Overview of Talk

This talk is a polemic for the primary prevention of rape. I will argue that current prevention programs have been suboptimal because they focus on the correlates and not the causes of rape.

Overview of Talk

Effective prevention requires a valid etiological model. I will present a promising model and draw out its implications for developing effective prevention programs.

Part I

1. I will set up the polemic by critically evaluating current prevention models and arguing that they may be focusing on correlated components of sexual aggression and not core causes.
2. I will present an overall causal model that integrates the extant research on the traits related to a proclivity for sexually coercive behavior.
3. I will integrate into this model the research on the concurrent correlates of rape proclivity.
4. I will then unpack nature of the traits.

Part II

I will integrate these traits into both their known developmental antecedents and the potential genetic predispositions of these traits that interact with early experience.

Part III

I will draw out the implications of the proposed etiological model for treatment and recommend modifications for prevention strategies.
Part I (a)
Evaluation of Current Prevention Strategies

Common Target of Programs
Most have been targeted acquaintance rape and have applied a skills-based approach aimed at improving sexual relationship knowledge and dating behavior and countering rape-supportive attitudes (Gidycz, Orchowski, & Edwards, 2011).

Anderson & Whiston, 2005
Meta-analysis of 69 studies
102 treatment interventions
18,172 participants

Overall Results

Conclusion on Rape Incidence
“If effectiveness is defined solely as a decrease in sexual assault, then there is little support available from the current pool of studies.”

Recommended New Directions
🔹 Develop longer, more comprehensive, multi-level prevention strategies that include peer, community, and societal levels.
🔹 Intervene earlier, in high schools.
🔹 Focus on by-stander interventions.
🔹 Attempt to impact the social context.

Andersen & Whiston, 2005
Alternatively

Historically, primary prevention programs have depended on empirically validated etiological models.
Interventions that target causes rather than correlates have greater potential for success.
Moffitt (2005) – Aggression literature is littered with prevention programs that do not work, because they target correlates.
To be successful we must determine the best etiological/causal models.
Generate recommendations for intervention from the model.

Part I (b)
Current Correlates and Hypothetical Traits of Rape

Etiology SEM Model

Validation
Replicated
• College Students (Johnson & Knight, 1998)
• Community non-criminal controls (Knight & Sims-Knight, 2003)
• Generic non-sexual criminals (Johnson & Knight, 1998)
• Juvenile Sexual Offenders (Knight & Sims-Knight, 2004)

Validation
Consistent with
• College Students (Malamuth, 2003; Abbey, Jacques-Tiura, & LeBreton, 2011)
• Representative Sample of Adolescent Males (Casey, Beadnell, & Lindhorst, 2009)
• Generic Sex Offenders (Lussier, LeClerc, Cole, & Proulx, 2007)

Recent Developments in the Etiology Model Traits
Recent Additional Developmental Antecedents in the Etiology Model

Transformation from the Etiological to the Typological Model

MTC:R4

Construct Validation

- The two models converge on the same three core traits as central to their structure—
  - Sexualization,
  - Callousness/Manipulative, and
  - Externalizing/Dysinhibition.
- These congruent models emerged from empirical investigations that started—
  - In radically different populations (noncriminal, mostly college convenience samples versus offenders and civilly committed ASOs),
  - Using different data sources (self-report versus ratings from archival records), and
  - Using different analytic techniques (structural equation modeling versus cluster analyses).
Predictive Validity

- These three traits are important in actuarials that predict recidivism (Peerson & Martijn-Bourgon, 2005, 2009; Knight & Thornton, 2007, 2014).

Etiology SEM Model: Interface with Community Studies

Concurrent Correlates

- Plays multifaceted role in rape (Abbey, Zanuck, Beck, Clinton, & McAuslan, 2004; Prentky & Knight, 1991).
- In 50% of sexual assaults--
  - the perpetrator has been drinking (Abbey et al., 2004).
  - the victims have been found to be using alcohol (Abbey et al., 2004).

Alcohol Use and Abuse

- Impairs inhibitory controls;
- Exacerbates communication misinterpretations;
- Disrupts of higher order cognitive processing; and
- Interacts with existing personality characteristics (e.g., trait aggression)–
  All interface with sexually coercive behavior

Alcohol Use and Abuse

- Results in –
  - increased frequency and recidivism of sexual coercion (Abbey, Wagner, Pierce, & Jacques-Tiura, 2012),
  - increased violence in the assault (Hamdi & Knight, in press; Abbey et al., 2003),
  - curvilinear relation to the severity of outcome (i.e., whether coitus is achieved) (Abbey et al., 2001).

Also, victim alcohol consumption covaries with a greater risk of completed rape.
Covaries with the Externalizing Spectrum (Krueger, Hicks, Patrick, Carlson, Iacono, & McGue, 2002).
• Covaries with the PCL Impulsivity/ Antisocial Behavior Factor (Factor 1),
• But not with the PCL Affective- Interpersonal Characteristics Factor (Factor 2) (Taylor & Lang, 2006).

Rape, especially acquaintance rape, occurs within a social context that requires the active selection and processing of information.
• Multiple studies have suggested that males who are likely to rape may have perceptual biases that lead to specific misperceptions of women’s communications (Abbey, 1982, 1987).

- Drieschner and Lange (1999) -- three hypothetical classes of perception--
  - the tendency to over-perceive
  - friendly behavior as seductive and
  - assertive behavior as hostile;
  - in ambiguous situations a positivity bias that transforms negative, dismissive communications into encouragement; and
  - a general set to mistrust women’s communications and perceive them as hostile.

The over-perception of sexual intent in women's behavior has received the greatest empirical support (Farris, Treat, Viken, & McFall, 2008).

Method – Attentional Study
36 undergraduates at a northeastern university
Tasks:
+ Short form of the Multidimensional Inventory of Development, Sex, and Aggression (the MIDSA)
+ Cognitive disattention task.

Scales
Conning and Superficial Charm
Machismo
Impulsivity
Pervasive Anger
Anxiety
Expressive Anger Toward Women
Hostility Toward Women
Sexual Preoccupation
Sexual Deviance
Sociosexuality
(Yoon & Knight, 2011)
Preventing Rape

Rutgers Conference, 2014

Method
Task Condition

Color

Red
Green
Square
Triangle

Continue

(task & Knight, 2013)

Results
Non-Task Condition

(task & Knight, 2011)

Results
Task Condition

(task & Knight, 2013)

Results
Correlates of Difficulty with Sexual Disattention

(task & Knight, 2011)

Rape Attitudes

In a meta-analysis examining 11 different measures of masculine ideology across 39 studies, strongest support found for 2 scales--

- Hostile Masculinity Scale (Malamuth, Sockloskie, Koss, & Tanaka, 1991), and
- Hypermasculinity Scale (Mosher & Sirkin, 1984).

(task & Knight, 2011)

(task & Knight, 2013)

(task & Knight, 2011)

(task, 2009)

(task, 2009)

(task, 2009)

(task, 2009)

(task, 2009)
Rape Attitudes

38-Site Study (Hines, 2007) —
Such adversarial attitudes about relationships were related to sexual aggression in both men and women, across cultures, and across samples.

Rape Attitudes

Traits >> Rape Attitudes

Rapists > Child Molesters & Community Controls
Negative (or Hyper) Masculinity and Hostility Toward Women.
Over all samples—

MIDSA

(MIDSA, 2011; Knight & Sims-Knight, 2003)

Pornography Use

Two meta-analyses establish a moderate correlation between porn use and sexual coercion (Hald, Malamuth, O’Connor, & Tuen, 2008; Oddone-Paolucci, Genio, & Violato, 2000).

Pornography Use

The same risk factors like high sexual fantasy, sociosexuality, dominance, hypermasculinity, etc. predict both porn use and rape (Kingston, Malamuth, Fedoroff, & Marshall, 2009; Malamuth, Addison, & Koss, 2000).

Pornography Use

Exposure to sexual materials is more likely to increase rape proclivity in those who are high on these common risk factors (Kingston et al., 2009; Malamuth, & Huppin, 2005).

traits >> pornography use

MIDSA

Concurrent Correlates in the Model
Hypothesized Causative, Trait Characteristics

**Antisociality/Externalization**

- **Externalizing**
  - Facet 4
  - Poor Behavioral Controls
  - Early Behavior Problems
  - Juvenile Delinquency
  - Criminal Versatility

  - Externalizing Syndrome
  - Emotional Dysregulation

**Antisociality/Externatization**

- A consistent covariate for rapists of age-appropriate females in –
  - **Adult sex offender samples** (Knight & Guay, 2006; MIDSA, 2003; Prentky & Knight, 1991).
  - **Non-criminal samples of sexually coercive males** (Abbey & McAuslan, 2004; Callhoun, Bernat, Clam, & Frame, 1997).

**Antisociality/Externatization**

- Rapists are predominantly **criminal generalists** (Harris, Mazerolle, & Knight, 2009; Harris, Smallbone, Dennison, & Knight, 2009).
- **Non-sexual recidivism** more likely than sexual recidivism in both juveniles and adults who sexually offend (Caldwell, 2002; Knight & Thornton, 2007; Zimring, 2004).

**Antisociality/Externatization**

- This component has significant overlap with –
  - the **externalizing syndrome** (Krueger, 2006)
  - **emotional lability** (Stinak, Goldberg, Davesra, & Knight, 2007).

**Callous/Manipulative**

- **Callous/Manipulative**
  - **PCL Facet 1**
  - Gib/Superficial Charm
  - Grandiose Sense of Self-Worth
  - Pathological Lying
  - Conning/Manipulation

- **PPI Self-Centered Impulsivity**
  - Machiavellian Egocentrism
  - Carefree Nonplanfulness
  - Blame Externalization
  - Impulsive Nonconformity
Callous/Manipulative: Community Samples

- Narcissism predicts rape supportive attitudes and rape supportive behavior in college student laboratory experiments (Bushman, Bonacci, Dijk, & Baumeister, 2003).
- The CM Factor covaries with sexually coercive behavior (Knight & Sims-Knight, 2003).

Callous/Unemotional: Criminal Samples

- JSOs > non-sex violent delinquents on CU Factor of the Psychopathy Screening Device, a youth version of the PCL-R (Caputo, Frick, & Brodsky, 1999).
- JSOs with CU traits > JSO low on CU:
  - number of sexual offense victims,
  - use of more violence with their victims, and
  - engagement in more sexual offense planning (Lawing, Frick, & Cruise, 2010).
- Rapists > child molesters: on both Factor 1 facets of the PCL-R: Interpersonal and Affective (Kim, Guay, & Knight, 2007).

MIDSA Example of CM Scale

Hypersexuality

Now widely accepted -- some aspect of sexual appetitive behavior is a critical component of rape.

Controversy – what more important?
- Sexualization (hypersexuality, sexual compulsivity, sexual preoccupation) or
- Sociosexuality (proclivity toward impersonal sex).

MIDSA Study of Hypersexuality

<table>
<thead>
<tr>
<th>Group Abbrev.</th>
<th>Label</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexually Coercive</td>
<td>Self-identified Sexually Coercive Criminals</td>
<td>59</td>
</tr>
<tr>
<td></td>
<td>Self-identified Sexually Coercive Community Controls</td>
<td>49</td>
</tr>
<tr>
<td>Non-Coercive</td>
<td>Self-identified Nonsexual Criminals</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Self-identified Nonsexual Community Controls</td>
<td>170</td>
</tr>
</tbody>
</table>

(Ronis & Knight, submitted)
Hypersexuality appears to be the motivator of a variety of fantasies about rape for juveniles and adults —

- Explicit Planning
- Intimacy Seeking/Sexual
- Sadistic Fantasies
- Agg/Violent Fantasies
- Eluding Apprehension
- Paraphilic Coercion Scale

Hypersexuality -- MIDSA Results

- Using a TSO of ≥7 orgasms per week as an indicator of hypersexuality;
- The mean TSO in the sample was 2.3 (SD = 2.9);
- Approximately 12% met the TSO clinical criterion for hypersexuality (TSO ≥ 7)

Predicting Recidivism in Canadian Sex Offenders

- Using a TSO of ≥7 orgasms per week as an indicator of hypersexuality;
- The mean TSO in the sample was 2.3 (SD = 2.9);
- Approximately 12% met the TSO clinical criterion for hypersexuality (TSO ≥ 7)

Predicting Recidivism in Project Vienna/Hamburg

1. Excessive time
2. Repetitively engaging in response to dysphoric mood
3. Repetitively in response to stressful live events
4. Repetitive but unsuccessful efforts to control
5. Repetitively engaging in sexual behavior while disregarding the risk for physical or emotional harm to self or others

Representative sample of Austrian child sexual abusers fulfill the lifetime criteria for HD (21/244; 8.6%)
**Part II**

Early Developmental and Genetic Influences

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### Overview

- Early environmental stressors
  - What abusive experiences affect development?
  - What outcomes are affected?
- Research on genes, particularly single gene research.
- Gene-environmental interactions.

---

### Etiology: SEM Model Traits

- **Abuse & Genetic Antecedents**
  - Frick & Marsee, 2006
  - Frick, 2005
  - Frick & Marsee, 2006
  - Frick, 2005
  - Viding & McCory, 2012
- **Externalizing**
- **Callous/Manipulative**
- **Hypersexuality**

---

### Predicting Recidivism in Child Molesters

- **Sexual Recidivism**
  - with HD (n=21)
  - without HD (n=223)
  - Total (N=244)

<table>
<thead>
<tr>
<th>Percent Recidivating</th>
<th>with HD (n=21)</th>
<th>without HD (n=223)</th>
<th>Total (N=244)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>28.6%</td>
<td>9.9%</td>
<td>11.5%</td>
</tr>
</tbody>
</table>

(Rattenborg et al., in preparation)

---

### Early Influences

- Overview
- Genetic dispositions interact with environment
Effects of Abuse in Sexually Coercive Samples

- Prevalence of abuse.
- Kinds of abuse → specific effects?
- Cumulative abuse?

Prevalence of Abuse Among Sex Offenders

How Large is the Problem of Early Abuse?

Sample --
307 residential juveniles who sexually offended;
From Maine, Massachusetts, Minnesota, & Virginia;
11 to 19 years old.

Sexual Abuse Before Age 17

Also high on --

- Physically abused-- 78% hit with an object or worse.
- Emotionally abused-- 21% regularly
  23% few times a year.
- Vicarious violence – almost half observed more than once.

Specific Effects of Types of Abuse
Types of Abuse Have Differential Effects

- Sexual Abuse
- Physical Abuse

Meta-analysis of 17 studies of adult sex offenders
(Jespersen, Lalumiere, & Seto, 2009)

Kinds of Abuse Have Differential Effects
JSOs versus Generic Delinquents

- Sexual abuse
- Physical abuse
- Family sexual violence
- Family nonsexual violence
- Nonfamily nonsexual violence
- Emotional abuse or neglect

Average Effect Size
Meta-analysis of 59 studies of juvenile sex offenders
(Seto & Lalumiere, 2010)

We Combined Various Components

- Cumulative abuse correlated more highly with negative outcomes

Also

Correlations among Abuse Categories

<table>
<thead>
<tr>
<th></th>
<th>Emotional Abuse</th>
<th>Sexual Abuse</th>
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<th>Vicarious Violence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexual Abuse</td>
<td>.17**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Abuse</td>
<td>.36**</td>
<td>.21**</td>
<td></td>
<td>.30**</td>
</tr>
<tr>
<td>Vicarious Violence</td>
<td>.36**</td>
<td>.11</td>
<td>.30**</td>
<td></td>
</tr>
<tr>
<td>Caregiver Instability</td>
<td>.19**</td>
<td>.24**</td>
<td>.15</td>
<td>.08</td>
</tr>
</tbody>
</table>

** p < .01
Residential juveniles who sexually offend
(Knight & Daversa, 2005)
**Effects of Cumulative Abuse on Traits**

- Allostatic load, as well as kind of stressor, is important.

(Teicher, Samson, Polcari, & McGreenery, 2006)

**Genetics of Aggression: Individual Differences**

**Focus**
- Single genes that help us to specify the effects of genes on behavior.
- Gene by environment interactions that confirm the importance of nature and nurture.
- Lesson
  - Some genes are expressed only when they encounter deleterious environments.
  - They are not a death sentence.

**Getting from Genes to Behaviors**

**MAOA gene**
- Encodes the MAOA enzyme that metabolizes neurotransmitters such as norepinephrine, serotonin, and dopamine.
- Variation in this gene results in higher or lower MAO activity.
- Lower MAO activity is related to increased aggressive behavior.
- A meta-analysis has corroborated MAOA gene by environment effects on aggression (Kim-Cohen et al., 2006).

**Genetic Variation and Environment**

- Vulnerable + Maladaptive
- Resilient + Adaptive

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Preventing Rape
Overall Summary of Etiology Findings
• Early stress -> prevalent and harmful among sex offenders.
• Types of abuse -> differential effects.
• Genetic component involved in both externalizing and internalizing syndromes.
• Genes interact

More Summary and Treatment Implications

Part III
Recommendations for Treatment and Prevention Strategies

TREATMENT Implications
Core Traits ➔ Key Dynamic Recidivism Predictors
Externalizing

Grievance Thinking
Sexualization
Sex Attitudes

Extraversion
Callousness
Hypersensitivity

Treatment Targets, replicated for Sex Offenders (Hanson et al., 2009)
Types of Prevention Strategies

- **UNIVERSAL** strategy -- Intervening in a general way in the population with a generic program.
- **SELECTED** strategy -- Intervening in a sample that is known to have a high base rate for the particular problem.
- **INDICATED** strategy – Intervening with individuals who have the prodromal signs of a disorder, but have not yet crossed the line.

**Types of Prevention Strategies**

**UNIVERSAL** Strategy

Should focus on--

- **Causal traits and not correlated effects** (Moffitt, 2005).
  - emotional dysregulation,
  - callous-unemotionality, and
  - hypersexuality
- **Earlier**, rather than later universal interventions should be attempted (middle school).

**FOXBORO TASK FORCE ON BULLYING**

**Interfacing with Bullying**

*Knights & Sims-Knight, 2003*
Caring School Community
Universal Strategy

Caring Community
- Sense of Community
- Academic Motivation & Aspirations
- Prosocial Attitudes
- Behavioral Problems
- Academic Performance

Preventing Rape

Conflict Resolution
Buddy Mentoring Program
Community/Cooperation Events
Service Learning

Caring School Community

2010
2011
2012
2013
2014
2015

Scale Score
0
0.2
0.4
0.6

Nonphysical Aggression by MS Grade

2011 2012 2013

Nonphysical Aggression by MS Grade

2011 2012 2013

Yes CSC
No CSC
Emotional Dysregulation by MS Grade

- Scale Score

Sexual Harassment

- High School
- Aggressor Frequency
- 21% aggressors
- In cyber (45%)
- Physically (32%)
- Nonphysically (62%)
- Relationally (57%)

- 80% of sexual harassers do other types

Sexual Targets

- High School
- Target Frequency
- 18% targets
- In cyber (53%)
- Physically (22%)
- Nonphysically (42%)
- Relationally (39%)

- 77% of sexual targets are victims of other types

Caring School Community

- Questions on sexual harassment and sexting

SELECTED Strategy

- Some high risk groups are obvious from the model.
- Survey may ultimately help identify other high risk groups for more intensive intervention.
- Selected strategies should target samples with a high base rate of the causal traits.
**INDICATED Strategy**

- The Foxboro program has already desensitized the school community to computer assessment.
- Ultimately, the computer assessments could provide a mechanism for efficient mental health checkups (see Fox, Halpern, & Forsyth, 2008).
- This has the potential for identifying vulnerable children.
- Specific interventions could then be fashioned and tested, being very careful to construct programs so that vulnerable youth were not pathologized or stigmatized.

**Conclusions**

- Thus, our etiological model proposes a difference in perspective on prevention than that currently in vogue.
- The data we have presented call for the concerted research effort that is necessary to maximize the efficacy of prevention interventions.

**Conclusions**

- We must advocate for –
  - the etiology research that will maximize their efficacy of our interventions efficacy, and
  - the implementation research that will test this efficacy.
- In the long run prevention is not only the route that will most effectively minimize the pain and suffering of victims, it also will prove to be the most cost effective solution to the problem of violence.

For a Copy of the PPT or PDFs of R. Knight References:

knight2@brandeis.edu