Is what’s “trending” what’s worth purchasing?:
Insights from a national study of collection development librarians

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Traditional metrics -> Web-native metrics

• Journal impact factor
• Citation counts
• Usage statistics
• Altmetrics
What are altmetrics?

The **volume** and **nature of attention** that research receives online.

How often are people talking, what’s being said, and who is saying it?

@jeandraws
Lots of speculation, little evidence
Study design

• Survey of **13,436 librarians** at 150 Carnegie-classified “R1” institutions in the US
  • Direct email (manually collected)
  • 707 respondents (5.3% response rate)

• Collected answers via Qualtrics
• Data analysis via Qualtrics and SPSS
Demographics
Years on the job

- More than 20 years: 35%
- 11 - 20 years: 25%
- 6 - 10 years: 22%
- 1 - 5 years: 18%
- Less than one year: 0%

(n=438)
What sort of duties do you perform regularly (1x/month or more) for your job? Check all that apply. (n=511)

- Collection development: 74%
- Instruction: 64%
- Assessment: 59%
- Reference services: 46%
- Scholarly communication support: 39%
Are you currently on the tenure track or do you have tenure? (n=463)

- Yes, I'm on the tenure track: 60
- Yes, I have tenure: 180
- I do not have a tenure-track position: 80
- My institution does not offer tenure status for librarians: 160
Familiarity with metrics

Among collection development librarians & as compared to those who aren’t
Do years of experience affect familiarity?
Does tenure status affect familiarity?
How familiar are you with the following measures of article-level impact?
(all librarians)

- **Altmetrics**: 17% know nothing, 22% know a little, 34% know quite a bit, 23% know a lot, 4% are an expert.
- **Usage statistics**: 4% know nothing, 8% know a little, 23% know quite a bit, 51% know a lot, 15% are an expert.
- **Citation counts**: 3% know nothing, 7% know a little, 22% know quite a bit, 52% know a lot, 16% are an expert.
- **JIF**: 9% know nothing, 11% know a little, 25% know quite a bit, 44% know a lot, 11% are an expert.
How familiar are you with the following measures of article-level impact?
(by tenure option)

- Altmetrics (nt): 18% know nothing, 21% know a little, 36% know some, 21% know a lot, 4% know a great deal
- Altmetrics (t): 16% know nothing, 20% know a little, 30% know some, 30% know a lot, 4% know a great deal
- Usage statistics (nt): 5% know nothing, 8% know a little, 27% know some, 48% know a lot, 12% know a great deal
- Usage statistics (t): 1% know nothing, 16% know a little, 59% know some, 17% know a lot
- Citations (nt): 4% know nothing, 8% know a little, 26% know some, 46% know a lot, 16% know a great deal
- Citations (t): 1% know nothing, 15% know a little, 62% know some, 17% know a lot
- JIF (nt): 10% know nothing, 11% know a little, 29% know some, 39% know a lot, 11% know a great deal
- JIF (t): 4% know nothing, 8% know a little, 18% know some, 57% know a lot, 13% know a great deal
Relationships between familiarity with metrics and experience & tenure status

- Years of experience do not affect familiarity with metrics.

- Tenure status affects familiarity with usage statistics, citation counts, and Journal Impact Factor.

- Tenure status does not affect familiarity with altmetrics.
Use of metrics

For collection development
Factors affecting frequency of use
How often do you evaluate materials using the following indicators of research impact in the context of your collection development duties?

- Altmetrics: Never (46%), Rarely (34%), Often (4%), Very Often (0%)
- Expert peer reviews: Never (31%), Rarely (27%), Often (9%), Very Often (3%)
- Usage statistics: Never (19%), Rarely (17%), Often (22%), Very Often (14%)
- Citation counts: Never (23%), Rarely (19%), Often (18%), Very Often (4%)
- Journal Usage Factor: Never (14%), Rarely (14%), Often (29%), Very Often (15%)
- Journal Impact Factor: Never (20%), Rarely (23%), Often (16%), Very Often (5%)
Factors affecting the frequency of use of metrics

- Years of experience
- Tenure status
- Job responsibilities
Frequency of use unaffected by...

- Tenure status
- Years of experience (unconfirmed)

Frequency of use is affected by...

- Having regular scholarly communication support duties
- Having instruction duties (for usage statistics)
How often do you evaluate materials using the following indicators in the context of your collection development duties? (librarians with regular scholcomm duties)

- **Altmetrics***: 32% Never, 35% Rarely, 9% Often
- **Expert peer reviews***: 19% Never, 31% Rarely, 13% Often, 2% Very Often
- **Usage statistics**: 12% Never, 18% Rarely, 19% Often, 19% Very Often
- **Citation counts**: 15% Never, 15% Rarely, 21% Often, 7% Very Often
- **Journal Usage Factor**: 5% Never, 14% Rarely, 34% Often, 20% Very Often
- **Journal Impact Factor**: 9% Never, 21% Rarely, 20% Often, 7% Very Often
Tools for collecting metrics
Tools used in compiling impact evidence, all librarians vs. collection development librarians

- Web of Science
- Google Scholar
- Scopus
- Altmetric
- Impactstory
- PlumX
- Other

Collection Development (n=124) vs. All (n=187)
Other websites or databases all librarians use to compile evidence of research impacts
Takeaways: Familiarity with metrics

• Familiarity with and use of metrics are linked.
• Librarians report greater familiarity with traditional metrics.
• No relationship between years of experience and familiarity with metrics.
• Familiarity with traditional metrics is related to tenure status.
• Familiarity with altmetrics is not related to tenure.
Takeaways: Use of metrics

• Journal Usage Factor and usage statistics most likely to be used for collection development.
• Altmetrics least likely to be used for collection development.
• Use of metrics is related to having regular responsibilities for scholarly communication.
• Years of experience unrelated use of metrics.
Takeaways: Tools for collecting metrics

- WoS reigns supreme for citation metrics.
- Altmetric is most used tool for altmetrics.
Future work

• Additional surveys & interviews with US librarians
• Similar survey of librarians on an international scale
• Investigate relationships between Open Access and altmetrics
• Examine P&T documents
Thank you!

Questions?

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Years of experience

How often do you evaluate materials using the following indicators of research impact in the context of collection development?

<table>
<thead>
<tr>
<th>Indicator</th>
<th>0-5</th>
<th>6-10</th>
<th>11-20</th>
<th>21+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quite Often use altmetrics</td>
<td>8.33%</td>
<td>33.33%</td>
<td>16.67%</td>
<td>41.67%</td>
</tr>
<tr>
<td>Rarely use altmetrics</td>
<td>19.05%</td>
<td>19.05%</td>
<td>18.10%</td>
<td>43.81%</td>
</tr>
<tr>
<td>Never use altmetrics</td>
<td>10.95%</td>
<td>21.90%</td>
<td>28.47%</td>
<td>38.69%</td>
</tr>
<tr>
<td>Very Often use citation counts</td>
<td>20.00%</td>
<td>6.67%</td>
<td>33.33%</td>
<td>40.00%</td>
</tr>
<tr>
<td>Quite Often use citation counts</td>
<td>11.76%</td>
<td>27.45%</td>
<td>27.45%</td>
<td>33.33%</td>
</tr>
<tr>
<td>Rarely use citation counts</td>
<td>17.74%</td>
<td>19.35%</td>
<td>20.97%</td>
<td>41.94%</td>
</tr>
<tr>
<td>Never use citation counts</td>
<td>12.31%</td>
<td>21.54%</td>
<td>24.62%</td>
<td>41.54%</td>
</tr>
<tr>
<td>Very Often use JIF</td>
<td>23.91%</td>
<td>15.22%</td>
<td>15.22%</td>
<td>45.65%</td>
</tr>
<tr>
<td>Quite Often use JIF</td>
<td>10.34%</td>
<td>22.99%</td>
<td>24.14%</td>
<td>42.53%</td>
</tr>
<tr>
<td>Rarely use JIF</td>
<td>15.91%</td>
<td>13.64%</td>
<td>22.73%</td>
<td>47.73%</td>
</tr>
<tr>
<td>Never use JIF</td>
<td>13.04%</td>
<td>23.93%</td>
<td>30.43%</td>
<td>32.61%</td>
</tr>
<tr>
<td>Very Often use JIF</td>
<td>12.50%</td>
<td>18.75%</td>
<td>25.00%</td>
<td>43.75%</td>
</tr>
<tr>
<td>Quite Often use JIF</td>
<td>14.58%</td>
<td>20.83%</td>
<td>25.00%</td>
<td>39.58%</td>
</tr>
<tr>
<td>Rarely use JIF</td>
<td>15.49%</td>
<td>21.13%</td>
<td>28.17%</td>
<td>35.21%</td>
</tr>
<tr>
<td>Never use JIF</td>
<td>15.63%</td>
<td>23.44%</td>
<td>26.56%</td>
<td>34.38%</td>
</tr>
</tbody>
</table>
Tenure status

need a graph here of tenure status x frequency of use of indicators of RI
How familiar are you with the following measures of article level impact?

- **Altmetrics - Schol Comm**
  - 1 (11.29%)
  - 2 (9.14%)
  - 3 (36.02%)
  - 4 (32.80%)
  - 5 (10.75%)

- **Altmetrics - Collection Dev**
  - 1 (4.98%)
  - 2 (12.46%)
  - 3 (24.56%)
  - 4 (24.20%)
  - 5 (33.81%)

- **Citation Counts - Schol Comm**
  - 1 (28.72%)
  - 2 (13.83%)
  - 3 (53.72%)
  - 4 (1.60%)

- **Citation Counts - Collection Dev**
  - 1 (19.37%)
  - 2 (6.34%)
  - 3 (51.41%)
  - 4 (21.48%)

- **Usage Stats - Scholarly Comm**
  - 1 (24.47%)
  - 2 (17.02%)
  - 3 (54.26%)
  - 4 (2.13%)

- **Usage Stats - Collection Dev**
  - 1 (17.96%)
  - 2 (7.39%)
  - 3 (21.48%)
  - 4 (50.70%)

1 - Know Nothing
2
3
4
5 - Expert