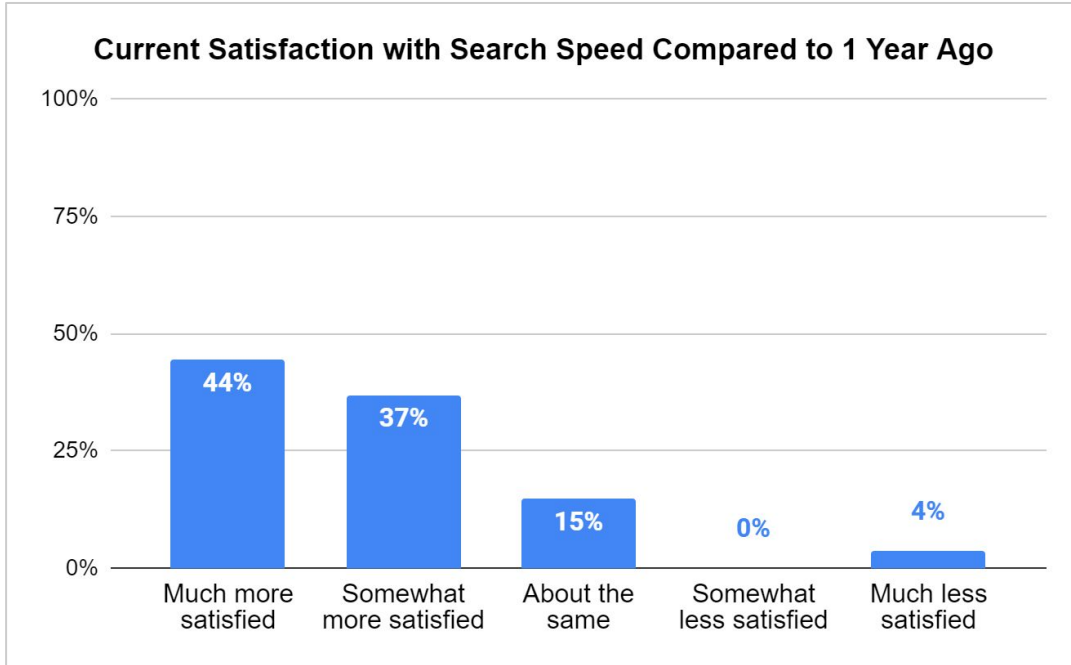**Expected Results in Exploratory Search**

Similar results with satisfaction about **position** (85% satisfied) and **amount of information presented** (80% satisfied)

Exploratory Searches

Examples of comments about unexpected results:

- critical+race+theory&library=U-M+Ann+Arbor+Libraries
  - "The very first entry is not as relevant as the rest on the first page. I was looking for info about critical race theory in general. I was surprised that something about sports came up before introductory items about this topic."

- linguistics+encyclopedias&library=U-M+Ann+Arbor+Libraries
  - "What is driving the relevance ranking? Four of the top seven results are very old. Two are a specialized sub-area. The most important item is #7, Elsevier's Encyclopedia of Language & Linguistics, 2nd ed."

- bell+birds&library=U-M+Ann+Arbor+Libraries&page=2
  - "I was expecting to see scientific works related to birds, but instead I saw only works of literature and music that mentioned birds in their titles."

Relative Satisfaction

Current Satisfaction with Search Speed Compared to 1 Year Ago

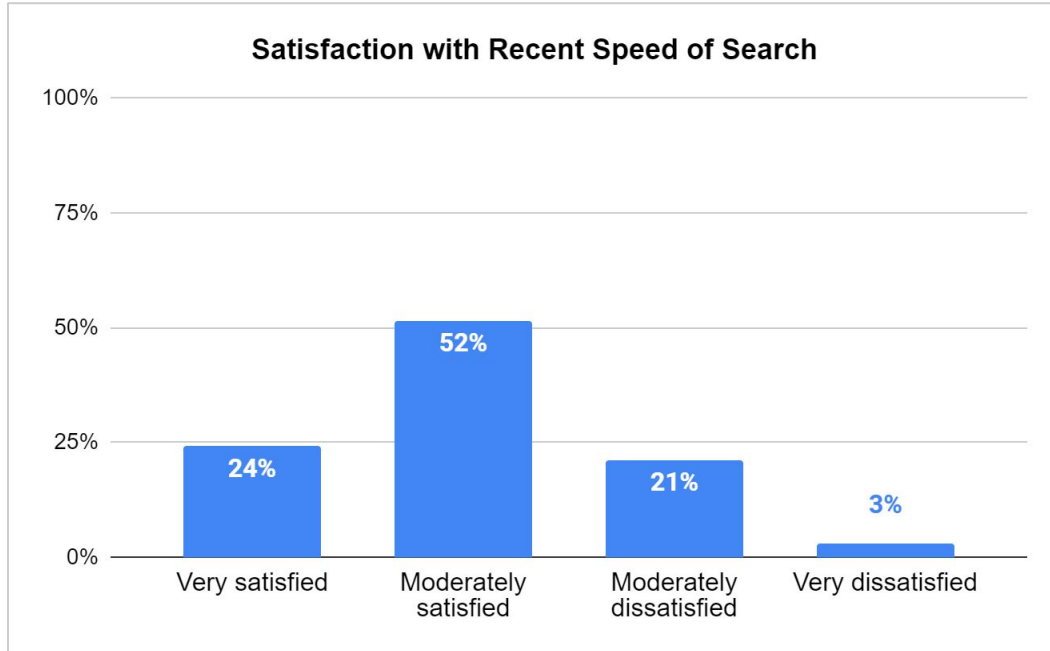| Category	Percentage
Much more satisfied	44%
Somewhat more satisfied	37%
About the same	15%
Somewhat less satisfied	0%
Much less satisfied	4%

Compared to 1 year ago (for those who said they recalled their earlier experience), **72% were more satisfied with search relevance**.

Compared to 1 year ago (for those who said they recalled their earlier experience), **82% were more satisfied with search overall**.

Current Satisfaction

Satisfaction with Recent Speed of Search

Very satisfied	24%
Moderately satisfied	52%
Moderately dissatisfied	21%
Very dissatisfied	3%

Current satisfaction with recent (December 2019) relevance was 70% satisfied.

Overall satisfaction with recent (December 2019) search experiences was also 70%.

Implications and Next Steps

Pilot a Success

Running a pilot with Librarians was helpful!

- Allowed development to focus on specific areas and gave us solid, actionable data
  - Metadata display improvements
  - Added information on where items are located
  - Currently working on improving how we translate user queries into back-end searches
- Highlighted features we needed to migrate from Aleph OPAC into Catalog Search

Follow-Up Surveys

- Two identical follow-up surveys were run simultaneously in Fall 2020
  - One to campus faculty, staff, students
  - One to librarians and partner libraries
- Surveys were slightly different than the original pilot
  - Focus on all the Search options, not just Catalog Search
  - Asked about satisfaction with speed, position of items in search results, etc.
  - Didn't ask about overall satisfaction with Library Search, or about relative satisfaction compared to 1 year ago
- Surveys closed mid-October 2020
  - Response: 99 campus users and 54 library staff, including partner libraries

Concluding Thoughts

Successes:

- Being in a remote setting didn't have an impact on ability to conduct research (though being in a pandemic probably lowered the response rate)
- Great way to reach lots of people with relatively low interaction cost
- Using this method provided us with solid actionable data
- Expanded our ability to observe and see how we've succeeded

Challenges:

- Lack of trust in Library Search because our legacy catalog (Mirlyn Classic) is precision-focused and returns smaller, more narrowly focused results

Thanks!

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