The Composite Abuse Scale, Revised – Short Form (CAS$_R$-SF): Development & Application of a Brief Measure of Intimate Partner Violence

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This Presentation

- Initial Development of the CAS$_R$-SF with women
- Patterns of IPV experiences (subgroups)
- Evolution of the instrument to account for gender and gendered experiences
- Unpacking “Fear”
- Contributions to improving measurement
- Ongoing debates
Acknowledgements

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Our Team:
Sue O’Donnell, RN, PhD, Kelly Scott-Storey, RN, PhD, Nancy Perrin, PhD, Colleen Varcoe, RN, PhD, Harriet MacMillan, MD, MSc, Jen McGregor, PhD, Alice Sedziafa, PhD Student

Intimate Partner Violence (IPV) is Complex

- IPV is behaviour in an intimate relationship (past or current) that causes or has the potential to cause physical, sexual, or psychological harm, including acts of physical aggression, sexual coercion, psychological abuse, and controlling behaviours (WHO, 2010).
- Large variation in: types of abuse, intensity/severity of abuse, degree of threat, longevity, context, outcomes
- goes well beyond binary decisions about “abuse” / “no abuse”
- Gender is a core consideration when examining patterns of abuse perpetration, victimization and impacts across the lifespan
Measurement Challenges

- Tendency to privilege physical & sexual violence
- Scoring approaches over-simplify important differences
- Emphasis on prevalence (presence/absence), excluding other features of IPV (e.g., type, frequency, severity, pattern)
- In gender-based analyses, include gender of the victim but not the perpetrator
- Lack of careful validation of measures across the full range of gender identities and relationship types
- More comprehensive measures often too long to be useful outside research

Setting the Context: Initial Development of the CASr-SF

- Addressing the gap between more recent theorizing and empirical work on IPV and measurement
- Began with the 30-item Composite Abuse Scale (Hegarty et al., 2005)
- Our Goal: to create a brief, reliable and valid measure of IPV severity for use in population-based surveys (and other studies), that could capture important dimensions of IPV
- 2 Phase Mixed Methods Study

**CAS$_R$-SF 2 Phase Development Approach**

- **Expert Review of CAS Items**
  - 31 IPV Researchers & Women
  - 15-20 min online survey
  - Ratings of 30 + 1 Items: importance, clarity, fit for diverse groups of women
  - Gaps/redundancy
  - Recommendations to improve

- **Item Reduction & Scale Validation**
  - Data from 6278 women (separate reduction, validation samples)
  - Factor Structure, internal consistency and concurrent validity of 30-item CAS
  - Use Phase 1 results and iterative process to drop, retain or combine items to create a new measure
CAS<sub>R</sub>-SF Development Results (n=4143)

Exploratory Factor Analysis (FA): 28/30 items loaded cleanly onto 3 factors (factor loadings >.40)

- Psychological Abuse (15 items)
- Physical Abuse (10 items)
- Sexual Abuse (3 items)

For each factor: inspected FA and Phase 1 findings

First Revision: 15 items combined, 5 retained, 8 dropped (13)

Second Revision: added-back 1 item, several combined

FINAL Scale: 12 items

<table>
<thead>
<tr>
<th>Items</th>
<th>Factors and Loadings</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Psychological</td>
</tr>
<tr>
<td>Blamed me for causing their violent behavior</td>
<td>.905</td>
</tr>
<tr>
<td>Told me I was crazy, stupid or not good enough</td>
<td>.841</td>
</tr>
<tr>
<td>Tried to convince my family/friends that I am crazy or tried to turn them against me</td>
<td>.870</td>
</tr>
<tr>
<td>Tried to keep me from seeing/talking to friends/family</td>
<td>.830</td>
</tr>
<tr>
<td>Harassed me over the phone</td>
<td>.865</td>
</tr>
<tr>
<td>Followed me or hung around outside my house</td>
<td>.806</td>
</tr>
<tr>
<td>Tried to or forced me to have sex</td>
<td></td>
</tr>
<tr>
<td>Made me perform sex acts that I did not enjoy or like</td>
<td></td>
</tr>
<tr>
<td>Shook, pushed, grabbed or threw me</td>
<td></td>
</tr>
<tr>
<td>Hit me with a fist/object, kicked or bit me</td>
<td></td>
</tr>
<tr>
<td>Used a knife or gun or other weapon</td>
<td></td>
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<tr>
<td>Locked me in the bedroom</td>
<td></td>
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</tbody>
</table>
Reliability and Concurrent Validity: 12-item CAS<sub>R</sub>-SF versus Original CAS

<table>
<thead>
<tr>
<th></th>
<th>30-item CAS</th>
<th>12-item Developmental Sample</th>
<th>12-item Validation Sample</th>
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<tbody>
<tr>
<td></td>
<td>r (n)</td>
<td>r (n)</td>
<td>r (n)</td>
</tr>
<tr>
<td>Coercive Control</td>
<td>.502 (n=353)</td>
<td>.509 (n=353)</td>
<td>.529 (n=183)</td>
</tr>
<tr>
<td>(WEB)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depressive Symptoms</td>
<td>.414 (n=626)</td>
<td>.425 (n=626)</td>
<td>.384 (n=301)</td>
</tr>
<tr>
<td>(CESD)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTSD Symptoms</td>
<td>.491 (n=954)</td>
<td>.505 (n=954)</td>
<td>.428 (n=472)</td>
</tr>
<tr>
<td>(SPAN)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cronbach’s alpha</td>
<td>.94</td>
<td>.97</td>
<td>.97</td>
</tr>
</tbody>
</table>

Post-Validation Changes to CAS<sub>R</sub>-SF

- 3 new items added to address gaps: use of threats, financial abuse, choking/strangulation = **15 items**
- Wording shifts to update language and/or improve clarity
- Framing: from ‘current/most recent partner” to ‘any partner’
- Revised response options (change ‘never’ and ‘only once’)
- Added lifetime experiences (y/n) to anchor recent abuse

Limitations:
- Whether CAS<sub>R</sub>-SF is robust in other samples, including with people of all genders, requires further testing
Patterns of IPV among Women

Is the CAS\textsubscript{R}-SF item pool useful in distinguishing different patterns of IPV among women?

**Approach:** Hierarchical Cluster Analysis using data from women with non-zero scores on the CAS\textsubscript{R}-SF (n= 2,343)

- Used to find people with similar patterns of response across a set of variables (develops mutually exclusive subgroups)
- Starts with each person as their own cluster – then combines sequentially based on similarity at each step
- Researchers decide on the best number of clusters (meaningful groupings)

Cluster Analysis Approach

- Responses on each item dichotomized into ‘yes/no’ (experienced in last 12 months)
- Use Ward’s Method with Euclidean distances
- *Agglomeration schedule* (distance between the two clusters combined at each step) and interpretability used to determine the number of clusters
- Examined 3, 4 and 5 cluster solutions
- Decided on 5 clusters as most interpretable
Differences in Mental Health & Fear by IPV Cluster

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<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PTSD* (SPAN)</td>
<td>4.72</td>
<td>5.50</td>
<td>6.87</td>
<td>8.65</td>
<td>9.70</td>
</tr>
<tr>
<td>Depression* (CESD)</td>
<td>18.63</td>
<td>21.93</td>
<td>24.84</td>
<td>26.35</td>
<td>30.74</td>
</tr>
<tr>
<td>Fear*</td>
<td>20.2%</td>
<td>26.0%</td>
<td>52.5%</td>
<td>89.6%</td>
<td>94.9%</td>
</tr>
<tr>
<td>CAS 12-item* mean Score</td>
<td>0.24</td>
<td>0.26</td>
<td>0.70</td>
<td>1.64</td>
<td>2.59</td>
</tr>
</tbody>
</table>

NS *p<.05
What about Men & other Genders?
Examining CAS\textsubscript{R}-SF Applicability & Fit

- Limited research on men’s experiences of IPV, but men do experience physical, sexual, psychological IPV
- Some evidence that psychological abuse/violence may be most common form of IPV among men (Follingstad & Rogers, 2013)
- Many factors account for variation in men’s experiences of IPV including sex and gender of partner (perpetrator)
- Most IPV measures used with men developed for women
- Validation of IPV measures across different genders is required
- No population data on experiences of trans/gender non-binary people

Expert Consultation Survey
Leads: Kelly Scott-Storey, Sue O’Donnell, UNB

Online Survey of 23 Experts in IPV, gender and/or masculinities

Examine 15 CAS\textsubscript{R}-SF items and rate:
- whether item reflects IPV as experienced by men
- is gender-based (e.g., wording)
- fit for men of diverse backgrounds

Comment on the CAS\textsubscript{R}-SF measure as a whole to:
- Identify gaps in the item pool
- Provide any other additional feedback/suggestions
Cognitive Testing of the CAS\textsubscript{R}-SF

18 men who identified as experiencing IPV engaged in cognitive interviews (individual, group) to:
- Assess clarity of introduction and instructions
- Explore meaning of “fear” questions
- Identify items were not relevant, unclear, too similar
- Identify important gaps
- Comment on appropriateness and clarity of response options

Men who took part asked to:
1. Complete CASr-SF
2. Assess applicability, fit, usability
3. Provide additional comments

Key Results
- Both men and experts found the CAS\textsubscript{R}-SF to be clear, applicable and understandable
- Validation that the items are consistent with men’s experiences of varied types of IPV
- NEW sexual humiliation item added for testing, based on concurrent work with Status of Women Canada, PHAC, and resonance with men’s comments
- Sex and gender of victim and perpetrator must be considered and captured
- Men conceptualize fear in various ways
Performance of the CASₐ-SF: A Gendered Analysis

Collecting primary data to further evaluate the performance of the CASₐ-SF in a diverse (gender inclusive) sample of Canadian adults who have experienced IPV. This will allow us to:

- Examine and analyze performance of full 15-item CASₐ-SF across people of varied gender identities and relationship types
- Test additional item (Item 16; sexual humiliation)
- Explore how a range of people conceptualize the construct of 'fear' in the context of IPV
- Develop a standardized scoring approach to allow for meaningful sex and gender based analysis

GBV Survey

- Volunteer sample of 1100 Canadian adults: 500 women, 500 men, 100 people with non-binary identities
- Anonymous, online survey (10 minutes)
- Gender-based Analysis: item level statistics, reliability, validity, patterns of IPV

www.GBVStudy.ca
GBV Survey Progress

- Soft Launch of survey (early April)
- Initial recruitment primarily via Kijiji, Craigslist
- Added social media including Twitter, distribution of flyers through networks
- Shifting to targeted recruitment of people who identify as LGBTQ+ and non-binary

April 28: 109 recruited

Unpacking “Fear” (an early look)

- High proportion (58.6% of 60 respondents) report fearing partner previous 12 months
- Varies by Gender:
  - Men: 48%
  - Women: 66.7%
- Reasons for FEAR vary widely (how often endorsed and gendered patterns)
Examples of Reasons for FEAR of Partner (n=58)

<table>
<thead>
<tr>
<th>Reason for Fear</th>
<th>RANK</th>
<th>Total %</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being Physically Hurt</td>
<td>2</td>
<td>70.6</td>
<td>77.3</td>
<td>58.3</td>
</tr>
<tr>
<td>Being Killed</td>
<td>7</td>
<td>33.3</td>
<td>40.9</td>
<td>18.2</td>
</tr>
<tr>
<td>Being Emotionally Hurt</td>
<td>8</td>
<td>27.3</td>
<td>31.8</td>
<td>18.2</td>
</tr>
<tr>
<td>Being Sexually Hurt</td>
<td>10</td>
<td>24.2</td>
<td>31.8</td>
<td>9.1</td>
</tr>
<tr>
<td>Family/friends being harmed</td>
<td>1</td>
<td>88.2</td>
<td>86.4</td>
<td>91.7</td>
</tr>
<tr>
<td>Pets/animals harmed</td>
<td>10</td>
<td>24.2</td>
<td>22.7</td>
<td>27.3</td>
</tr>
<tr>
<td>Children taken away/lost custody</td>
<td>10</td>
<td>24.2</td>
<td>27.3</td>
<td>18.2</td>
</tr>
<tr>
<td>Humiliated in front of others</td>
<td>5</td>
<td>51.5</td>
<td>50.0</td>
<td>54.5</td>
</tr>
<tr>
<td>Loss of Status in community</td>
<td>9</td>
<td>30.3</td>
<td>31.8</td>
<td>27.3</td>
</tr>
<tr>
<td>Loss of Privacy</td>
<td>4</td>
<td>52.9</td>
<td>50.0</td>
<td>58.3</td>
</tr>
<tr>
<td>Loss of Income</td>
<td>6</td>
<td>42.4</td>
<td>45.5</td>
<td>36.4</td>
</tr>
<tr>
<td>Loss of Stable Housing</td>
<td>3</td>
<td>54.5</td>
<td>54.5</td>
<td>54.5</td>
</tr>
</tbody>
</table>

In Summary

- IPV is complex – measurement needs to capture complexity
- CASR-SF shows promise in assessing:
  - types, patterns and severity of gendered IPV
  - types of “fear”, how this interacts with IPV experiences & other outcomes
  - role of gender in violence victimization and perpetration
- We will soon have sample specific data from those experiencing IPV, population-based data, and data from major cohort studies to more fully examine these factors and their relationships to:
  - other violence and trauma experiences
  - health and social status
  - life course data
Potential Contributions of CASR-SF

- Opportunity to measure IPV more comprehensively
  - include multiple dimensions
  - consider gender and relationship type, perpetrator gender
- New scoring approach to capture these differences
- Link to large national surveys – SSPPS and Canadian Longitudinal Study on Aging
- Uptake by researchers internationally
- Provide a better ‘fit’ between needs and types of services or interventions offered to different groups

Questions?

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