Altmetric Counts from Different Sources – A Case Study of JASIST Articles Published Between 2001 and Mid 2017

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Altmetric data sources and aggregators

• In this presentation, data sources
  • Mendeley
  • Twitter
  • Blogs
  • Wikipedia
  • Mainstream news

• Aggregators
  • Altmetric
  • PlumX
Questions and answers

• For a given indicator (say Wikipedia mentions of an article), do they provide the same number?

• Is the data we receive from the data sources and aggregators reliable?

• In order to answer these question data were collected from Altmetric, Mendeley and Plumx on June 29, 2017 on 2,728 articles and reviews published in JASIST between 2001 and 2017 (partial year)
Mendeley on the three platforms

• Mendeley: reader counts for 2,628 articles (96%)
• Altmetric: reader counts for 1,113 articles (41%)
  - Reports reader counts only if the article has at least one other indicator
• PlumX: reader counts for 1,721 articles (63%)

Mendeley found no readers for 65 articles, where counts were reported by the aggregators
Why?

• Perhaps because Mendeley periodically reorganizes its content
  • Users remove the item from their libraries?
  • Data cleansing by Mendeley?

• Are the number of readers per article the same?

<table>
<thead>
<tr>
<th>X &amp; Y</th>
<th>all</th>
<th>same</th>
<th>X more</th>
<th>Y more</th>
</tr>
</thead>
<tbody>
<tr>
<td>X=Mendeley, Y=PlumX</td>
<td>1,676</td>
<td>706 (42%)</td>
<td>522 (31%)</td>
<td>448 (27%)</td>
</tr>
<tr>
<td>X=Mendeley, Y=Altmetric</td>
<td>1,074</td>
<td>875 (82%)</td>
<td>184 (17%)</td>
<td>15 (1%)</td>
</tr>
<tr>
<td>X=PlumX, Y=Altmetric</td>
<td>823</td>
<td>280 (34%)</td>
<td>309 (38%)</td>
<td>234 (28%)</td>
</tr>
</tbody>
</table>
Twitter—Almetric vs. PlumX

• Almetric: Twitter counts for 980 articles
  • Average number of tweets per article: 7.2

• PlumX: Twitter counts for 824 articles
  • Average number of tweets per article: 9.2

• Almetric & PlumX: both found tweets for 800 articles

<table>
<thead>
<tr>
<th></th>
<th>#A=#P</th>
<th>#A&gt;#P</th>
<th>#P&gt;#A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Altmetric &amp; PlumX</td>
<td>336</td>
<td>225</td>
<td>239</td>
</tr>
<tr>
<td></td>
<td># articles mentioned in blog</td>
<td>sum of blog mentions</td>
<td># articles mentioned in Wikipedia</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------------------------</td>
<td>----------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>Altmetric</td>
<td>153</td>
<td>265</td>
<td>82</td>
</tr>
<tr>
<td>PlumX</td>
<td>37</td>
<td>62</td>
<td>77</td>
</tr>
</tbody>
</table>
Whom should we believe?

• Altmetric?
• Mendeley?
• PlumX?
• Crossref?