What Does the “Derivation Dataset” Used in Swartout et al. 2015 Tell Us About Repeat Rape?

Straightforward Frequency Analyses

Analyses and Presentation
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(two corrected y-axis labels, slides 18 & 21)
Background Information – Datasets

• Swartout et al. 2015* used 2 different data sets:
  • “Derivation dataset” – J. White’s, 1990-1995
  • “Validation dataset” – M. Thompson’s, 2008-2011

• The “derivation dataset” is publicly available

• We have been unable to obtain sufficient data from the “validation dataset” to run simple frequency analyses (we only have 5 yes/no rape variables, one for each assessment)

* Swartout, Koss, White, Thompson, Abbey & Bellis, Trajectory analysis of the campus serial perpetrator assumption. JAMA Pediatrics, 5(3), 314-324.
Swartout et al.’s Definition of Rape

They used 3 items from Koss’s Sexual Experiences Survey to define rape as completed rape. For derivation dataset:

1. **Penile-vaginal rape:** "Have you engaged in sexual intercourse with a woman when she didn't want to by threatening or using some degree of physical force (twisting her arm, holding her down, etc.)?"

2. **Drug/alcohol-related rape:** “Have you ever deliberately given a woman alcohol or drugs and then engaged in sexual intercourse when she didn't want to?” [Note: unclear if incapacitated.]

3. **Other rape:** “Have you engaged in sex acts (oral or anal intercourse or penetration by objects other than the penis) with a woman when she didn't want by threatening or using some degree of physical force (twisting her arm, holding her down, etc.)?”
High Attrition Rate

Total numbers of derivation dataset participants providing data on sexual assault survey items:

- **~850**: Fall freshman year (Pre-College, ages 14-18)
- **~640**: Spring freshman year (Sept - May, 8 months)
- **~455**: Spring sophomore year (12 months)
- **~300**: Spring junior year
- **~145**: Spring senior year (too few for valid analyses)
Swartout et al.’s Definition of “Serial” Rape

• Some researchers (e.g., David Lisak) have used the term “repeat rapist” and (the more inflammatory) term “serial rapist” interchangeably.

• For this paper, Swartout et al. created a new and restricted definition of “serial rapist”: a man who admits to committing rape during more than one assessment period / year of college.

• They did not look at the number of rapes men reported committing in each assessment period / year of college.

• In addition, they did not include data from 2 items on attempted rape (i.e., penile-vaginal, drug/alcohol-related).
Swartout et al.’s Definition of “Serial” Rape

• Because Swartout et al.’s definition ignores the number of rapes men reported committing in each assessment period / year of college, a man could commit more than 5 rapes during a particular assessment period / year of college, but if he did not admit raping during another assessment period, he was not defined as a “serial” rapist.

• This was true if even the man dropped out of the study after reporting committing “more than 5” rapes, even on just a single survey item, in just the past 8 or 12 months.

• In short, for this paper Swartout et al. made no attempt to determine whether men were repeat rapists, let alone how many rapes they committed. Nor did they acknowledge that men they define as not “serial rapists” have committed more than 2 rapes, even more than 5 rapes – even in 8-12 months.
Potential for “Item Overlap”

• Swartout et al. caution that men completing the SES could have been referring to the same rape incident with their responses to more than one item.

• Their solution to this problem? Assume that all rape reports refer to the same incident(s).

• They argue that researchers should not add up the number of rape acts from different SES items to determine how many rapes a man committed during a particular period.

• But Swartout et al.’s solution is no more reasonable than assuming that all rape reports on different SES items refer to separate incidents.
No Overlap for Attempted Rape

• The problem of how to interpret multiple rape reports does not apply to items covering attempted rape.

• By definition, acts in which a man reports attempting but failing to commit penile-vaginal rape (or drug/alcohol-related rape) cannot overlap with acts in which he “succeeded” in completing rapes of the same type.
Dealing with Potential Overlap: Two Approaches

• **Assume 100% OVERLAP** (Swartout et al.) = All forms of rape reported by a subject in an assessment period are counted as the same incident(s) (e.g., 2 penile-vaginal + 2 drug/alcohol = 2; 3 penile-vaginal + 2 drug/alcohol = 3).

• **Assume NO OVERLAP** = All forms of rape reported by a subject in an assessment period are counted as separate incidents (e.g., 2 penile-vaginal + 2 drug/alcohol = 4; 2 penile-vaginal + 3 drug/alcohol = 5).
Our 1\textsuperscript{st} Simple Question

What percentage of men who raped during a particular assessment period committed more than one rape during that period?
Notes on Data and Calculations

• On the following slides, we define “repeat rapist” (not “serial rapist”) as someone who rapes more than once (in this case, in a particular time period).

• All percentages are based on the data found in the public version of the “derivation dataset” they used.

• Because those data have problems with integrity and validity, the percentages on the following slides may not be accurate (i.e., are likely underestimates).

• However, the percentages are based on the same dataset that the study’s authors relied upon for their analyses, and the main errors we have found (i.e. coding “no response” and “missing” responses as “never” raped), would make these underestimates.
Percentage of Rapists Committing Completed Rapes That Are Repeat Rapists

Assuming No Overlap

Assuming 100% Overlap
Percentage of Rapists **Committing Attempted & Completed Rapes** That Are Repeat Rapists

**Assuming No Overlap**

- **Pre-College**: 66% (Red), 34% (Blue)
- **Freshman Year**: 69% (Red), 31% (Blue)
- **Sophomore Year**: 71% (Red), 29% (Blue)
- **Junior Year**: 88% (Red), 12% (Blue)

**Assuming 100% Overlap**

- **Pre-College**: 61% (Red), 39% (Blue)
- **Freshman Year**: 69% (Red), 31% (Blue)
- **Sophomore Year**: 71% (Red), 29% (Blue)
- **Junior Year**: 88% (Red), 12% (Blue)
Our 2\textsuperscript{nd} Simple Question

What percentage of rapes reported by all men during a particular assessment period were perpetrated by repeat rapists?
Notes on (Conservative) Calculations

For the following slides, all calculated total numbers of rapes (committed by serial rapists), used to generate the percentages, are based on conservative estimates:

Response of “3 to 5” = 3

Response of “more than 5” = 6
Percentage of All Completed Rapes Committed by Repeat Rapists

Assuming No Overlap

Assuming 100% Overlap
Percentage of All Attempted & Completed Rapes Committed by Repeat Rapists

Assuming No Overlap

- Pre-College: 7% (93%)
- Freshman Year: 8% (92%)
- Sophomore Year: 6% (94%)
- Junior Year: 1% (99%)

Assuming 100% Overlap

- Pre-College: 12% (88%)
- Freshman Year: 12% (88%)
- Sophomore Year: 8% (92%)
- Junior Year: 3% (97%)
Conservatively* Estimated Average Numbers of Rapes by Repeat Rapists

Within Each Assessment Period, Not (Even) Total Per Perpetrator

* Reports of “3 to 5” rapes were counted as 3, and reports of “more than 5” were counted as 6.

<table>
<thead>
<tr>
<th></th>
<th>Pre-College</th>
<th>Freshman</th>
<th>Sophomore</th>
<th>Junior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completed Rapes Only</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Overlap</td>
<td>5.4</td>
<td>5.5</td>
<td>8.1</td>
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<tr>
<td>100% Overlap</td>
<td>3.5</td>
<td>3.9</td>
<td>3.9</td>
<td></td>
</tr>
<tr>
<td>Attempted + Completed Rapes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Overlap</td>
<td>4.6</td>
<td>3.4</td>
<td>4.3</td>
<td>5.2</td>
</tr>
<tr>
<td>100% Overlap</td>
<td>4.6</td>
<td>3.4</td>
<td>4.3</td>
<td>5.2</td>
</tr>
</tbody>
</table>
Conservatively* Estimated Percentages of Rapists Committing Different #s of Rapes
Within Each Assessment Period, Assuming Complete Overlap

Pre-College | Freshman | Sophomore | Junior
---|---|---|---
One Rape: | 42 | 33 | 8 | 50
Two Rapes: | 28 | 30 | 17 | 30
Three to Five: | 12 | 25 | 5 | 28
More than Five: | 19 | 25 | 15 | 33

Completed Rapes Only
Conservatively* Estimated Percentages of Rapists Committing Different #s of Rapes

Within Each Assessment Period, Assuming NO Overlap

* Reports of “3 to 5” rapes were counted as 3, and reports of “more than 5” were counted as 6.
Conservatively* Estimated Percentages of Rapists Committing Different #s of Rapes

Within Each Assessment Period, Assuming Complete Overlap

<table>
<thead>
<tr>
<th>Completed and Attempted Rapes</th>
<th>Pre-College</th>
<th>Freshman</th>
<th>Sophomore</th>
<th>Junior</th>
</tr>
</thead>
<tbody>
<tr>
<td>One Rape</td>
<td>39</td>
<td>31</td>
<td>29</td>
<td>13</td>
</tr>
<tr>
<td>Two Rapes</td>
<td>18</td>
<td>28</td>
<td>19</td>
<td>18</td>
</tr>
<tr>
<td>Three to Five</td>
<td>25</td>
<td>31</td>
<td>29</td>
<td>31</td>
</tr>
<tr>
<td>More than Five</td>
<td>18</td>
<td>10</td>
<td>24</td>
<td>31</td>
</tr>
</tbody>
</table>

* Reports of “3 to 5” rapes were counted as 3, and reports of “more than 5” were counted as 6.
Conservatively* Estimated Percentages of Rapists Committing Different #s of Rapes

Within Each Assessment Period, Assuming NO Overlap

* Reports of “3 to 5” rapes were counted as 3, and reports of “more than 5” were counted as 6.