

Connecting Theory With Research: How to Test Theoretical Assertions About the Causes of Sexual Offending


Kevin L. Nunes, Chantal A. Hermann, Michael C. Seto, Tony Ward, Anthony R. Beech, and Patrick Lussier

Pre-Conference Seminar
 34th Annual Research and Treatment Conference of the Association for the Treatment of Sexual Abusers (ATSA)
 October 14, 2015 Montreal, Quebec Canada





Introductions and Overview

Kevin L. Nunes and Chantal A. Hermann



Why do we Care About Theory?


- Framework for evidence
- Guide research and practice

Why do we Care About the Causes of Sexual Offending?


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  graph TD
    A[Understanding causes of sexual offending] --> B[More effective and efficient assessment, management, and intervention]
    B --> C[Reduce sexual offending]
  
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Causal Relationship

- A causal relationship exists if
 - 1. the cause preceded the effect,
 - 2. the cause was related to the effect, and
 - 3. we can find no plausible alternative explanation for the effect other than the cause
- (Shadish et al., 2002, p. 6, paraphrasing John Stuart Mill)




Goals of Seminar

- Summarize ITSO-R, DLC approach, and MFMSO
- Take stock of the state of the available evidence
- Guidance for interpreting and conducting research
- Facilitate more rigorous and relevant research




• Each presenter will address the following questions:

- What relevant evidence is available regarding the main assertions made in the ITSO-R/DLC approach/MFMSO?
- To what extent does the available evidence support the assertions?
- What evidence is missing?
- What methodological approaches (e.g., design, measurement, analysis, etc.) will yield more conclusive tests of the assertions?



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Topic/Activity	Speaker
Introductions and overview	Nunes & Hermann
Research methodology review	Nunes & Hermann
Summary of ITSO-R	Beech
Guidance for future research on ITSO-R	Beech
ITSO-R discussion	Everyone
Summary of DLC approach	Lussier
Guidance for future research on DLC approach	Lussier
DLC approach discussion	Everyone
Summary of MFMSO	Seto
Guidance for future research on MFMSO	Seto
MFMSO discussion	Everyone
Consultation	Everyone
Concluding remarks	Nunes & Hermann



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Research Methodology Review


Kevin L. Nunes and Chantal A. Hermann



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Some Designs That Have Been or Could Be Used


- Description of a case or sample, but no comparisons or associations examined
- Cross-sectional/retrospective observational/correlational
- Single wave longitudinal observational/correlational or quasi-experiment
- Multi-wave (the factor was assessed at two or more time points) longitudinal observational/correlational or quasi-experiment
- Randomized experiment



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Typical Study


- Researchers compared a group of people who had committed sexual offences to a group of people who had never committed sexual offences. The sexual offenders had **more** beliefs supportive of sexual offending than did the people who had not sexually offended (the result had a medium effect size and was statistically significant).



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Causal, Associated, or Predictive?

- **Cause:** X, alone or in combination with other things, directly or indirectly, leads at least some people to sexually offend
- **Predictor:** X, alone or in combination with other things, directly or indirectly, is associated with the likelihood or amount of sexual offending **in the future**
- **Associated:** X, alone or in combination with other things, directly or indirectly, is associated with the likelihood or amount of **past, current, or future** sexual offending



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Plausible Interpretations?

- X influenced sexual offending
- Sexual offending influenced X
- Some other factor influenced X
- Some other factor influenced sexual offending
- X did not influence sexual offending

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Appropriate Conclusions?

- X should be an important target in treatment programs aimed at reducing the likelihood of offending
- Change in X can be expected to lead to change in the likelihood of offending
- Changing X (e.g., through treatment) can be expected to reduce the likelihood of offending

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Causal, Associated, or Predictive?

- ~~• Cause: X, alone or in combination with other things, directly or indirectly, leads at least some people to sexually offend~~
- ~~• Predictor: X, alone or in combination with other things, directly or indirectly, is associated with the likelihood or amount of sexual offending in the future~~
- Associated: X, alone or in combination with other things, directly or indirectly, is associated with the likelihood or amount of **past, current, or future** sexual offending

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Plausible Interpretations?

- ✓ X influenced sexual offending
- ✓ Sexual offending influenced X
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- ✓ X did not influence sexual offending

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Appropriate Conclusions?

- ~~• X should be an important target in treatment programs aimed at reducing the likelihood of offending~~
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Steps in Testing Hypotheses About Causes of Sexual Offending


- Definition
 - Clear and precise conceptualization of the construct
- Measurement
 - Accurate measurement of the construct
- Causal role
 - Test of the extent to which the construct plays a causal role in sexual offending

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Validity of Inferences


- Inference: conclusion, knowledge claim, or proposition
- How true or accurate is the inference?
- Validity is a matter of degree



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4 Main Types of Validity (Shadish et al., 2002)


- Internal validity
 - “inferences about whether observed covariation between A (the presumed causal variable) and B (the presumed outcome variable) reflects a causal relationship from A to B as those variables were manipulated or measured”
- Construct validity
 - Inferences about the constructs presumed to be represented by the observed persons, settings, and cause and effect operations included in a study
- External validity
 - “inferences about whether the causal relationship holds over variation in persons, settings, treatment variables, and measurement variables”
- Statistical conclusion validity
 - inferences about the correlation (covariation) between the presumed causal variable and the presumed outcome variable



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Threats to Validity

- “Threats to validity are reasons why we can be partly or completely wrong when we make an inference about covariance [statistical conclusion validity], about causation [internal validity], about constructs [construct validity], or about whether the causal relationship holds over variations in persons, settings, treatments, and outcomes [external validity]” (Shadish et al., 2002, p. 39)




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Some Designs That Have Been or Could Be Used


Weakest inferences

- Description of a case or sample, but no comparisons or associations examined
- Cross-sectional/retrospective observational/correlational
- Single wave longitudinal observational/correlational or quasi-experiment
- Multi-wave (the factor was assessed at two or more time points) longitudinal observational/correlational or quasi-experiment



Strongest inferences


- Randomized experiment



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Strength of Inferences Should Match Strength of Evidence

- Although we could and should do more rigorous research, **the available research is important, valuable, and useful**
- The main issue here is the validity of inferences
- It is important for researchers to match the strength of inferences to the strength of evidence so that we do not misinform or become complacent



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- **Methodologically rigorous studies minimize the number and plausibility of threats to validity, thereby permitting stronger inferences**



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Some Ways to Minimize the Plausibility of Alternative Interpretations

- More rigorous designs
- Better measures; i.e., scores have demonstrated acceptable levels of reliability and construct validity
- Larger samples
- More representative sampling of population
- Multiple comparison groups
- Measurement and statistical control of plausible alternative causal variables

Complementary Evidence

- Typically a trade-off between different types of validity in any one study
- Use the complementary strengths and weaknesses of different studies to gather and produce more informative body of evidence. For example,
 - Randomized experiments (usually with non-forensic/correctional samples and analogous variables)
 - Studies of forensic/correctional samples (usually observational cross-sectional or, less often, longitudinal)

Suggested Readings

- Abbey, A., & McAuslan, P. (2004). A longitudinal examination of male college students' perpetration of sexual assault. *Journal of Consulting and Clinical Psychology, 72*, 747-756. doi 1037/0022-006X.72.5.747
- Edwards, S. R., & Vogel, D. L. (2015). Young men's likelihood ratings to be sexually aggressive as a function of norms and perceived sexual interest. *Psychology of Men and Masculinity, 16*, 88-96.
- Harris, G. T., & Rice, M. E. (2015). Progress in violence risk assessment and communication: Hypothesis versus evidence. *Behavioral Sciences and the Law, 33*, 128-145.

- Kazdin, A. E. (2003). *Research design in clinical psychology* (4th ed.). Boston, MA: Allyn and Bacon.
- Nunes, K. L., Hermann, C. A., Maimone, S., & Woods, M. (2015). Thinking clearly about violent cognitions: Attitudes may be distinct from other cognitions. *Journal of Interpersonal Violence, 30*, 1322-1347. doi: 10.1177/0886260514540329
- Nunes, K. L., Pettersen, C., Hermann, C. A., Looman, J., & Spape, J. (2014). Does change on the MOLEST and RAPE scales predict sexual recidivism? *Sexual Abuse: A Journal of Research and Treatment*. Advance online publication. doi: 10.1177/1079063214540725

- Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Belmont, CA: Wadsworth.
- Thompson, M. P., Swartout, K. M., & Koss, M. P. (2013). Trajectories and predictors of sexually aggressive behaviors during emerging adulthood. *Psychology of Violence, 3*(3), 247-259. doi: 10.1037/a0030624

The Integrated Theory of Sexual Offending (ITSO-R)

Anthony Beech & Tony Ward
October 2015, ATSA

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There is nothing more practical than a good theory' Lewin (1952, p.169)

- Here Lewin suggests that:
 - Theorists should try to provide new ideas for understanding or conceptualizing a (problematic) situation, and provide ideas which may suggest potentially fruitful new avenues of dealing with that situation
 - Applied researchers should provide theorists with key information and facts relevant to solving a practical problem, facts that need to be conceptualized in a detailed and coherent manner
- More generally
 - theorists should strive to create theories that can be used to solve social or practical problems
 - practitioners and researchers in applied psychology should make use of available scientific theory (Vansteenkiste & Sheldon, 2006)
- Kurt Zadek Lewin (1890–1947) was a German-American psychologist, known as one of the modern pioneers of social, organizational, and applied psychology. He is often recognized as the founder of social psychology.**

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Background

- There are a number of rich and insightful accounts of sexual offending
- See Ward, Polaschek, & Beech, 2006 for overviews of these
- We note here three levels of theories

Theories of sexual offending



Tony Ward, Devon L.L. Polaschek and Anthony R. Beech

Background: Level of theories

- Level I** represent comprehensive or multi-factorial accounts of sexual offending (e.g., Marshall & Barbaree, 1990) The aim is to take into account the core features of sexual offenders and to provide a complete account of what causes these phenomena and how they manifest in sexually abusive actions.
- Level II**, or middle level theories, have been proposed to explain single factors thought to be particularly important in the generation of sexual crimes, for example, the presence of empathy deficits (Marshall, Hudson, Jones, & Fernandez, 1995)
- Level III** are descriptive models of the offence chain or relapse process (e.g., Pithers, 1990; Ward, Louden, Hudson, & Marshall, 1995; parts of the Beech-Ward (2004) risk-etiology model)

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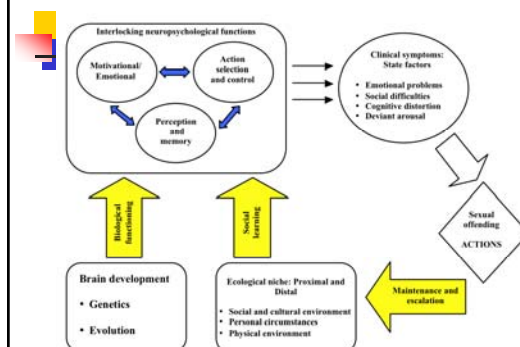
Theory knitting

- A theory knitting strategy stipulates that researchers should seek to integrate the best existing ideas in a given domain within a new framework (Ward & Hudson, 1998)
- This strategy involves identifying the common and unique features of the relevant theories, so it is clear what constitutes a novel contribution and what does not.
- The major virtue of this approach is that good ideas do not get lost in a continual procession of 'novel' theories that appear briefly in the literature and then disappear forever, often for no good reason

Sex offender theories (part1)
2011

5

ITSO-R



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Theories, Part 2: An Integrated Theory of Sexual Offending

- Beech, A.R. Nordstrom, B., & Raine A. (2012). Contributions of forensic neuroscience (to offending). In G. Davies & A.R. Beech (Eds.), *Forensic psychology, second edition* (pp. 55-76). Chichester: Wiley.
- Ward, T., & Beech, T. (2006). An integrated theory of sexual offending. *Aggression and Violent Behavior, 11*, 44-63.
- Ward, T. & Beech, A. (in press). The explanation of sexual offending. B. Francis & T. Sanders (Eds.), *The Oxford handbook on sex offences and sex offenders: Confronting and challenging the issues*. Oxford, UK: Oxford University Press.
- Ward, T, Fisher, S., & Beech, A.R. (in press). The Integrated Theory of Sexual Offending. In A. Phenix & H. M. Hoberman (Eds.), *Sexual offending: Predisposing conditions, assessments and management*. New York: Springer.

theories part 2

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ITSO-Sexual abuse occurs as a consequence of a network of causal factors

- **Brain development** - influenced by genetic inheritance, adverse environmental factors
- **Ecological niche factors** – social, cultural and , personal circumstances, and learning
- **Problems in neuropsychological functioning** –including:
 - Motivation
 - Emotions
 - Goals
 - Beliefs
 - Action directed behavior
 - Information processing

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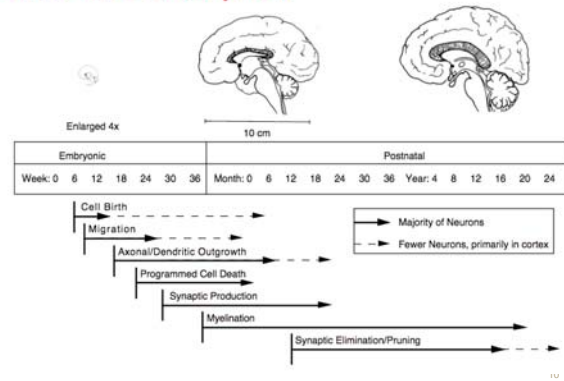
ITSO-Brain development

- Neurobiological level of analysis concerned with the nature of the physical processes associated with the functioning of the brain
 - Structural problems
 - Functional problems

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Human Brain Development



Factors that can lead to problematic brain development

- Abnormalities in fetal development
- Prenatal factors: (i.e., smoking in pregnancy, maternal alcohol consumption) during pregnancy leading to Fetal Alcohol Syndrome)
- Perinatal risk factors (birth complications, maternal rejection)
- Parent-child relationships (attachment experiences)
- Post-natal risk factors (adverse childhood experiences, poor nutrition, head injury)

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Box 2: Adverse Childhood Experiences (ACEs)

1. Recurrent physical abuse
2. Recurrent emotional abuse
3. Contact sexual abuse
4. There is substance abuse taking place within the home
5. A household member is in prison.
6. Household mental illness
7. Family violence (typically to the mother from a partner)
8. Parental separation/divorce
9. Physical neglect
10. Emotional neglect

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Offenders (generally) with problematic backgrounds in the UK

- Nearly a third of all prisoners (29%) reported that they had experienced some form of abuse/neglect in childhood (ACE 1, 2, 9, 10).
- A number had observed violence in the home (41%) as a child – particularly those who stated that they had a family member with an alcohol or drug problem (ACE 7).
- 18% stated that as a child they had a family member with an alcohol problem (ACE 4).
- 14% stated that as a child they had a family member with a drug problem (ACE 4).
- Over a third (37%) reported having family members who had been convicted of a serious crime, of whom 84% had been in prison or a young offenders' institution (ACE 5).
- 24% said that they had been in care at some point during their childhood (aspect of ACE 8).

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Effects of ACEs on structures and functions of the brain

- Structural changes can include reduced size of the mid-portions of the corpus callosum and attenuated development of the left neocortex, hippocampus, and amygdala (Teicher et al., 2003)
- While, functional consequences include increased 'electrical irritability' in the limbic structures of the brain (Teicher et al., 2003)
- Other evidence suggests that chromosomal damage can also occur such as telomere erosion (an essential part of human cells that affect how our cells age, and are the caps at the end of each strand of DNA that protect chromosomes, rather like the plastic tips at the end of shoelaces)
- Telomere erosion associated with cellular aging, disease and morality in later life (Shalev et al., 2013)
- And can also cause high levels of stress

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Areas of the brain said to be affected by early stress

- Corpus callosum
- Hippocampus
- Prefrontal cortex
- Visual cortex
- Auditory cortex

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Some neurobiological markers in sex offenders indicative of early trauma

- Lower IQs (Cantor et al., 2004)
- Poorer visuospatial and verbal memory scores
- Higher rates of left handedness (Cantor et al., 2005, 2005)
- Higher reported rates of having reported childhood head injuries (Blanchard et al., 2002, 2003)
- More likely to have been placed in special education facilities

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ITSO: Ecological Factors

- *Ecological* refers to potentially adverse
 - social and cultural circumstances
 - personal circumstances
 - and physical environments confronting each person that develops throughout their life
- These create vulnerabilities

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ITSO-Interlinking neuropsychological systems

- It is suggested that each system is associated with distinct functions and brain structures: - *motivation/ emotional; perception and memory; and action selection and control.*
- Neuropsychological systems work together to generate clinical problems evident in offenders, i.e., deviant arousal, offence related thoughts and fantasies etc.

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ITSO: Motivation/Emotional system

- Associated with cortical, limbic, and brainstem brain structures.
- 'Allow goals and values to influence both perception and action selection rapidly and to adjust motivational [and emotional] states to fit changing environmental circumstances' (Pennington, 2002)
- Broadly mapping onto Intimacy and interpersonal skills problems (Domain 3 problems)

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ITSO: Motivation/Emotional system problems

- Stemming from poor attachment, emotionally impoverished environment, abuse, social isolation etc.

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ITSO: Action Selection and Control system

- Associated with the frontal cortex, the basal ganglia, and parts of the thalamus.
- Major functions of this system is to help organism to plan, implement, and evaluate action plans, and to control behavior, thoughts, and emotions in service of higher-level goals

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ITSO: Action Selection and Control system problems

- Problems that might arise from malfunctions in action control and selection system essentially span self-regulation problems such as impulsivity, failure to inhibit negative emotions, inability to adjust plans to changing circumstances and poor problem solving skills.
- Maps broadly onto the kinds of problems that have been described as (Domain 4) stable dynamic risk factors

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ITSO: Perception and Memory system

- Associated primarily with the hippocampal formation and the posterior neocortex.
- Major functions of this system is to process incoming sensory information and to construct representations of objects and events, and make them available to the other two systems.

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ITSO: Perception and Memory system problems

- Problems in perceptual and memory system can lead to maladaptive beliefs, attitudes, and dysfunctional interpretations of interpersonal encounters, i.e., dysfunctional schemas, implicit theories) seen as type of stable dynamic risk factor for sexual offending
- Maladaptive beliefs that are chronically activated (i.e., frequently available to guide information processing) are likely cause activation of the motivational/ emotional system leading to problematic goals and emotions

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ITSO: Clinical Phenomena

- Deficits in neuropsychological functioning interact with individuals' current *ecology* or physical environment (proximal dimension) to cause the emergence of four groups of symptoms or clinical phenomena that are directly associated with sexual offending.
- These clinical phenomena can be usefully viewed as *acute risk* factors.

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ITSO: Clinical Phenomena

- Once these clinical phenomena are expressed in a state form as:
 - offence-supportive cognitions*
 - deviant thoughts and fantasies*
 - problematic emotions*
 - Leading to sexual arousal*
- These likely to to set the scene for the commission of a sexual offence
- Dependent on the availability and accessibility of a potential victim.

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ITSO: Maintenance and Escalation of Clinical Factors

- ITSO accounts for maintenance and escalation of sexual offending via impact on the ecology of the offender and on his/her psychological functioning.
- E.g. sexual abuse of child might result in person becoming further socially isolated from his normal social supports and lessen chances of forming appropriate intimate relationships.

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ITSO: Maintenance and Escalation of Clinical Factors

- Cultural factors interact with biological and individual learning to create situations that support or discourage sexual offending: part of initial forming of beliefs and triggering, facilitating.
- E.g., portrayal of females as essentially sexual objects and males as sexually entitled to have sex with whom and when they want

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Critical review

- The ITSO has both:
 - Horizontal depth** which refers to the ecological and multisystemic nature of the theory
 - Vertical depth** – denotes the ability of the ITSO to provide a multilevel analysis of sexual offending

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Critical review

(from Ward, Polaschek and Beech, 2006)

- The following that need to be taken account*
 - Predictive accuracy, empirical adequacy and scope** concerns whether the theory can account for existing findings and the range of phenomena requiring explanation
 - Internal coherence** refers to whether a theory contain contradictions or logical gaps.
 - External consistency** is concerned with whether the theory in question is consistent with other background theories that are currently accepted
 - Unifying power** relates to whether existing theory is drawn together in an innovative way and whether the theory can account for phenomena from related domains; does it unify aspects of a domain of research that were previously viewed as separate?
 - Fertility or heuristic** value refers to a theory's ability to lead to new predictions and open up new avenues of inquiry. In a clinical setting this may also include a theory's capacity to lead to new and effective interventions
 - Simplicity** (is it parsimonious), as the name suggests, refers to a theory that makes the fewest special assumptions. An example of a relatively elegant psychological theory is Skinner's radical behaviourism (Skinner, 1976)
 - Explanatory** depth refers to the theory's ability to describe deep underlying mechanisms and processes

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Critical review (1)

Empirical adequacy and scope

- Multisystemic nature of the ITSO prompts therapist to take into account a range of causal variables when formulating a case
- To think dynamically with respect to their interaction, and to appreciate the role of ecological (i.e., social, cultural, circumstantial) variables in both creating the conditions for abuse and in shaping offender vulnerabilities

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Critical review (2)

Internal coherence - refers to whether a theory contain contradictions or logical gaps

Neuroscientific account of human behavior/ psychopathology requires consideration of four levels of analysis:

- i. *etiological level* - concerned with the influence of genetic and environmental factors causing psychopathology
 - ii. *brain mechanisms* - concerned with the effects of aetiological factors on the development of the brain and its subsequent functioning
 - iii. *neuropsychological systems* - concerned with the brain-based mechanisms that generate human behavior
 - iv. *a symptom level analysis* - concerned with the clinical phenomena thought to characterize psychopathology
- All four levels should be mutually constraining, hence consistent with each other

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Critical review (3)

External consistency: is the ITSO consistent with other theories, e.g., Marshall & Barbaree (1991)

- The motivation/emotional system can incorporate the sexual attachment, intimacy, emotional, and needs constructs of the Marshall and Barbaree theory;
- The *action selection and control* aspect of our theory can absorb the impulsivity, social skills, and self-regulation components of the Integrated Theory
- The *perception and memory* system is able to integrate the entrenched beliefs, strategies, identity, and values referred to in the Integrated Theory. Concerning the other variables the emphasis on ecological, social learning, circumstantial and biological factors are all easily dealt with
- For example, early learning events are viewed as part of the developing offender's social ecology

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Critical review (4a)

Unifying power

Incorporating Level II theories

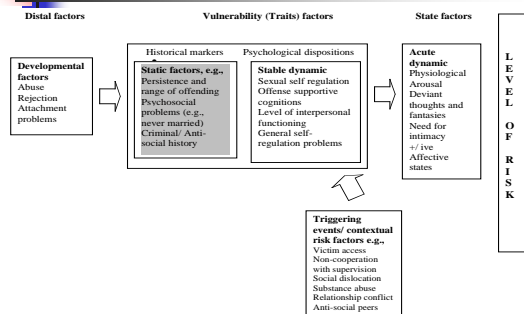
- **[Deviant] sexual arousal** - The ITSO has the ability to potentially explain deviant arousal as the interaction of three neuropsychological systems as mentioned earlier
- **Cognitive distortions** - interaction of situational and underlying problematic perception/ memory systems
- **Intimacy deficits** - interaction of situational and emotion/ motivational problems
- **Self-regulation** - interaction of situational and action/ control systems

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Critical review (4b) - unifying power

Incorporating Level III theories

Figure 1: An Etiological Model of Risk



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Critical review (5)

Simplicity

- Probably not simple, but understanding sexual offending isn't!

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Critical review (6)

Explanatory depth: refers to the theory's ability to describe deep underlying mechanisms and processes

- ITSO is multifactorial (accounting for all of these)
- And provides for example
 - diverse etiological pathways
 - and levels of explanation
- As well as starting to provide a neurobiological account

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Summary

- ✓ **External consistency** is concerned with whether the theory in question is consistent with other background theories that are currently accepted
- ✓ **Unifying power** relates to whether existing theory is drawn together in an innovative way and whether the theory can account for phenomena from related domains; does it unify aspects of a domain of research that were previously viewed as separate?
- ? **Simplicity (is it parsimonious)**, as the name suggests, refers to a theory that makes the fewest special assumptions. An example of a relatively elegant psychological theory is Skinner's radical behaviourism (Skinner, 1976)
- ✓ **Explanatory depth** refers to the theory's ability to describe deep underlying mechanisms and processes
- ? **Predictive accuracy, empirical adequacy and scope** concerns whether the theory can account for existing findings and the range of phenomena requiring explanation
- ? **Internal coherence** refers to whether a theory contains contradictions or logical gaps.

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Influence

- ITSO model currently referenced:
 - 296 times on Google Scholar
 - 168 times on Research Gate
 - 87 times on Web Of Science

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Influence

The ITSO provides a theoretical framework for sexual offending for the following examples

- **neurobiological processes**
- The Neuropsychology and Neurology of Sexual Deviance: A Review and Pilot Study. Joyal et al. (2007). *Sexual Abuse: A Journal Of Research And Treatment* 19(2):155-73
- Could we measure sexual interest using functional imaging? Kirsten Jordan, Peter Fromberger, Jürgen L. Müller. *Sexual Offender Treatment*, 10 (2015), Issue 1
- Mitchell, I. J., & Beech, A.R (2011). Towards an attachment related neurobiological model of offending. *Clinical Psychology Review*, 31, 872-882. doi: 10.1016/j.cpr.2011.04.001
- **Collectors of indecent images of children:** Child Pornography Offending Seen Through Three Theoretical Lenses. Jung et al. (2012). *Deviant Behavior*, 33(8):655-673
- **Firesetting:** The multi-trajectory theory of adult firesetting (M-TTAF). Gannon et al. (2012). *Aggression and Violent Behavior*, 17(2):107-121
- **Female sex offenders:** A descriptive offence process model of female sexual offending. Gannon et al. (2012)
- **ID sex offenders.** Keeling et al. (2009)

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Guidance for future research

- More to be done on the neurobiological approach
- There is a need to explore whether the theory contains contradictions or logical gaps
- There needs to be an exploration of whether the theory able to lead to new and effective interventions
- And whether it has predictive accuracy, empirical adequacy and scope

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A developmental life-course view of sexual offending

PART OF THE PRE-CONFERENCE SEMINAR ENTITLED:
**Connecting theory with research-
How to test theoretical assertions about the
causes of sexual offending**

Patrick LUSSIER, PhD
Université Laval
Quebec city, Quebec, Canada



Annual meeting of the Association for the Treatment of Sexual Abusers (ATSA), Montreal, October, 2015

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Overview

- Presentation of the developmental-life course criminology perspective
- Brief overview of empirical knowledge
- Gaps in the scientific literature
- Research needs and directions

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Developmental life course criminology approach to sexual offending

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A brief history...

The criminal career paradigm

- Marvin Wolfgang, Al Blumstein, David P. Farrington, Joan Petersilia, etc.
- Early studies in the 1940s on crime as a profession/career option (e.g., professional thief)
- The concept of criminal career reemerges in the criminology literature in 1970s but differently
- Refers strictly to the *longitudinal sequence of crime/delinquent acts committed by an individual*
- Discovery of the 'juvenile chronic offender' (Wolfgang et al., 1972)
 - 5% of males in a birth cohort
 - Responsible for 50% of all arrests by members of the entire cohort
 - Responsible for 80% of all arrests for violent offenses
 - Responsible for 70-80% of all arrests for rape/sexual assault

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A brief history...

The criminal career paradigm

- Stresses the importance of prospective longitudinal studies and self-reported data (offending)
- Onset, frequency, versatility, and termination of offending
- A-theoretical perspective leading to a dispute among scholars over the age-crime curve effect
- The criminal career perspective branched out into two theoretical approaches

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A brief history...

The criminal career paradigm

- DEVELOPMENTAL CRIMINOLOGY PERSPECTIVE
- LIFE COURSE CRIMINOLOGY PERSPECTIVE

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A brief history...

Developmental criminology

- KEY CONTRIBUTORS: Marc LeBlanc, Rolf Loeber, Terence Thornberry, Terrie Moffitt, etc.
- KEY ISSUE: Need to look earlier in the development, prior the onset of offending
- FOCUS: childhood period and the onset of antisocial behavior
- CAUSAL FACTORS: Age-graded perspective – causal, risk factors may change/cumulate over time
- MECHANISMS: Person x environment interactions
- OFFENDING: Multiple offending trajectories

A brief history

Life course criminology

- KEY CONTRIBUTORS: Glen Elder, Robert Sampson, John Laub, Peggy Giordano, Shadd Maruna, etc.
- KEY ISSUE: Not all is played in the early years, people change
- FOCUS: Emerging adulthood and adulthood and desistance from offending
- CAUSAL FACTORS: Importance of significant life events and life transition
- MECHANISMS: Shifts in social environment, social control and opportunities to redefine self-identity
- OFFENDING: no long-term prediction possible, offending is too intermittent, there are elements of randomness not taken into account in prediction models

A brief history...

Theoretical integration

Developmental and life course theories are not necessarily contradictory
Emphasize the importance of a longitudinal view
Recognize the presence of both stability and change over the life course
Causal risk factors and crime mutually influence each other
Involvement in crime fluctuates over time
Desistance from crime is the norm across individuals
There are *multiple* pathways or trajectories

Developmental life course approach: Its value for the study of crime and delinquency

DLC perspective

Key objectives

- Describe within-individual continuity and change in criminal behavior over time
- Explain the development of criminal behavior over time until termination
- Identify and contextualize key etiological factors associated with its development

DLC perspective

Key issues and assumptions #1

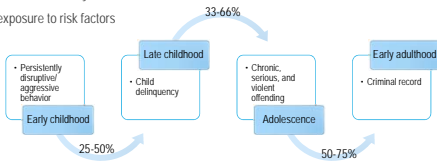
- Criminal behavior develops in an orderly, hierarchical, and predictable fashion
- Criminal behavior may take on distinct forms at different developmental periods
- *Heterotypic continuity* between early aggressive-antisocial behavior and criminal behavior



DLC perspective

Key issues and assumptions #2

- Most individuals do not go through all stages of behavioral development
- There is both continuity and discontinuity of antisocial/criminal behavior over time
- Children do overcome exposure to risk factors



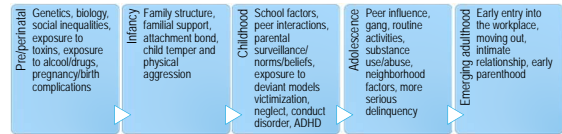
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DLC perspective

Key issues and assumptions #3

- Etiological factors vary across developmental periods or stage of offending development
- Age-graded perspective on the causal mechanisms responsible for behavioral development



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DLC perspective

Key issues and assumptions #4

- Some of the most salient risk factors appear in the first few years of life
- Exposure to an increasing number of domains of risk factors with age
- Exposure to the earliest risk factors may create a chain of cumulative deficits

Developmental stages			
Birth/infancy	Early childhood (2-5)	Middle/late childhood (6-12)	Adolescence (13-17)
Genetic factors	Genetic factors	Genetic factors	Genetic factors
Prenatal exposure to substance	Prenatal exposure to substance	Prenatal exposure to substance	Prenatal exposure to substance
Birth complications	Birth complications	Birth complications	Birth complications
Socio-economic situation	Socio-economic situation	Socio-economic situation	Socio-economic situation
Family environment	Family environment	Family environment	Family environment
Parenting skills	Psychological functioning	Psychological functioning	Psychological functioning
Behavioral problems	Psychological functioning	Psychological functioning	Psychological functioning
	Parenting skills	Parenting skills	Parenting skills
	Behavioral problems	Behavioral problems	Behavioral problems
	Delinquency	Delinquency	Delinquency
	CBMT attachment issues	CBMT attachment issues	CBMT attachment issues
	Poor socialization	Poor socialization	Poor socialization
	Neighborhood	Neighborhood	Neighborhood
		Drug use and abuse	Drug use and abuse

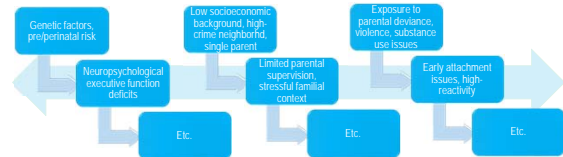
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DLC perspective

Key issues and assumptions #5

- Equifinality or the presence of multiple pathways/trajectories leading to crime and delinquency
- Different initial conditions can lead to the same or similar outcomes



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DLC perspective

Key issues and assumptions #6

- Objective is to inform prevention/intervention programs
- Developmental stages are various gate for prevention/intervention
- When to prevent/intervene, with whom, and which factors to emphasize...



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DLC perspective

The case of sexual offending

- DLC theory and research as, for the most part, overlooked sexual offending
- Limited theorizing and research about sexual development
- Limited research on the developmental course of antisocial/criminal behavior and its impact on sexual development
- Limited research in the field of sexual violence/abuse using a DLC perspective

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A DEVELOPMENTAL PROCESS MODEL OF THE DEVELOPMENT OF SEXUAL OFFENDING

Developmental life course criminology

Research needs

- Importance of first describing the developmental course of sexual offending
- What are the quantitative and qualitative changes in offending over time?

Developmental life course criminology

Offending is dynamic over life course

A. Quantitative changes

- From a non-offending to an offending state
- From an occasional to a repetitive offending state
- From a repetitive to an occasional, intermittent offending state
- Etc.

B. Qualitative changes

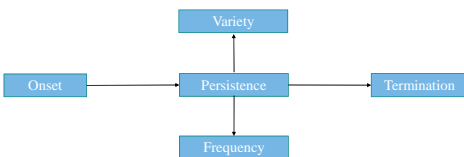
- Progression to more serious
- Escalation to more violent offending
- Etc.

Basic behavioral development parameters used in DLC theories and research

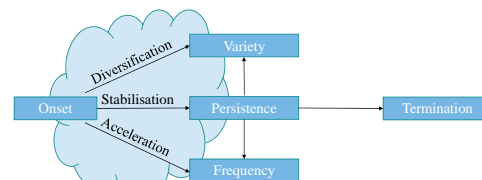
Basic descriptive and boundary parameters

ONSET	→	Age at first offense
PERSISTANCE	→	Duration of offending
VARIETY	→	Number of different offense type
FREQUENCY	→	Number of different victims/events
TERMINATION	→	Age at last offense

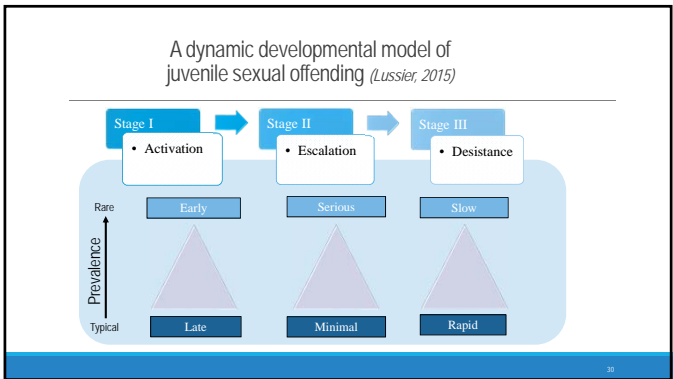
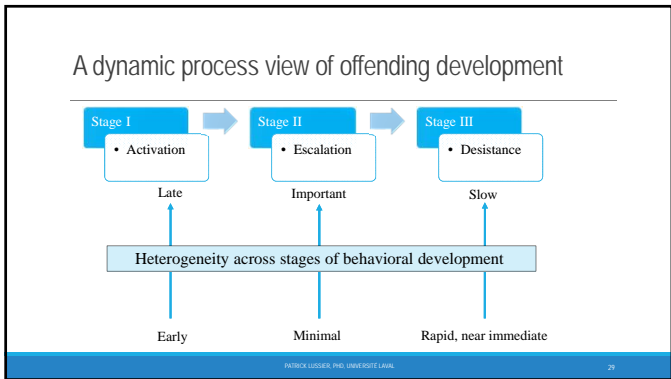
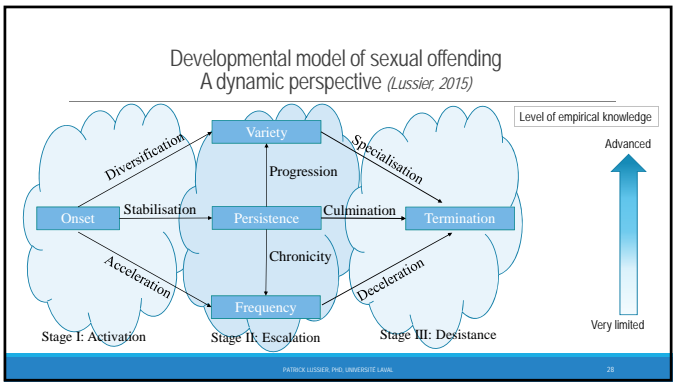
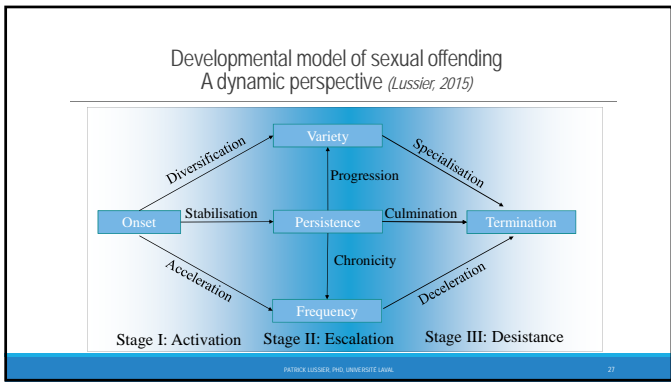
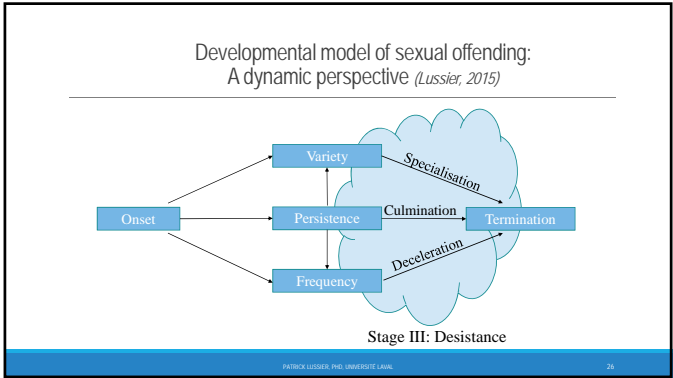
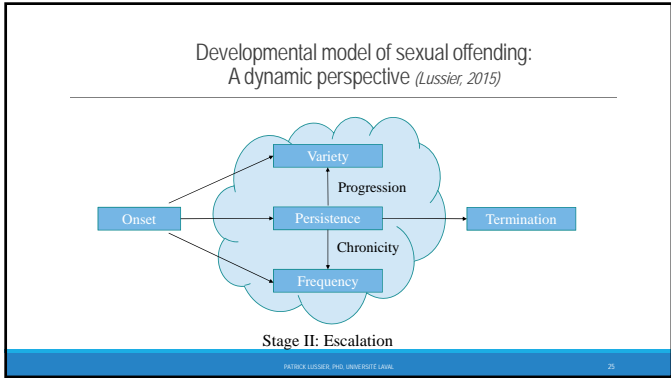
Developmental model of sexual offending A dynamic perspective (Lussier, 2015)

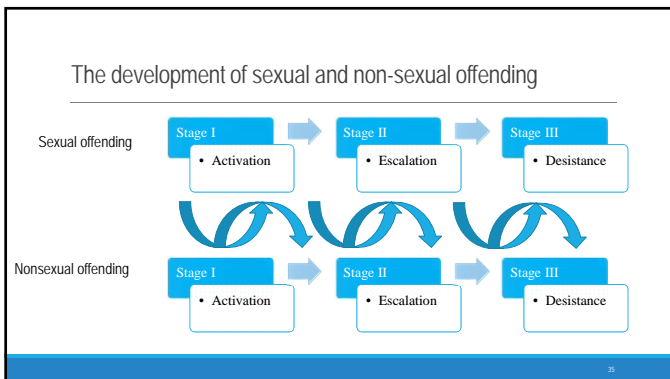
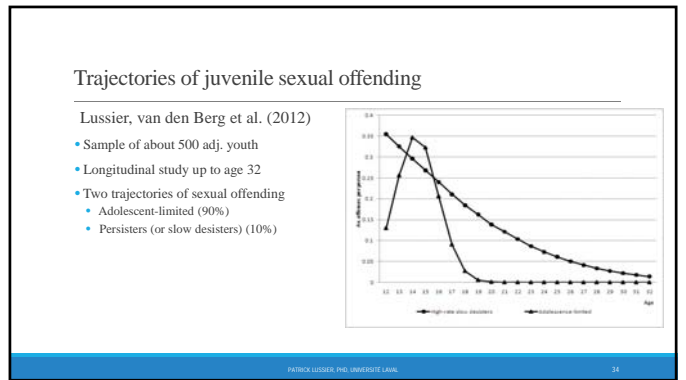
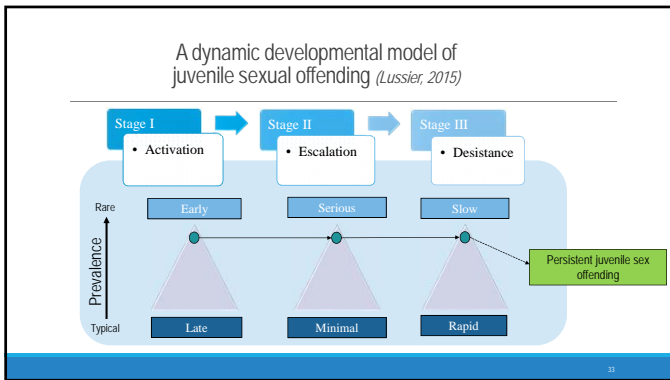
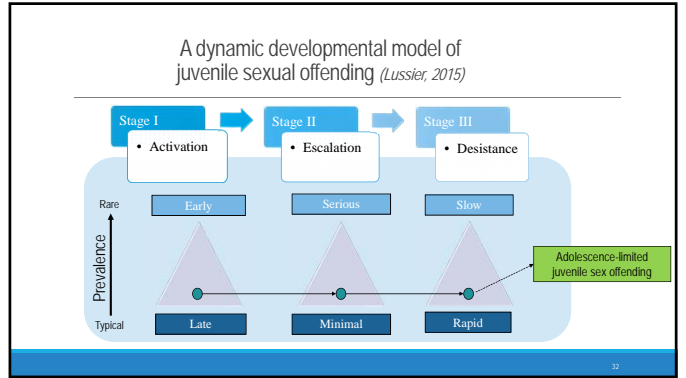
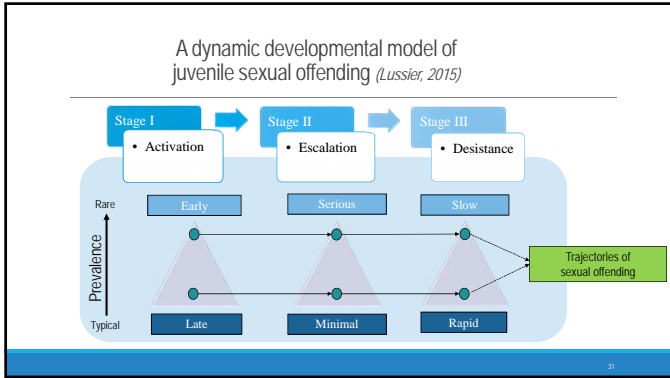


Developmental model of sexual offending A dynamic perspective (Lussier, 2015)



Stage I: Activation





From DLC approach to research: Methodological considerations

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Sexual offending within a DLC framework



Key aspects of DLC research

Prospective longitudinal data
Representative samples or at-risk samples drawn from the general population
Risk/protective factors measured prior to, during, after the onset of sexual offending
Biological/genetic, individual, familial, peer, school, and neighborhood factors
Repeated measurements over time
Covering multiple developmental/life stages and distinguishing those
Both self-report and official data on delinquency

Sexual offending within a DLC framework



Key conceptual issues of DLC research on sex offending

Contextualizing sexual offending (developmental stage, life events, etc.)
Examining continuity-discontinuity patterns across developmental stage transition (childhood-adolescence, adolescence-emerging adulthood)
Age-graded risk/protective factors across developmental stages?
Changing behavioral manifestations across developmental stages (quantitative and qualitative)?
Link between atypical childhood sexual behaviors and juvenile sex offending?

Sexual offending within a DLC framework



Key methodological issues of DLC research on sex offending

Birth cohort studies show that 3-5 kids per 1,000 have a police contact for a sex offense
Studies based on the general population may require extremely large sample
Conducting studies on at-risk populations (over sampling children with known risk factors)
Emerging childhood risk factors from prospective longitudinal studies include:
ADHD symptoms, conduct disorder, atypical sexual behaviors, sexual victimization

Sexual offending within a DLC framework



Key analytical issues of DLC research on sex offending

Introduce new methodologies to examine longitudinal data and repeated measurements
Pursuing research on the identification and description of offending trajectories
Combining qualitative and quantitative research methodologies
Latent growth curve modeling and semi-parametric group-based modeling
Life histories narratives and calendar research to contextualize offending over life course

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<http://www.centrejeunessedequebec.qc.ca>

Centre for Research on Sexual Violence
<http://www.sfu.ca/crsv.html>



Motivation-Facilitation Model

Michael Seto, Ph.D.

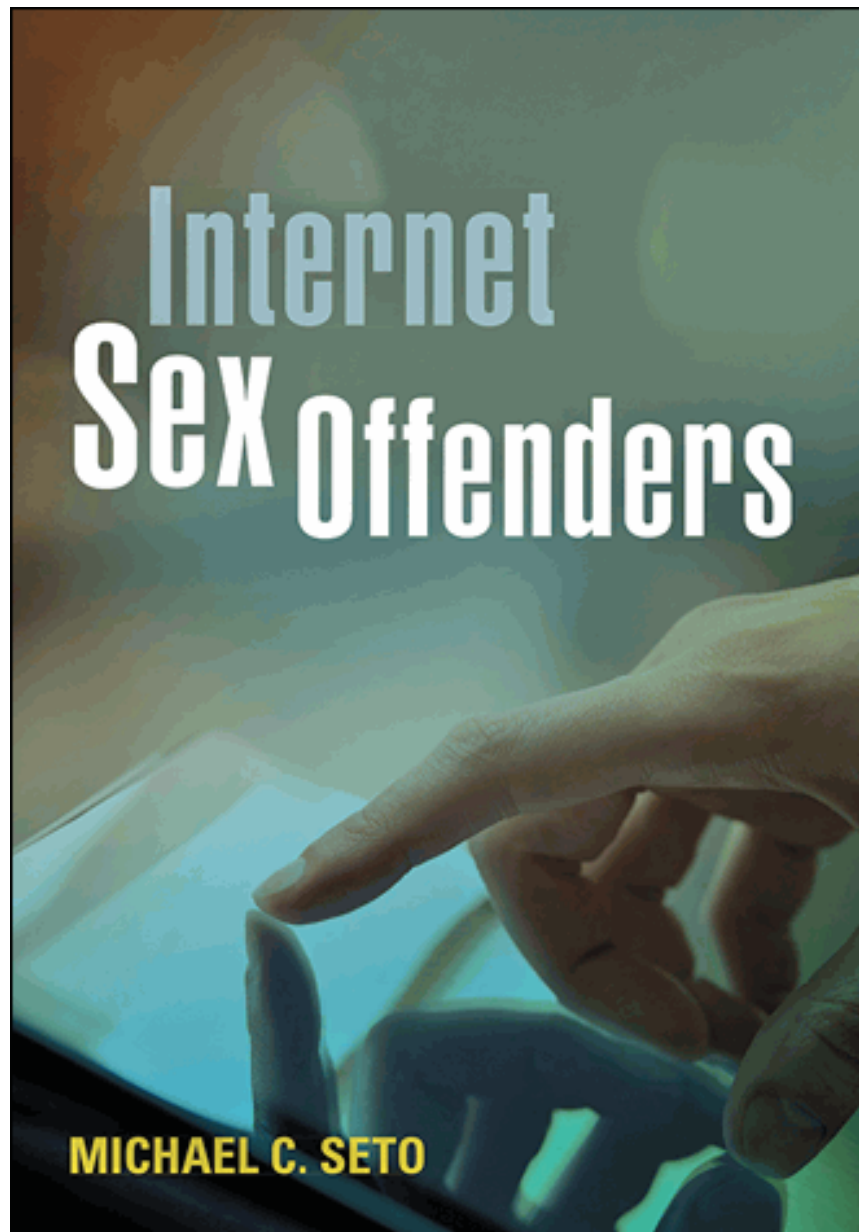
October 2015, ATSA

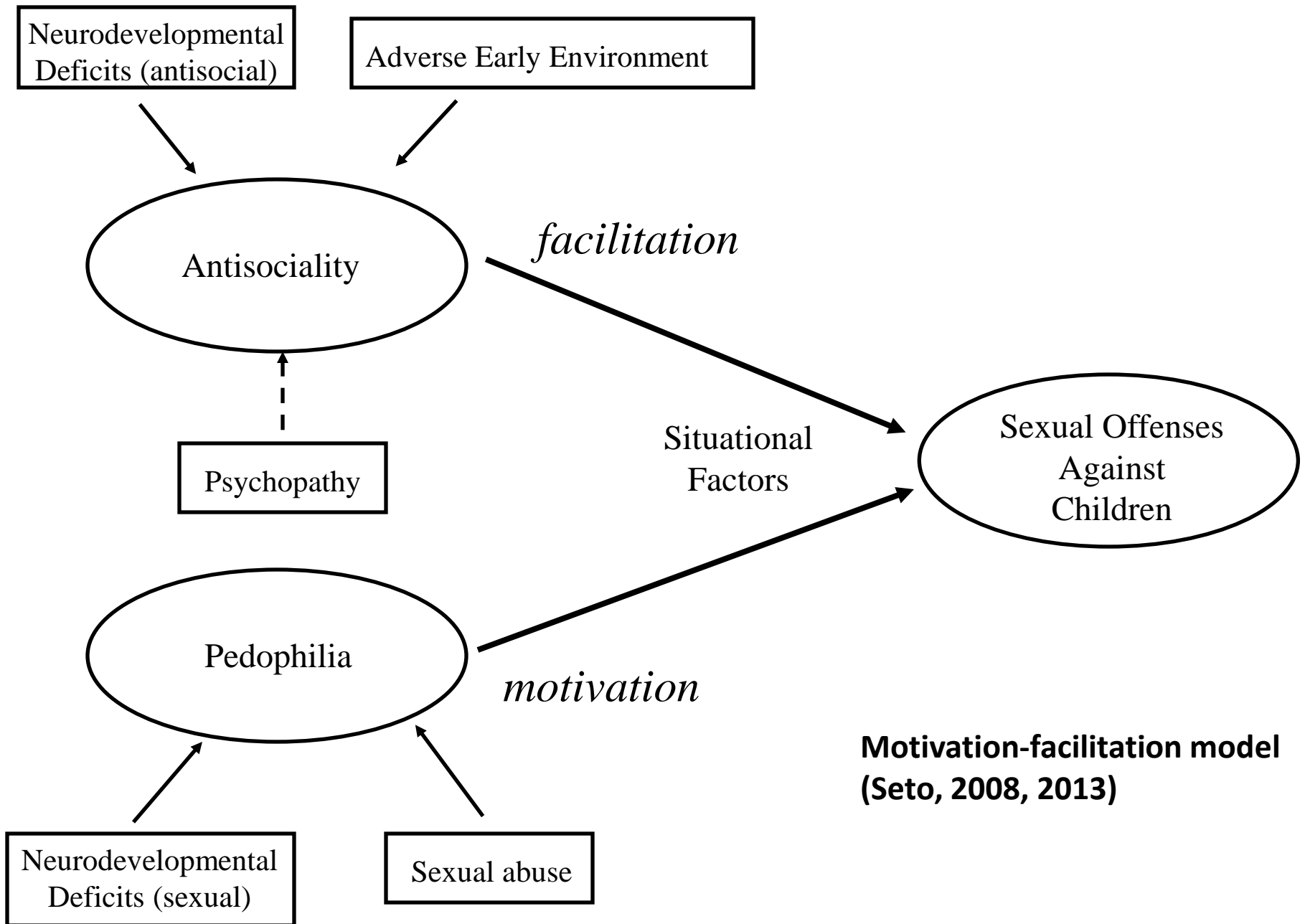
Pedophilia and Sexual Offending Against Children

THEORY, ASSESSMENT, AND INTERVENTION



Michael C. Seto





**Motivation-facilitation model
(Seto, 2008, 2013)**

Motivations

- Sexual in nature
- But not only paraphilias
- Excessive sexual preoccupation
- Typical sexual desire

Facilitators

- Antisocial personality traits
- Offense-supportive cognitions
- Substance use
- Peer pressure/norms
- Abbey effect
- Sexual myopia
- Low perceived cost (detection etc)

Situational Factors

- Access to vulnerable victim
- Absence of effective guardian
- Opportunity in time and space

Summary of Evidence

- Pedophilia distinguishes male sex offenders with child victims from other men (Seto, 2008)
- Pedophilia and antisocial tendencies (e.g., psychopathy) are strong predictors of sexual recidivism (Hanson & Morton-Bourgon, 2005)
- Situational crime analyses e.g., presence of guardian
- Importance of pedophilia for female offenders?
- Less discriminant and predictive validity for pedophilia measures in adolescent offenders

Summary of Evidence, cont'd

- Sexually coercive men distinguished by sexual responses to violence/nonconsent
- Response to (sexual) violence and antisociality predicts sexual recidivism in clinical & community samples
- Excessive sexual preoccupation and “normal” sexual desire distinguish sexually coercive men
- Excessive sexual preoccupation predicts sexual reoffending

Evidence Gaps

- Sexual arousal to violence, nonconsent, or both?
- Role of biastophilia or excessive sexual preoccupation for female or adolescent offenders?
- Tests using community samples
- Other kinds of sexual offenses, e.g., noncontact?
- Role of putative factors in ONSET of offending?

Strengths

- Parsimonious
- Elegant
- Incorporates group differences
- Incorporates recidivism risk evidence
- Incorporates community evidence
- Could be applied to other offender types, e.g., noncontact, sexual offenses against adults

Weaknesses


- Explains persistence rather than onset?
- Narrow scope for motivations and facilitators
- Doesn't explicitly include social ecology
- Applicability to female offenders? Youth?
- Cross-culturally?

Tests Going Forward

1. Cross-sectional studies of community and clinical samples, cf., Malamuth et al. confluence model
2. Longitudinal studies of both community and clinical samples to predict maintenance; ideally would collect data on children and youth to test onset.
3. Experimental manipulations of motivation or facilitation via sexual arousal (e.g., pre-exposure to pornography), mood induction, and social/cognitive manipulations of risk-taking.


In Conclusion....

Kevin L. Nunes and Chantal A. Hermann




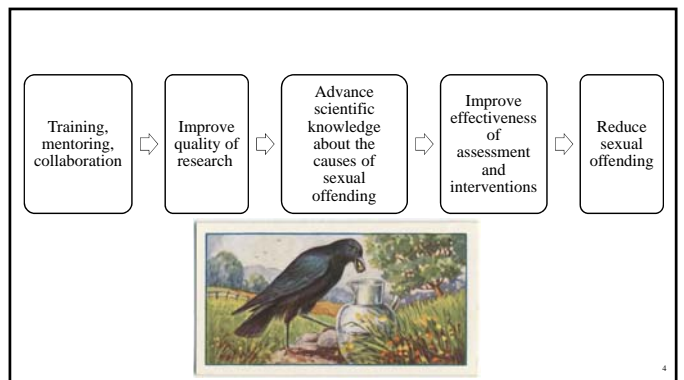
Recap

- Overview of ITSO-R, DLR approach, and MFMSO
- Critically reviewed relevant evidence
- Identified important knowledge gaps
- Identified relevant and optimal methodology



Take-Away Message

- When evidence is limited, speculation is the best we can do
- Past research and theoretical models are important, valuable, and useful
- But recognizing and acknowledging the limited inferences we can draw from the available evidence may motivate more rigorous research and more accurate knowledge translation
- Stronger research can provide more conclusive evidence with which to develop, test, and refine models, and guide practice

Thank You!

- Audience
- Sacha Maimone
- ATSA
- Social Sciences and Humanities Research Council (SSHRC)
- Carleton University, Department of Psychology
- SAGE

