Citation de-duplication - who does it better? A comparison of a systematic review accelerator to EndNote with manual de-duplication

Diana Almader-Douglas, M.L.S.
Division of Education, Department of Library Services
Mayo Clinic Arizona

# Background
- Hospital staff suggested a systematic review accelerator as a better option to EndNote for citation de-duplication.
- EndNote is reliable, safe and widely used by librarians and researchers. But is there a better tool for de-duplication of citations?

# Objectives
- To compare EndNote's de-duplication to the Centre for Research in Evidence-Based Practice Systematic Review Accelerator (CREBP-SRA).
- To compare automated de-duplication to manual de-duplication.

# Methods
- From October 2017 through December 2017, nine EndNote libraries were downloaded into XML, imported into CREBP-SRA and de-duplicated.
- Each EndNote library was then de-duplicated using the built-in de-duplication feature.
- Remaining duplicate citations were manually extracted from EndNote.

# Results
- CREBP-SRA captured more duplicate citations than EndNote.
- CREBP-SRA did not support manual de-duplication.
- Manual de-duplication in EndNote captured the most duplicate citations.

# Conclusions
- CREBP-SRA is on a slow server (web page often froze, or failed to complete operations).
- CREBP-SRA has a difficult user interface/design.
- CREBP-SRA did not manage large libraries well.
- CREBP-SRA did not work in Chrome.
- CREBP-SRA did not support manual changes.
- EndNote de-duplication with manual de-duplication is most accurate in locating and removing duplicate citations.

## About CREBP-SRA
- Bond University Centre for Research in Evidence-Based Practice (CREBP) was established in June 2010 to support research into evidence-based practice. It was created based on the NHMRC Australia Fellowship grant awarded to Paul Glasziou.
- According to CREBP, the CREBP SRA was "built to speed up the Systematic Review process. It is freely available for anyone in the world to use."

## References

## Results - Detected Duplicates

<table>
<thead>
<tr>
<th>Library</th>
<th>Endnote Software</th>
<th>CREBP-SRA</th>
<th>EndNote w/ Manual De-duplication</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>126</td>
<td>146</td>
<td>149</td>
</tr>
<tr>
<td>2</td>
<td>438</td>
<td>447</td>
<td>478</td>
</tr>
<tr>
<td>3</td>
<td>207</td>
<td>181</td>
<td>234</td>
</tr>
<tr>
<td>4</td>
<td>664</td>
<td>2783</td>
<td>3503</td>
</tr>
<tr>
<td>5</td>
<td>13</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>6</td>
<td>17</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>7</td>
<td>270</td>
<td>331*</td>
<td>329</td>
</tr>
<tr>
<td>8</td>
<td>88</td>
<td>98</td>
<td>107</td>
</tr>
<tr>
<td>9</td>
<td>75</td>
<td>107</td>
<td>123</td>
</tr>
</tbody>
</table>