Cascading Effects of Interparental Conflict: Implications for Adolescent Substance Use

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Acknowledgements

• PROSPER: Promoting School-Community-University Partnerships to Enhance Resilience
  – M. Greenberg, M. Feinberg, C. Redmond, R. Spoth
  – National Institute on Drug Abuse: DA 013709

• Karl R. and Diane Wendle Fink Early Career Professorship for the Study of Families
Interparental Conflict (IPC): Robust Risk for Maladjustment

- Prevalence: experienced by nearly all children
  - Coparenting, 2-caregiver homes (Cummings & Davies, 1994)

- Consistently linked with children’s psychological maladjustment (Buehler et al., 1997; Cummings & Davies, 1994; Grych & Fincham, 2001)

- Multifinality in types/severity of outcomes
A Second Generation: Cognitive-Contextual Framework

Emotional Security Theory

Emotional Security Theory-R

A Second Generation: Mechanisms
Cognitive Appraisals: Mechanisms of Risk

Frequent, Intense, Unresolved, IPC → Cognitive Appraisals → Child Psychopathology

Fosco, DeBoard-Lucas, & Grych (2007)
Evaluates Environmental Risk: Personal Relevance of IPC

Specific Concerns: Escalation, Turn to Child, Result in Harm/Injury, Divorce

General worries about implications of IPC

General Fears that IPC → Something Bad

A Spotlight on Threat Appraisals

Atkinson et al., 2009; Davies & Cummings, 1994; Davies & Woitach, 2008; Grych et al., 1992; Fosco et al., 2007; Grych & Cardoza-Fernandez, 2001; Martin et al., 2014
Threat is Adaptive

- Evaluations of immediate threats to safety
- Guiding self-protective processes
- Vigilance for subsequent risk

Threat is Maladaptive

- Stable Beliefs Persist Beyond Objective Danger
- Persistence may overwhelm coping resources

Atkinson et al., 2009; Davies & Cummings, 1994; Davies & Woitach, 2008; Grych et al., 1992;

Fosco et al., 2007; Grych & Cardoza-Fernandez, 2001; Martin et al., 2014
Threat: Long-Term Risk

- Cross-sectional and Meta-analytic studies document the association with internalizing, externalizing
- Longitudinal association with internalizing across 2 samples
- Common risk across DRD4 7-/7+ alleles

Buehler et al., 2007; Gerard et al., 2005; Grych, Harold, & Miles, (2003); Fosco & Grych (2008); Fosco & Feinberg, (In Press); Schlomer, Fosco, Cleveland, Feinberg, & Vandenberg (2015)
Advancing the Second Generation of IPC Research: Cascade Models

• Impact on Stage Salient Tasks

• Impact on Stage Salient Outcomes
Impact on Developmentally Salient Tasks
Figure from: Davies, Manning, & Cicchetti (2013)
Cascade Effects via Self-Efficacy

Fosco & Feinberg (In Press).
Cascade Models and Stage Salient Outcomes: Developmental Trajectories
Cascade Models: “Stage Salient Outcomes”

• Adolescence involves several developmental transitions; unique developmental trajectories
  – Substance use trajectories often start early in adolescence
  – Understanding family risk during this period is valuable

• IPC risk for substance use is largely ignored
Threat Appraisals may be a Key Risk Factor for Substance Use

- Stable Stress: Escalation, Family Stability
- Diminished Coping Resources
- Lead to Maladjustment

Substance Use Risk
Two Competing Hypotheses

Global Risk Hypothesis

Substance-Specific Risk Hypothesis
Prediction: Threat is related to trajectories of substance use over adolescence

A: direct associations with cigarettes and alcohol use

B: Risk may occur via maladjustment problems

Internalizing problems are related to cigarette use and alcohol use risk (Lewis et al., 2011; Prinstein & La Greca, 2009; Raskin et al., 2001).
**Prediction**: Threat has specific risk for one outcome: *escalation in cigarette use*

Nicotine’s anxiolytic properties may make this particularly appealing in the context of persistent worry, danger to self or others, outside of adolescents’ control.
Method

• Drawn from a community implementation of the PROSPER intervention delivery system in rural Iowa and Pennsylvania.

• Current sample = 768 two-caregiver families
  – Early adolescents: 49.5% female, 84% Caucasian

• Family assessments: Fall 6th, Spring 6th, Spring 7th

• Adolescent data: Spring: 6th, 7th, 8th, 9th, 10th, 11th
Measures

• **Interparental Conflict**: parent report of conflict and hostile behaviors with partner (Spoth, Redmond, & Shin, 1998). Mother and Father data.

• **Threat Appraisals**: drawn from the threat scale, Children’s Perceptions of Interparental Conflict (CPIC; Grych et al., 1992).

• **Internalizing Problems**: Depressed/Anxious Scale, YSR

• **Past Month Substance Use**:
  – How many times smoke cigarettes: none, once, few, once/week, more
  – How many times drink alcohol: none, once, few, once/week, more
Analysis Plan

1. Unconditional Growth Models
2. Conditional Model: Do Covariates Predict?
   • Youth Sex, Parent Substance Use, Parent Edu., Family Income
3. Threat Mechanism for Substance Use
4. Does Internalizing Problems Account for Assn?
1. Unconditional Growth Models

**Cigarettes**

Mean $i = 1.01^*$
$s = .06^*$
$q = .01^*$

VAR: $i = 0.00$
$s = .13^*$
$q = .01^*$

**Alcohol**

Mean $i = 1.09^*$
$s = .07^*$
$q = .01^*$

VAR: $i = 0.11^*$
$s = .12^*$
$q = .01^*$
Predicting Slope

Substance Use vs. Time
Cigarette Use Analyses
2. Covariate Predictors of Cigarette Use

Model fit:
\[ \chi^2(30) = 63.40, p < .01; \]
CFI = .99; TLI = .99;
RMSEA = .009 (90%: .000–.031)
3. Threat Predicting Cigarette Use

Model fit:
\[ \chi^2(31) = 103.28, \ p < .01; \]
CFI = .96; TLI = .95;
RMSEA = .031 (90%: .017–.045)
4. Cigarettes: Threat via Internalizing Problems

Model fit:
\[ \chi^2(42) = 112.31, p < .01; \]
CFI = .97; TLI = .96;
RMSEA = .027 (90%: .014–.039)
Alcohol Use Analyses
2. Covariate Predictors of Alcohol Use

Model fit:
$\chi^2(24) = 29, p = .49$;
CFI = 1.00; TLI = 1.00;
RMSEA = .000 (90%: .000–.031)
3. Threat Predicting Alcohol Use

Model fit:
\( \chi^2(30) = 69.247, p < .01; \)
CFI = .96; TLI = .94;
RMSEA = .033 (90%: .019–.047)
Threat Cascade Model Predicting Alcohol Use

Model fit:
\(\chi^2(43) = 65.73, p = .10;\)
CFI = .99; TLI = .97;
RMSEA = .019 (90%: .000–.033)
Summary

• Findings support the Substance Use Specific Risk Hypothesis
  – Threat was associated with slope in cigarette use over time; not with alcohol use
  – This effect is direct, and unaltered by internalizing problems

• Why cigarettes?
  – Perceived as stress-reducing
  – Functionally different from alcohol: less social in nature, may be used as coping strategy to manage worry/stress
Limitations/Future Directions

• Inclusion of self-blame: interesting implications for substance use
• Replication with diverse samples
Thank you!

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Evaluates Environmental Risk
Guides Coping Strategies
Facilitates Support Resources
Guides Emotional and Behavioral Regulatory Strategies

Atkinson et al., 2009; Davies & Cummings, 1994; Davies & Woitach, 2008; Grych et al., 1992; Fosco et al., 2007; Grych & Cardoza-Fernandez, 2001; Martin et al., 2014
Cascade Models and Stage Salient Outcomes: Developmental Trajectories
Two Perspectives on Cascade Models

- Impacting Developmentally Salient Tasks
  - Disrupts typical development

- Impacting Developmentally Salient Outcomes
  - Consider developmental trajectories
Past Month Cigarette Use Trajectories Gr 6-11

Individual Estimated Curves

Mean i = 1.01*
s = .06*
q = .01*

VAR: i = 0.00
s = .13*
q = .01*

Unconditional LGCM: $\chi^2(12) = 68.34$, $p = .054$; CFI = .97, TLI = .96, RMSEA = .03
Past Month Alcohol Use Trajectories Gr 6-11

Mean i = 1.09*
  s = .07*
  q = .01*

VAR: i = 0.11*
  s = .12*
  q = .01*

Unconditional LGCM: $\chi^2(12) = 29.99$, p = .07; CFI = .97, TLI = .97 RMSEA = .03
A Spotlight on Threat Appraisals

Defined:

- Evaluation of IPC for personal relevance
- Worries about implications of IPC
- General fears that IPC will lead to something bad
- Specific concerns of escalation, turn to child, result in harm/injury, lead to divorce

Atkinson et al., 2009; Davies & Cummings, 1994; Davies & Woitach, 2008; Grych et al., 1992; Fosco et al., 2007; Grych & Cardoza-Fernandez, 2001;