Mastering Metrics

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Setting the Scene

• Skewed Distributions?

• Which metric is best?
# Skewed Distributions

<table>
<thead>
<tr>
<th></th>
<th>Altmetric</th>
<th>Usage</th>
<th>Cites</th>
<th>Fruit Flies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.4</td>
<td></td>
<td>143.34</td>
<td>45.5</td>
</tr>
<tr>
<td>Median</td>
<td>1</td>
<td></td>
<td>76</td>
<td>45.5</td>
</tr>
<tr>
<td>Mode</td>
<td>0</td>
<td></td>
<td>0</td>
<td>45</td>
</tr>
<tr>
<td>Range</td>
<td>0-1876</td>
<td></td>
<td>0-5217</td>
<td>36-55</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>14.5</td>
<td></td>
<td>228.0</td>
<td>3.9</td>
</tr>
</tbody>
</table>

With Thanks to Dr Ian Rowlands for the Fruit Fly comparison

Image © tanakawho – CC-BY
Instability

Visual excludes journals over 500 articles per year and IF changes >150%
Image: © kaitlyn Hansen – CC-BY
Users of metrics

Authors
- Will this help me get tenure?
- Who has applied my work?

Readers
- Is this paper important
- What does this paper relate to

Institutions
- What has the faculty published
- Which departments are strongest in THE

Funders
- What have our awardees published
- What impact has our spending had?

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Types of metrics

Selecting the right metric is important

- Usage
- Altmetrics
- Citations
- Impact Factor (etc.)
Guides & Resources for metrics

Mastering metrics
Navigate the world of scholarly metrics with our guides and resources