FROM ONE-IN-FOUR TO NONE-IN-FOUR: AN EMPIRICAL ASSESSMENT OF UNIVERSITY-BASED SEXUAL AGGRESSION PERPETRATION

Samuel T. Hales (sth21@kent.ac.uk)
CORE-FP, University of Kent

Supervisory Committee: Theresa A. Gannon, DPhil, Caoilte Ó Ciardha, PhD
OVERVIEW

• Background & Rationale
• Overview of Studies
• General Discussion
• Implications & Next Steps

Sexual aggression noun

“Any sexual interaction – from petting to oral/genital contact to intercourse – which is gained against one's will through use of physical force, threats of force, continual arguments/pressure, use of alcohol/drugs and/or position of authority”
(Koss & Gaines, 1993, p.96)
Background

- University-based sexual aggression is a pervasive public health issue globally

In China, 34.8% of female university students report having experienced gender-based sexual violence (CFPA, 2016)

26.4% of undergraduate female students in the US self-report experiencing rape or sexual assault victimisation through physical force, violence, or incapacitation (AAU, 2020)

Nearly 1-in-10 female students (9.4%) in Brazil reported being subjected to sexual aggression since starting university (Zotareli et al., 2012)

Precisely 10.0% of female students in Australia reported sexual assault victimisation in 2015/16 (AHRC, 2017)

1-in-10 women students at Canadian postsecondary schools were sexually assaulted in 2019 (Statistics Canada, 2020)
Background

- University-based sexual aggression is a pervasive public health issue globally
  - Rough estimate: 1-in-4 female university students sexually victimized internationally
  - Perpetrators often known heterosexual male students
- Recent climate surveys highlight that UK universities are not exempt
- Wide-reaching implications (for victims and perpetrators)
- Why are male students at increased risk of perpetrating sexual aggression?

70% of female students & recent graduates report having experienced sexual violence at university.

8% of female students & recent graduates report having been raped.

3.4% of community females self-report (attempted) rape/assault by penetration victimization since the age of 16

---

2 The Student Room & Revolt Sexual Assault (2018)
(Sample. 4,491 students across 153 UK HEIs)

4 Office for National Statistics (2018)
(Figures extrapolated from Crime Survey)
Background

- Why do male university students perpetrate sexual aggression?
  - US: Broad body of campus sexual assault work

**Societal-level influences**: Larger social and cultural factors that contextualise an individual's behaviours. e.g., Social and economic policies, living in a patriarchal society, ‘lad culture’ and ‘rape culture’.

**Community-level influences**: Risk-relevant factors linked to an individual’s community and social environment. e.g., Tolerance of sexual assault, poor criminal justice support, institutional factors (e.g., mistrusting a university).

**Relationship-level influences**: Interpersonal factors linked to peers, intimate partners, and family members. e.g., Association with sexually aggressive peers, a violent or emotionally unsupportive family.

**Situational-level influences**: Elements of the immediate social and physical environment. e.g., Proximity to alcohol and drugs, proximity to sexually aggressive peers, access to victims.

**Individual-level influences**: Subjective psychological, physiological, and personal historic factors. e.g., Sexually aggressive attitudes and beliefs, alcohol and drug use, emotional deficits or deviations.

*Based on Wagman, Dean, & Swartout (2020)*
Background

• Why do male university students perpetrate sexual aggression?
  - US: Broad body of campus sexual assault work
  - UK: Not empirically assessed
  - Are these findings generalizable?

• What about general sexual offending literature?
  - Well-established knowledge base in the UK
  - May help extend or refine findings from US campus sexual assault research

“Psychologists are particularly well placed to contribute to policies and practices in the area, given our knowledge and understanding of the perpetrators of sexual offending, and with a number of us working with victims/survivors of sexual violence.”

Rationale

- There’s a lack of empirical research assessing sexual aggression perpetration at UK universities
  - What is the rate of perpetration?
  - Why are male students at increased risk of perpetration during their studies?
  - Are perpetrators a homogenous group?
  - What about current interventions?

- We need to understand the issue before effectively addressing it
Overview of our Studies

• First attempt to empirically assess and classify male sexual aggression amongst UK male university students

• Three empirical studies that extend past research
  - **Study 1** What is the prevalence of university-based sexual aggression perpetration? & 2 What are the individual-level risk factors for perpetration? Can we ‘predict’ past sexual aggression?
  - **Study 3** Do perpetrators comprise a homogenous group? Are there distinct clusters of perpetrator with unique psychological profiles?

• Guided by US work into campus sexual assault and the established UK knowledge base on sexual offending
Study 1: “Local study”

• Assessed the individual-level risk factors for sexual aggression amongst male students at the University of Kent

• Participants \((N = 259)\)
  - Mostly young, educated White British students
  - Descriptive similarities between our sample and the male student body

• Completed an online survey comprising a battery of validated psychological measures
  - All relevant to CSA in the US or sexual aggression amongst incarcerated males in the UK
  - Included the SES-SFP (IV) and BIDR-6-IM (CV)

Relevant Demographic Data
Sexual Fantasies
- Inappropriate sexual fantasies

Intimacy & Social Functioning
- Assertiveness
- Loneliness
- Self-efficacy in relationships
- Self-esteem (negative & positive)

Offence Supportive Cognition
- Hostility toward women
- Rape myth acceptance

Self/Emotion Regulation
- Aggression
- Emotion regulation

Additional Measures
- Impression management
Study 1: Findings

- 33 participants (12.7% of the sample; “SAs”) self-reported having perpetrated **106 sexually aggressive** acts over the past 24 months
  - Sexual coercion most frequently perpetrated act (41.5% of acts)
  - 14 participants committed rape or attempted rape (23.6% of acts)
  - SAs often committed 2 offences (39.4%), mostly against females (81.8%)
Study 1: Findings

- 33 participants (12.7% of the sample) self-reported having perpetrated 106 sexually aggressive acts over the past 24 months
  - Sexual coercion most frequently perpetrated act (41.5% of acts)
  - 14 participants committed rape or attempted rape (23.6% of acts)
  - SAs often committed 2 offences (39.4%), mostly against females (81.8%)

- SAs scored higher on average than their non-offending peers ("NSAs") on most measured variables
  - Groups differed on hostility toward women ($p = .003$, $d = 0.51$), inappropriate sexual fantasies ($p < .001$, $d = 0.52$), & rape myth acceptance ($p = .003$, $d = 0.66$)
  - Slight differences with regards to ethnicity ($p = .048$)
Study 1: Findings

- 33 participants (12.7% of the sample) self-reported having perpetrated 106 sexually aggressive acts over the past 24 months
  - Sexual coercion most frequently perpetrated act (41.5% of acts)
  - 14 participants committed rape or attempted rape (23.6% of acts)
  - SAs often committed 2 offences (39.4%), mostly against females (81.8%)

- SAs scored higher on average than their non-offending peers on most measured variables
  - Groups differed on hostility toward women ($p = .003$, $d = 0.51$), inappropriate sexual fantasies ($p < .001$, $d = 0.52$), & rape myth acceptance ($p = .003$, $d = 0.66$)
  - Slight differences with regards to ethnicity ($p = .048$)

- Variables force-entered into a binomial logistic regression model to see if they could ‘predict’ past sexual aggression
Study 1: Logistic regression

- The model was significant overall, $\chi^2(4) = 25.82$, $p < .001$
- Explained 9.7% (Cox & Snell $R^2$) to 19.3% (Nagelkerke $R^2$) of variance in sexual aggression, with a high rate of correct classifications

<table>
<thead>
<tr>
<th>Measure</th>
<th>$\beta$</th>
<th>SE</th>
<th>Wald</th>
<th>df</th>
<th>$p$</th>
<th>OR</th>
<th>95% CI for OR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Study 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HTW</td>
<td>0.01</td>
<td>0.03</td>
<td>0.06</td>
<td>1</td>
<td>.81</td>
<td>1.01</td>
<td>0.95 - 1.07</td>
</tr>
<tr>
<td>IRMA-R</td>
<td>0.08</td>
<td>0.05</td>
<td>8.48</td>
<td>1</td>
<td>.004</td>
<td>1.08</td>
<td>1.03 - 1.14</td>
</tr>
<tr>
<td>SFQ-R-SV</td>
<td>0.07</td>
<td>0.03</td>
<td>6.07</td>
<td>1</td>
<td>.01</td>
<td>1.08</td>
<td>1.02 - 1.14</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>0.27</td>
<td>0.44</td>
<td>0.36</td>
<td>1</td>
<td>.55</td>
<td>1.31</td>
<td>0.55 - 3.10</td>
</tr>
<tr>
<td>Constant</td>
<td>-6.32</td>
<td>1.07</td>
<td>34.73</td>
<td>1</td>
<td>&lt;.001</td>
<td>1.00</td>
<td></td>
</tr>
</tbody>
</table>
| HL goodness of fit: $\chi^2(8) = 2.54$, $p = .96$

- The model discriminated between groups at better-than-chance level, (AUC = .77, $p < .001$, 95% CI [.68, .85], $d \approx 1.04$)

Rape myth acceptance & inappropriate sexual fantasies predicted past sexual aggression
Study 2: “National study”

- Replication of Study 1 across a national sample
  - How generalizable were our findings?
  - Do the individual-level risk factors for sexual aggression amongst male students differ between universities?

- Participants \((N = 295)\) recruited through Prolific
  - Larger \(N\) to aid analysis and to ensure enough SAs for Study 3
  - Descriptively like our earlier group and the UK male student body

- Two new survey items asking for university affiliation and SA’s relationship to their victim(s)
Study 2: Findings

- 30 participants (10.1% of the sample) self-reported having perpetrated 145 sexually aggressive acts over the past 24 months
  - Sexual coercion again the most common category (37.9% of acts)
  - 16 participants committed rape or attempted rape (35.9% of acts)
  - SAs typically committed 3+ offences (40.0%), mostly against females (86.7%) known to the participant (66.7%)
Study 2: Findings

- 30 participants (10.1% of the sample) self-reported having perpetrated 145 sexually aggressive acts over the past 24 months
  - Sexual coercion again the most common category (37.9% of acts)
  - 16 participants committed rape or attempted rape (35.9% of acts)
  - SAs typically committed 3+ offences (40.0%), mostly against females (86.7%) known to the participant (66.7%)

- SAs scored higher than NSAs on all measured variables
  - Groups differed on hostility toward women ($p < .001$, $d = 0.94$), inappropriate sexual fantasies ($p < .001$, $d = 0.70$), & rape myth acceptance ($p < .001$, $d = 0.70$)
  - They also differed on aggression ($p < .001$, $d = 0.69$), self-efficacy in relationships ($p = .04$, $d = 0.38$), and emotion regulation ($p = .04$, $d = 0.33$)
Study 2: Findings

• 30 participants (10.1% of the sample) self-reported having perpetrated 145 sexually aggressive acts over the past 24 months
  - Sexual coercion again the most common category (37.9% of acts)
  - 16 participants committed rape or attempted rape (35.9% of acts)
  - SAs typically committed 3+ offences (40.0%), mostly against females (86.7%) known to the participant (66.7%)

• SAs scored higher than NSAs on all measured variables
  - Groups differed on hostility toward women ($p < .001$, $d = 0.94$), inappropriate sexual fantasies ($p < .001$, $d = 0.70$), & rape myth acceptance ($p < .001$, $d = 0.70$)
  - They also differed on aggression ($p < .001$, $d = 0.69$), self-efficacy in relationships ($p = .04$, $d = 0.38$), and emotion regulation ($p = .04$, $d = 0.33$)

• Initial hierarchical regression model run to eliminate weak variables (i.e., rape myth acceptance, self-efficacy, and emotion regulation)
Study 2: Logistic regression

- The model was significant overall, $\chi^2(3) = 57.63, p < .001$
- Explained 18.1% (Cox & Snell $R^2$) to 42.5% (Nagelkerke $R^2$) of variance in sexual aggression, with a high rate of correct classifications

### Measure | $\beta$ | SE | Wald | $df$ | $p$ | OR | 95% CI for OR
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>LL</td>
</tr>
<tr>
<td>Study 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BPAQ</td>
<td>0.11</td>
<td>0.04</td>
<td>10.33</td>
<td>1</td>
<td>.001</td>
<td>1.12</td>
<td>1.05</td>
</tr>
<tr>
<td>HTW</td>
<td>0.14</td>
<td>0.03</td>
<td>18.51</td>
<td>1</td>
<td>&lt;.001</td>
<td>1.15</td>
<td>1.08</td>
</tr>
<tr>
<td>SFQ-R-SV</td>
<td>0.12</td>
<td>0.03</td>
<td>13.33</td>
<td>1</td>
<td>&lt;.001</td>
<td>1.12</td>
<td>1.06</td>
</tr>
<tr>
<td>Constant</td>
<td>-12.51</td>
<td>2.11</td>
<td>35.09</td>
<td>1</td>
<td>&lt;.001</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>HL goodness of fit: $\chi^2(8) = 4.81, p = .78$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Aggression, hostility toward women, & inappropriate sexual fantasies predicted past sexual aggression

- The model discriminated between groups at better-than-chance level, ($AUC = .93, p < .001, 95\% CI [.89, .96], d \approx 2.09$)
Study 3: Homogeneity testing

• Are UK male students who self-report recently perpetrating university-based sexual aggression a homogenous group?

• Participants ($N = 59$ after cleaning)
  - Self-reported SAs from Study 1 & 2

• Agglomerative hierarchical cluster analysis run
  - Main analysis conducted using standardised z-scores on measures of hostility toward women, inappropriate sexual fantasies, and rape myth acceptance
  - Cluster profiles validated using measures that differentiated between SAs and NSAs in either Study 1 or 2 (i.e., aggression, emotion regulation, self-efficacy in romantic relationships, ethnicity)
  - Stability testing confirmed final cluster profiles
Study 3: Homogeneity testing

- **Cluster One:** “Hostile excusers”
- **Cluster Two:** “Unremarkable aggressors”
- **Cluster Three:** “Hostile aggressors”
- **Cluster Four:** “Non-hostile fantasists”
- **Cluster Five:** “Sexual fantasists”

- Slight differences in aggression and emotion regulation scores during cluster validation.

Note. Letters that are shared by columns highlight clusters that do not significantly differ from one another using Dunn’s (1964) follow-up test with a Bonferroni correction (adjusted p < .005).

Five meaningful subgroups derived and tentatively defined based on their descriptive characteristics.
General Discussion

- Sexual aggression is perpetrated at worrying rates at UK universities
  - 11.4% prevalence across our studies (vs. ≈7.3% amongst non-university males)
- UK male university students with a recent history of sexual aggression are psychologically distinct from their non-offending peers
- Individual-level risk factors for sexual aggression include atypical sexual fantasies, hostility towards women, rape myth acceptance, and aggression
- SAs are likely to comprise a heterogenous forensic group
Implications

• Universities need to proactively tackle sexual aggression
• Better intervention design needed

Next Steps

• Results are preliminary and need validating
  - Larger, more diverse samples to assess generalisability
• Follow-up questions:
  - What about situational, relational, community, and societal-level risk factors?
  - Would interventions that target the psychological risk factors for sexual aggression reduce proclivity to offend?
ANY QUESTIONS?

sth21@kent.ac.uk
@Hales_Samuel
Indicative Bibliography