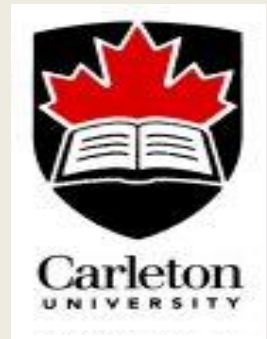# Do Young Females Follow A Gendered Pathway Into Crime? Implications for Risk Assessment & Misclassification

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The Young Female Offender

- Increase in number of females processed by criminal justice system in both Canada and US
  - Over last 30 years, number of females incarcerated increased at rate double than that of males (Calverley, 2006)

- Justifies increased attention accorded to female offenders by scholars and policy-makers

- Research on female offenders still lacking compared to that on male offenders

Gender-Neutral Perspective
(Andrews & Bonta's PIC-R)

- Probability of engaging in crime increases as perceived cost: reward decreases

- "Central Eight" predictors of criminal behavior:
  - antisocial attitudes, associates, crim. history, personality, substance abuse, family, education/vocation, leisure
  - apply irrespective of gender, race, social class

- Empirical support for applying gender-neutral tenets to female offenders(e.g., Coulson et al., 1996; Dowden & Andrews, 1999; Lowencamp et al., 2007)

- Weak predictors of criminal behavior: SES, mental health, personal distress

# Gender-Specific Perspective (Feminist Paradigms)

- Risk factors for females embedded in patriarchal forces of oppression

- Women require unique assessment tools grounded in gender-specific paradigms

- Two perspectives of interest:
  - Relational-Cultural Theory
    - Value of relationships/connectedness
  - Feminist Pathways
    - Early victimization sets stage for survival-based crime
    - Role of macro-level variables (e.g., economic marginalization)

Limitations of Female Offender Research

- ## Gender-Neutral Research
  - Failure to disaggregate by gender
  - Researcher bias (i.e., guided by premise of gender-neutrality)
  - Potential over-classification of females?
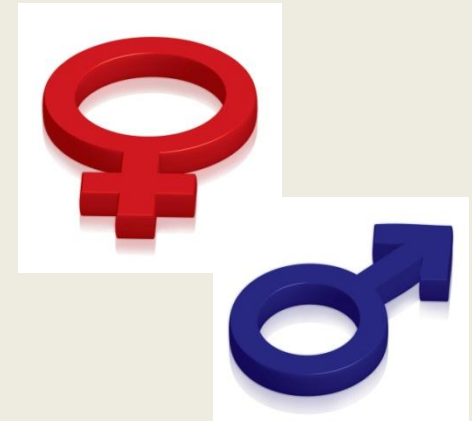
- ## Feminist-Based Research
  - Anecdotal and qualitative
  - No male comparison group or large male-to-female ratio

Current Study

- Quantitative assessment of etiology and offending behavior of young female (w/ male comparison group)
    - Will a gendered pathway theme emerge uniquely for young females?

- Determine:
  (1) the predictive validity of a 'gender-neutral tool'
  (2) associated classification errors for females (and subgroups) relative to males
   - Will girls be over-classified relative to boys?

Methodology:
Sample

- Archival risk assessment and recidivism data
    - Orbis Partners
    - NY State Division of Probation and Correctional Alternatives (DPCA)

- N = 1,838 (663 female, 1, 175 male); 54 counties across New York State

- 14 to 17 years of age at intake (M = 14.59, SD = 1.66)

- Processed by DPCA between 2000-2005

Measures

- Youth Assessment Screening Instrument (YASI; Orbis Partners, 2000)
  - Grounded in gender-neutral literature
  - 88 items across 10 domains (Legal history, Family, School, Attitudes, Mental health, etc.)
  - Both risk and protective factors (static and dynamic)

- Recidivism – official convictions within 2-year follow-up period
  - Girls: n = 111 (16.7%)
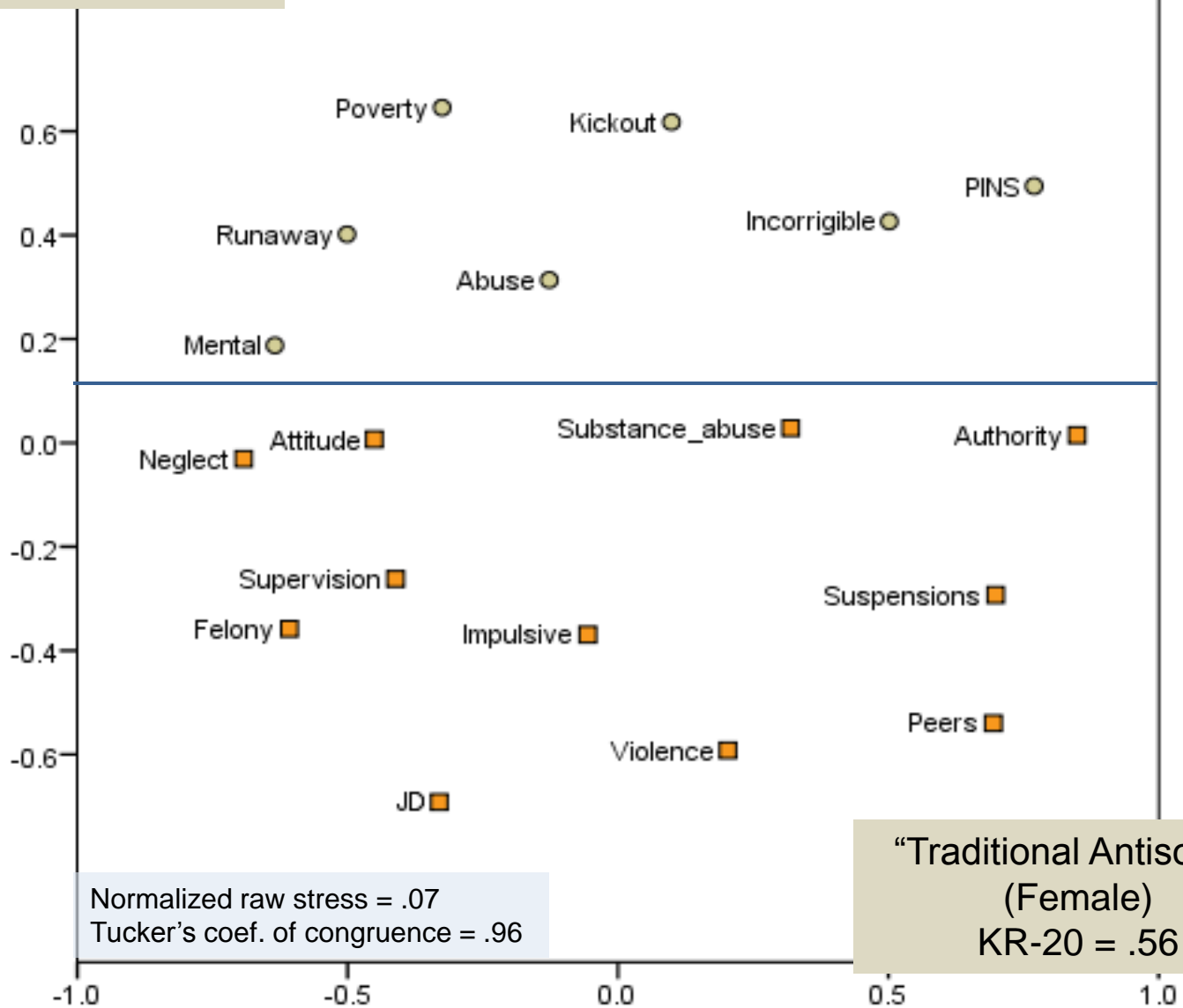 - Boys: n = 369 (31.4%)
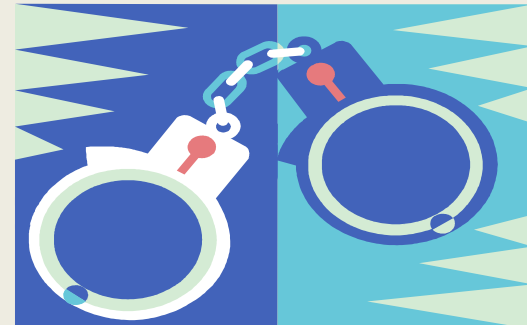
Analysis 1: Derivation of Themes

- Extraction of 18 variables from YASI based on both gender-neutral and feminist perspectives

- Female and male subsamples examined separately

- Proximity Scaling
    - Principle of contiguity: items tied to common theme will co-occur more highly and emerge in closer proximity in a geometric space

"Gendered Pathways" (Female) KR-20 = .47

"Traditional Antisocial" (Female) KR-20 = .56

Normalized raw stress = .07
Tucker's coef. of congruence = .96

"Traditional Antisocial" (Male) KR-20 = .47
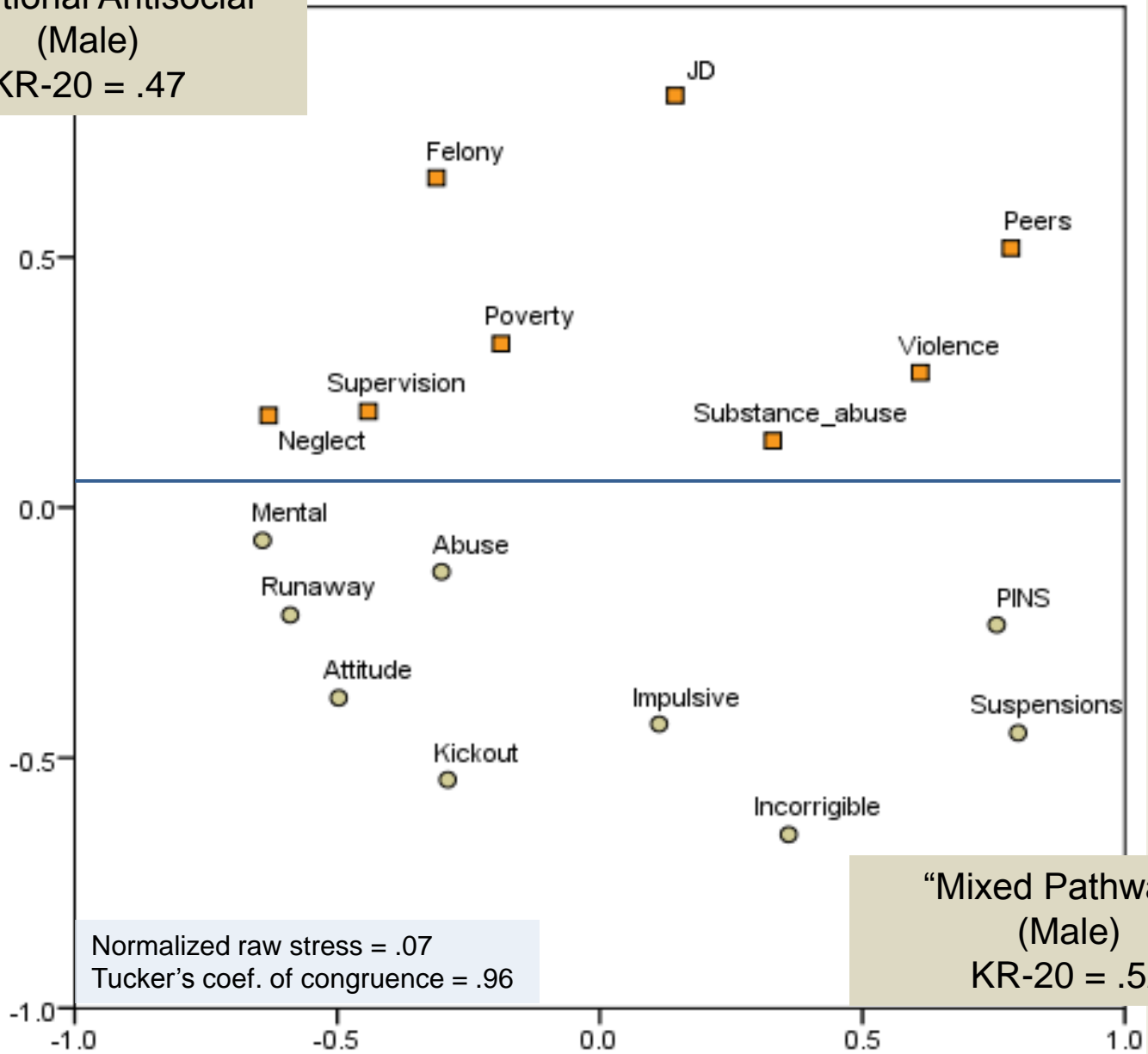
"Mixed Pathways" (Male) KR-20 = .52

Normalized raw stress = .07
Tucker's coef. of congruence = .96

Analysis 2: Predictive Validity of YASI

- Identification of "dominant" offender types based on proportion of items displayed from each theme
  - % items from A > % items from B
  - % items from A > 50%

- Discriminant function analysis and ROC analysis to determine predictive validity of YASI on females, males, and each dominant sub-group, respectively

YASI: Predictive Validity

Model	χ2 (df)	p	Wilk's Lambda (λ)	Effect size (η2)	AUC (95% CI)
Girls (n = 663)	18.86 (2)	<.001	.97	.01	.63 (.59 - .69)
Boys (n = 1175)	56.96 (2)	<.001	.95	.01	.64 (.60 - .67)

Model	χ2 (df)	p	Wilk's Lambda (λ)	Effect size (η2)	AUC (95% CI)
Girls – Gendered (n = 194)	6.79(2)	.05	.97	.01	.59 (.45 - .70)
Boys – Mixed (n = 103)	10.15(2)	<.001	.90	.04	.68 (.57 - .79)
Girls – Antisocial (n = 137)	.74 (2)	.69	.99	.003	.53 (.43 - .64)
Boys – Antisocial (n = 330)	12.73 (2)	<.001	.96	.01	.62 (.55 - .68)

Analysis 3: Does the YASI Over-classify Female Offenders?

- Comparison of YASI risk classification with recidivism base rates (*Risk X Outcome*)

- Independent Samples Chi-Square Tests
  - Over-classification (false positives)
  - Under-classification (false negatives)

- Differences in classification errors between females, males, and thematic subgroups

YASI – Classification Errors

Subsample	Overclassification: % False Positives (95% CI)	Underclassification: % False Negatives (95% CI)
Girls (n = 663)	26.5 (23.1 – 29.9)	4.1 (2.5 – 5.6)
Boys (n = 1175)	23.7 (21.3 – 26.1)	6.9 (5.5 – 8.3)

Subsample	Overclassification: % False Positives (95% CI)	Underclassification: % False Negatives (95% CI)
Girls – Gendered (n = 194)	33.0 (26.4 – 39.6)	2.6 (.4 – 4.8)
Boys – Mixed (n = 103)	29.4 (20.6 – 38.2)	2.9 (0 – 6.2)
Girls – Antisocial (n = 137)	54.0 (45.7 – 62.3)	2.2 (0 – 4.7)
Boys – Antisocial (n = 330)	43.9 (38.6 – 49.3)	2.9 (0 – 6.2)

Discussion

- Qualified support for gendered pathway

- Predictive validity of YASI significant but relatively low for both females and males

- High rate of over-classification in both female and male-subsample
  – Why did the YASI perform so poorly with the antisocial subgroups?
    - Youth vs. adult populations
    - Overweighting of "antisocial" items?

Future Research: What's Next?

- Develop separate versions of the YASI for boys and girls, respectively

- Revisit item weighting

- Revisit cutoffs for classification into risk categories

Thank You!

Please direct questions to:

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