

# Cascading Effects of Interparental Conflict: Implications for Adolescent Substance Use

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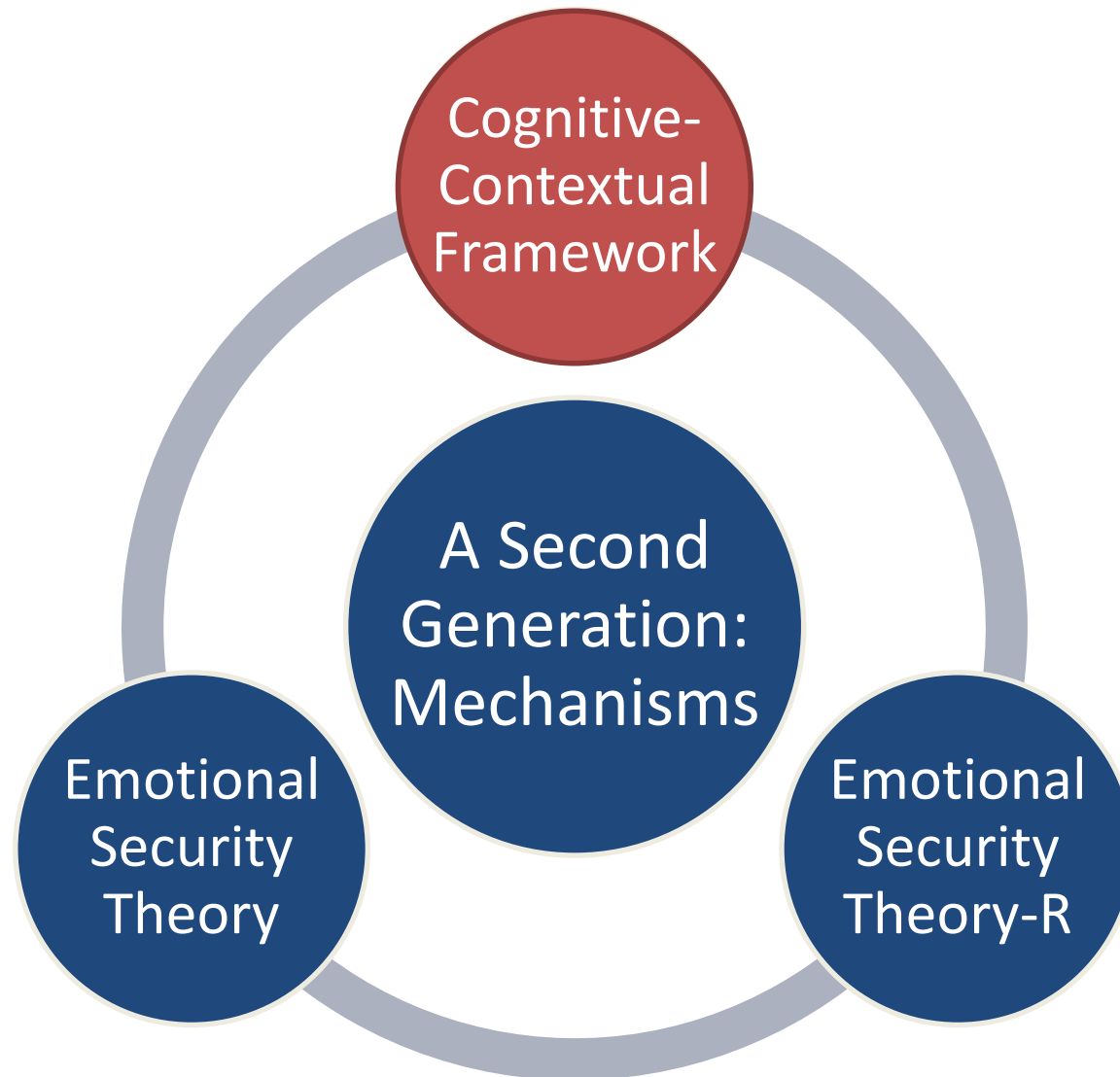
The Pennsylvania State University

# Acknowledgements

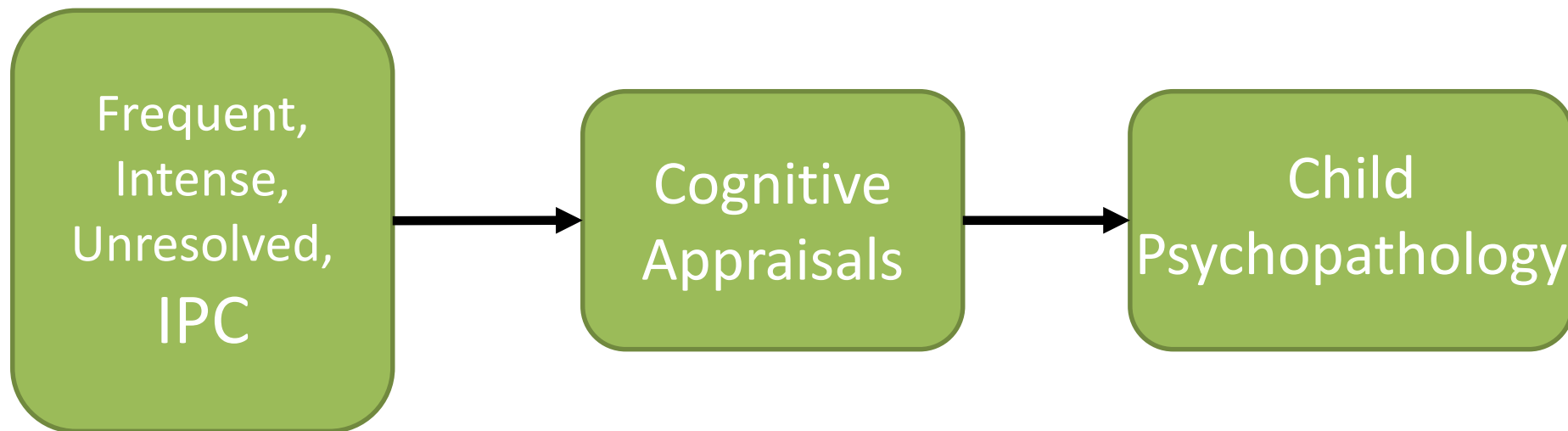
- PROSPER: Promoting School-Community-University Partnerships to Enhance Resilience
  - M. Greenberg, M. Feinberg, C. Redmond, R. Spoth
  - National Institute on Drug Abuse: DA 013709
- Karl R. and Diane Wendle Fink Early Career Professorship for the Study of Families

# 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



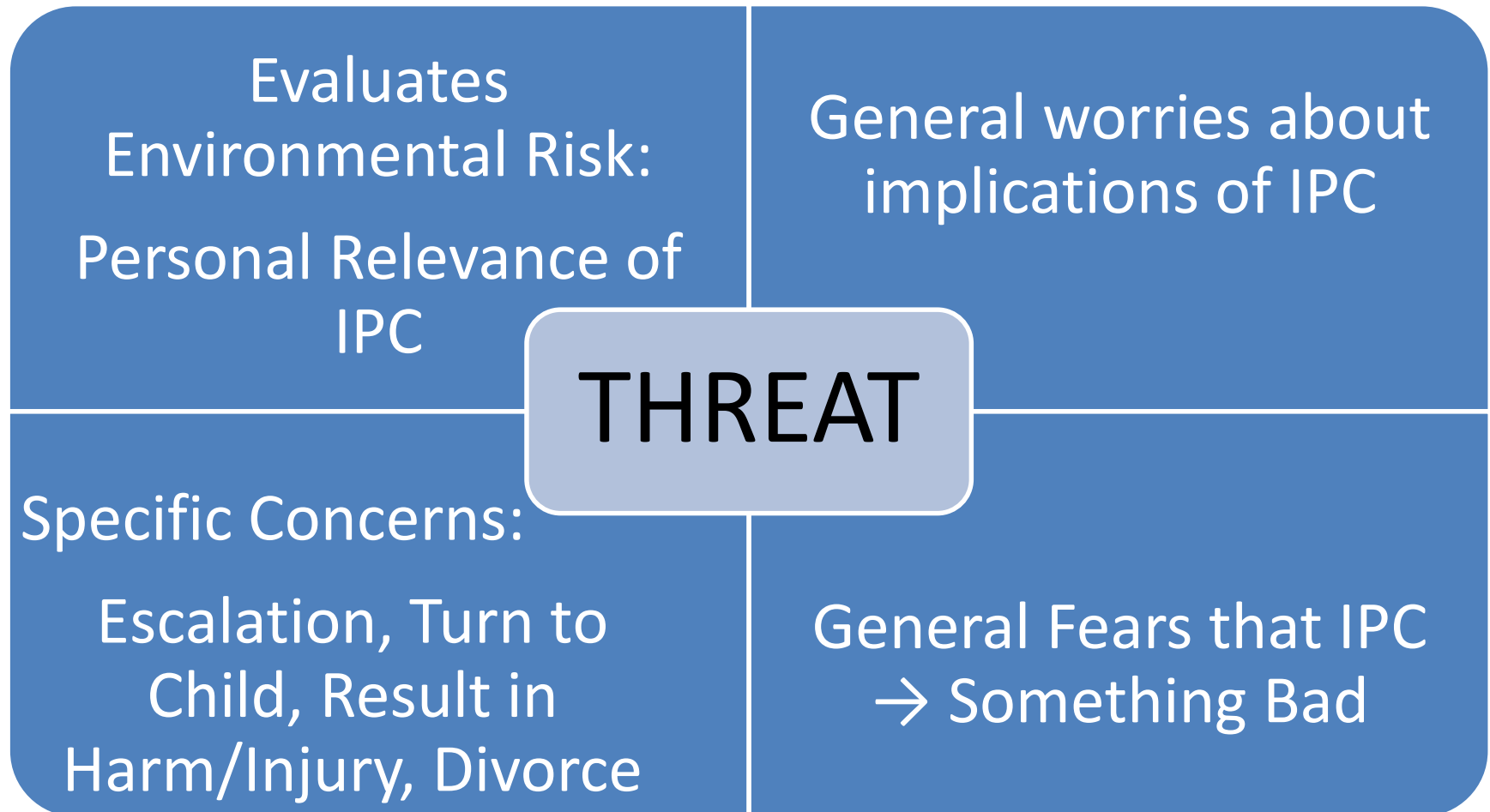
# Cognitive Appraisals: Mechanisms of Risk



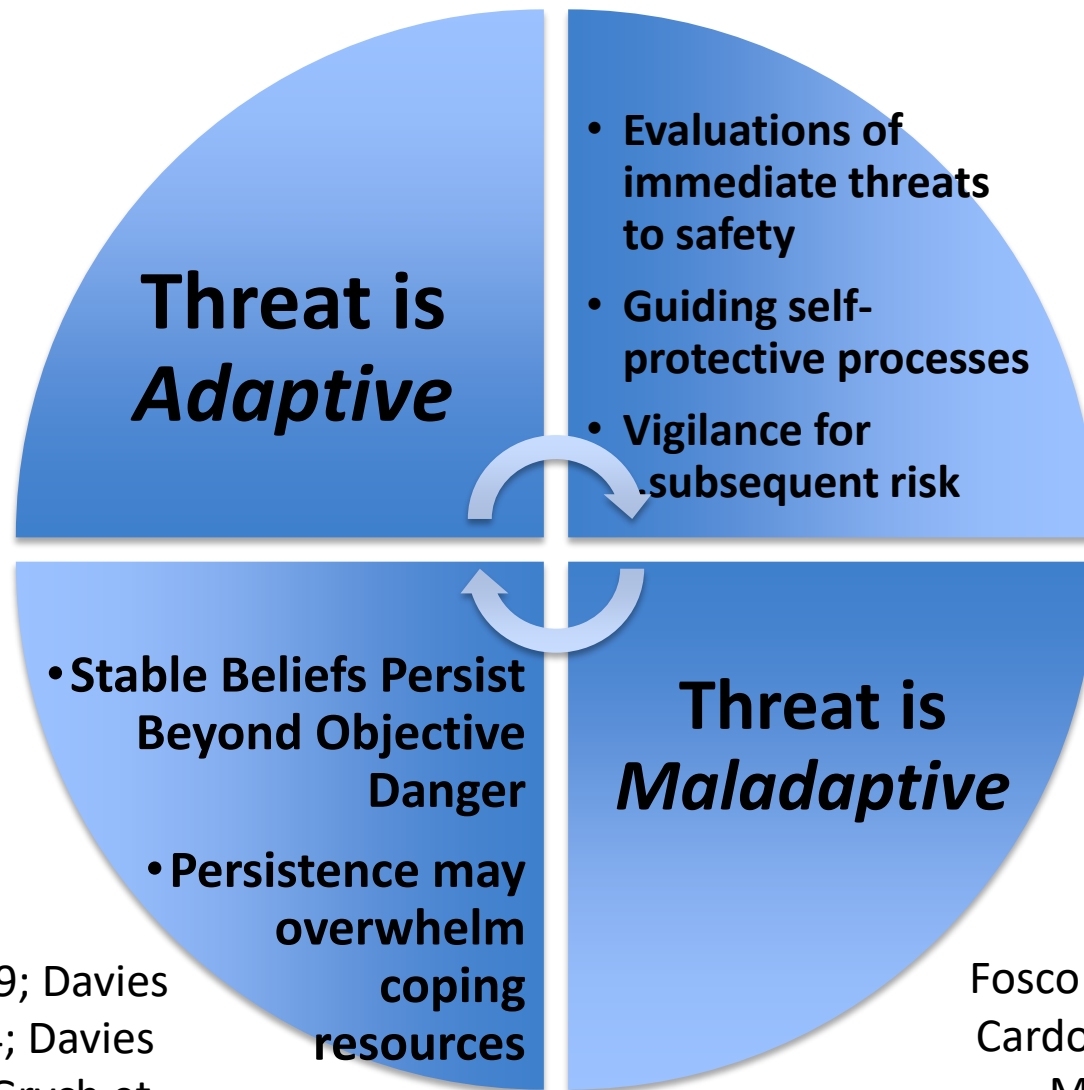
Grych & Fincham (1990)      Grych & Cardoza-Fernandez (2001)

Fosco, DeBoard-Lucas, & Grych (2007)

# 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



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

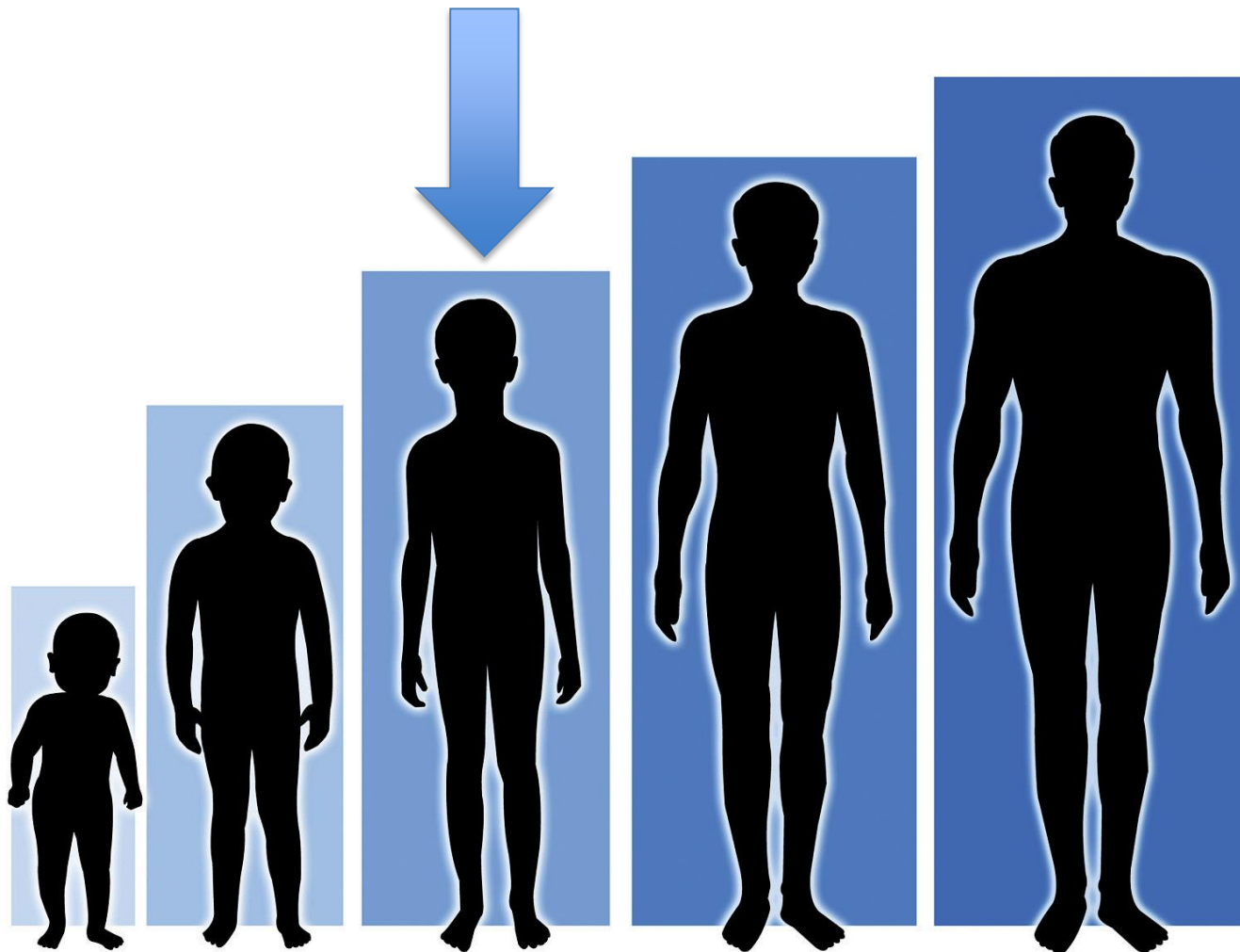
Buehler et al., 2007; Gerard et al., 2005; Grych, Harold, & Miles, (2003); Fosco & Grych (2008); Fosco & Feinberg, (In Press); Schlomer, Fosco, Cleveland, Feinberg, & Vandenberg (2015)



# Advancing the Second Generation of IPC Research: Cascade Models

- Impact on Stage Salient Tasks
- Impact on Stage Salient Outcomes

# Impact on Developmentally Salient Tasks



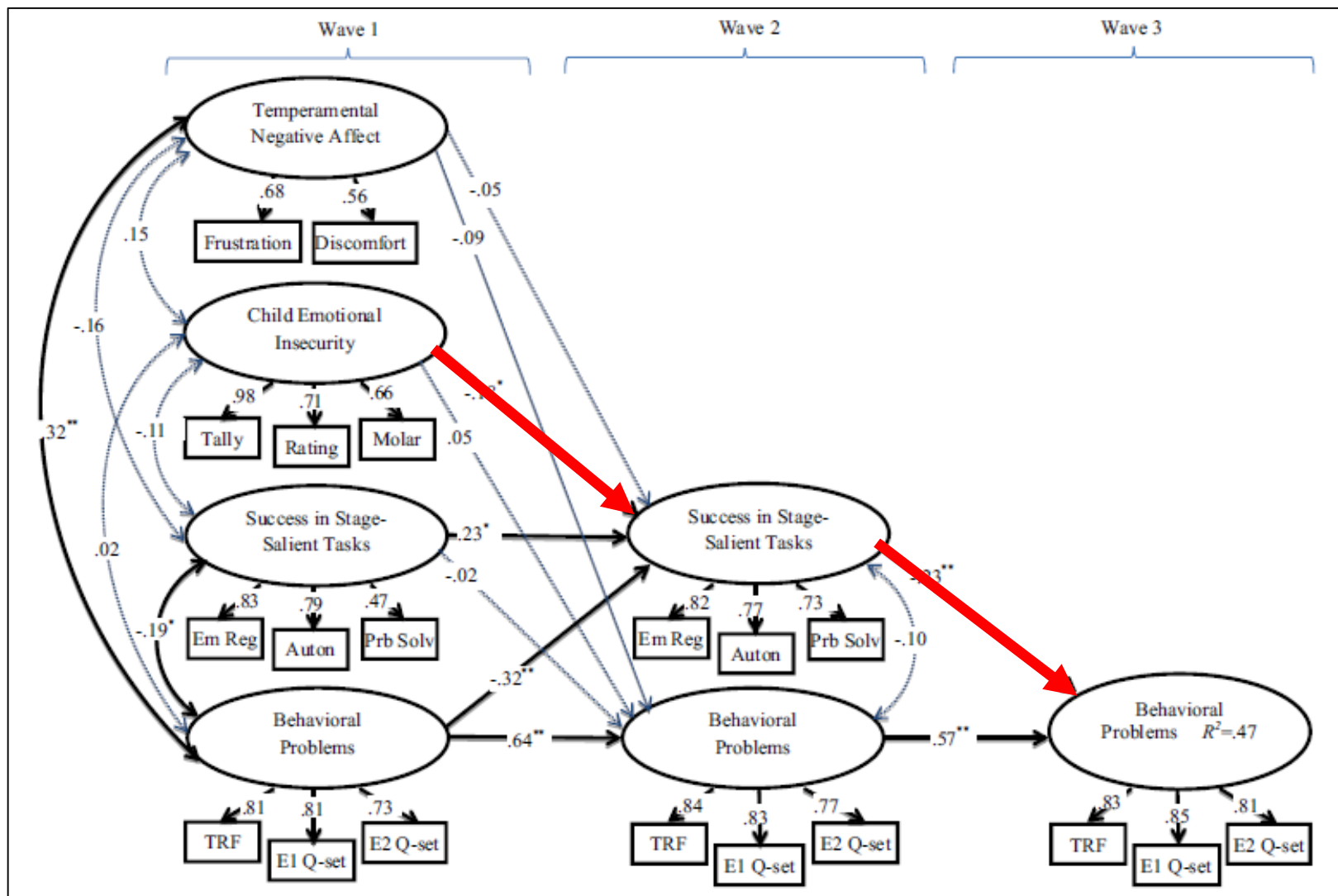
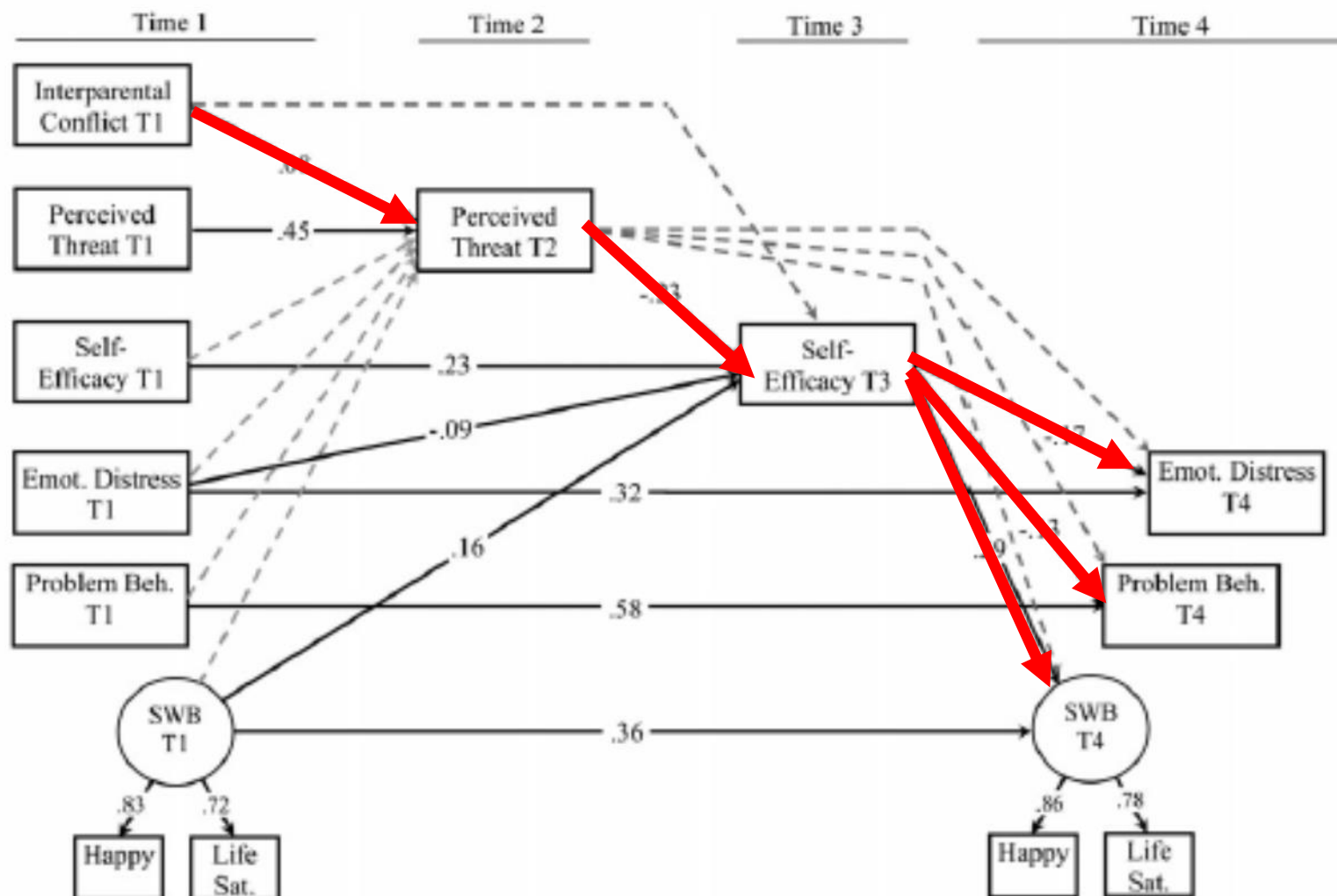


Figure from: Davies, Manning, & Cicchetti (2013)

# Cascade Effects via Self-Efficacy



Fosco & Feinberg (In Press).

# Cascade Models and Stage Salient Outcomes: Developmental Trajectories

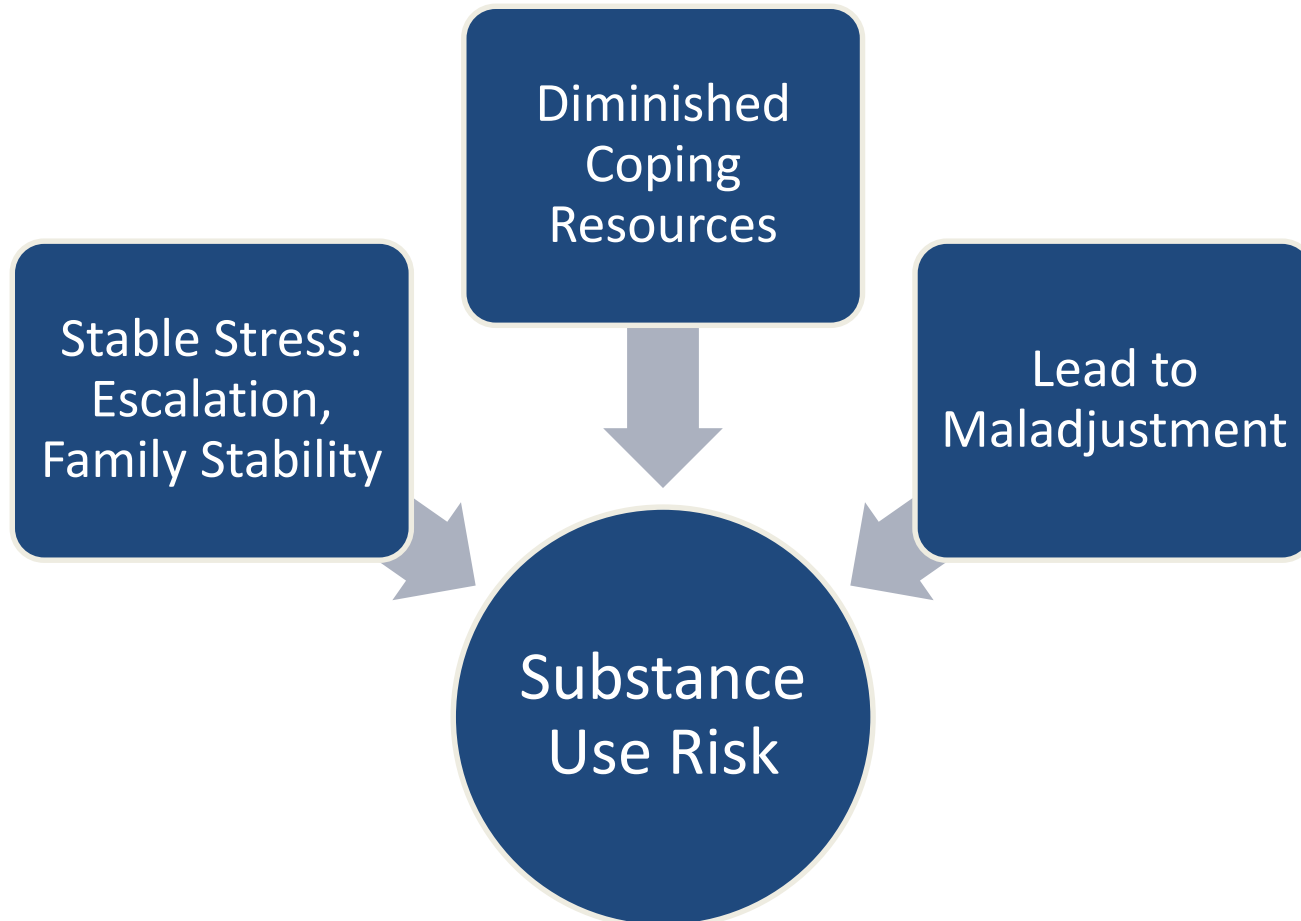




# Cascade Models: “Stage Salient Outcomes”

- 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



# Two Competing Hypotheses



Global Risk  
Hypothesis

Substance-  
Specific Risk  
Hypothesis



# Global Risk Hypothesis

Prediction: Threat is related to trajectories of substance use over adolescence

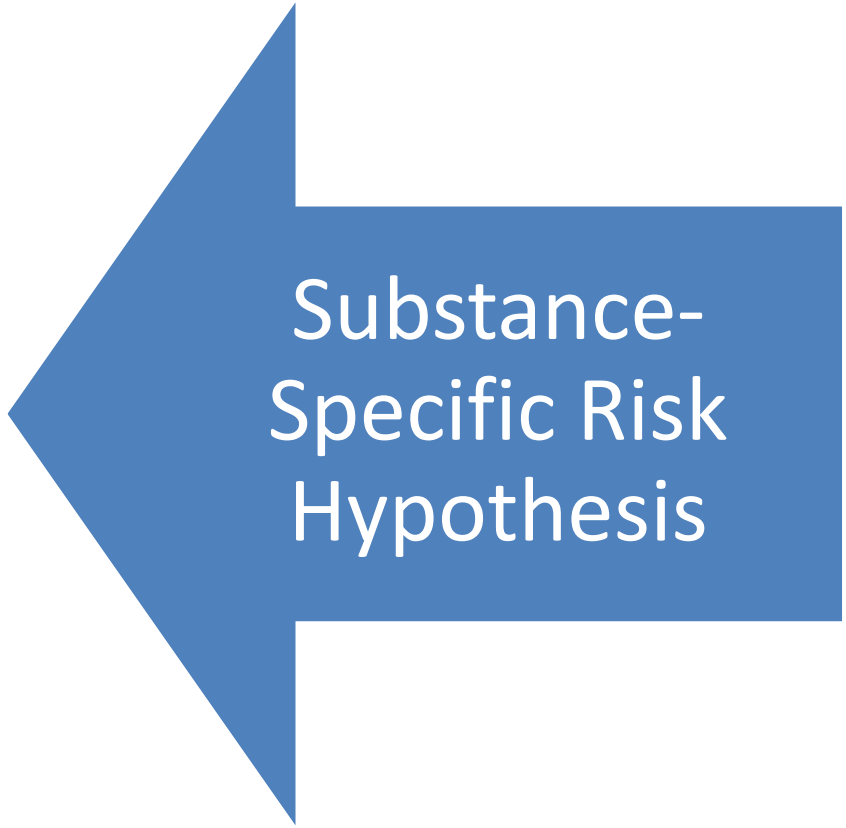
A: direct associations with cigarettes and alcohol use

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.



Substance-Specific Risk Hypothesis

# 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 6<sup>th</sup>, Spring 6<sup>th</sup>, Spring 7<sup>th</sup>
- Adolescent data: Spring: 6<sup>th</sup>, 7<sup>th</sup>, 8<sup>th</sup>, 9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>

# 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

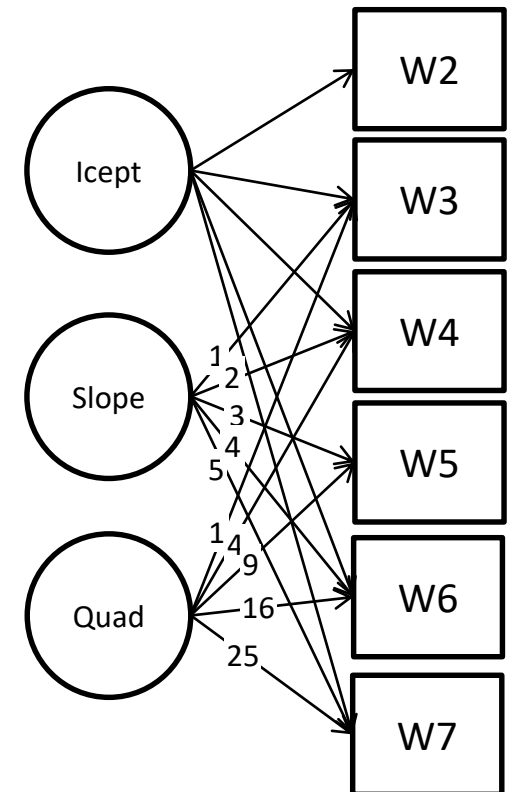
Mean  $i = 1.01^*$   
 $s = .06^*$   
 $q = .01^*$

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

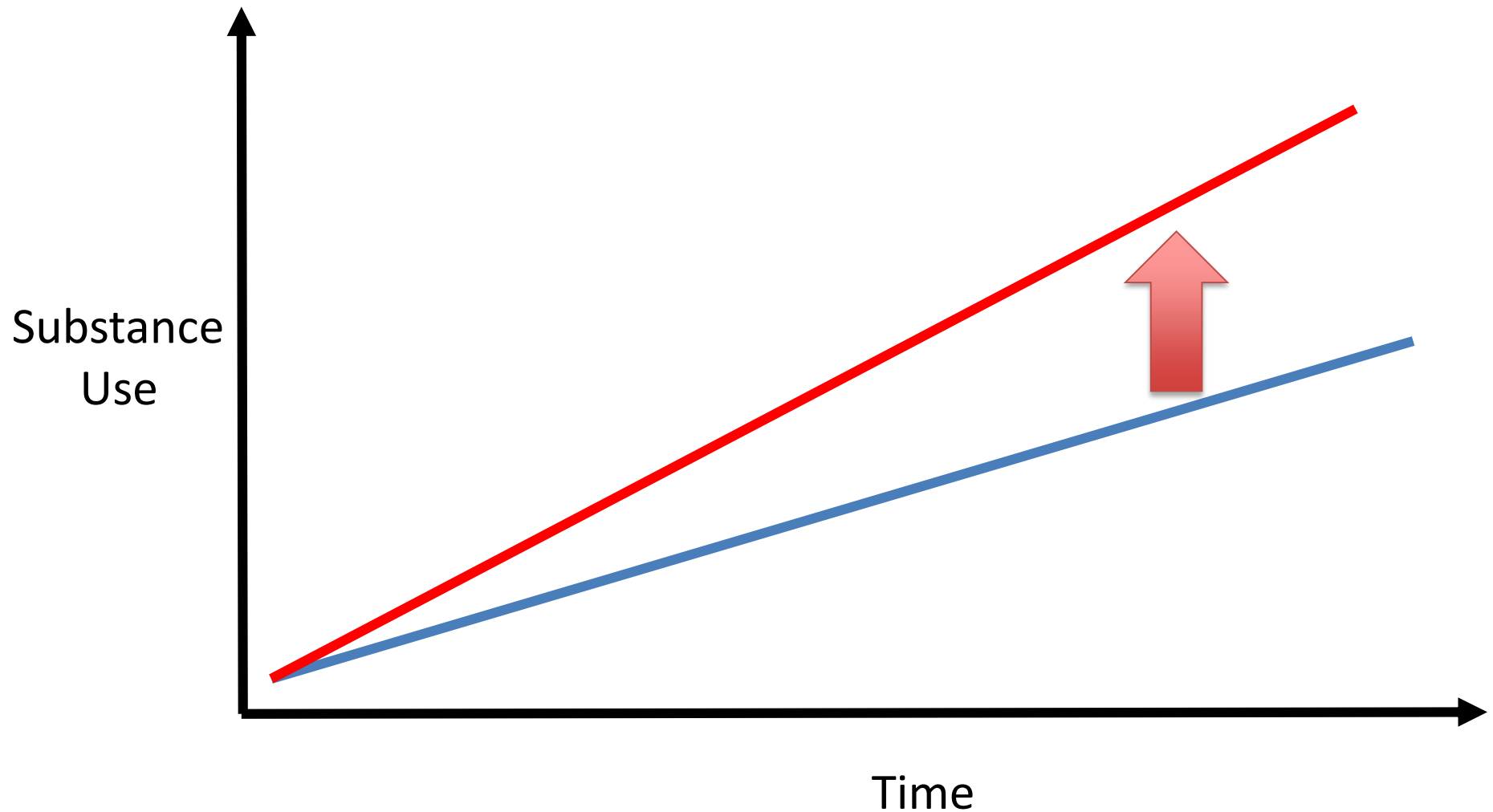
## Alcohol

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

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



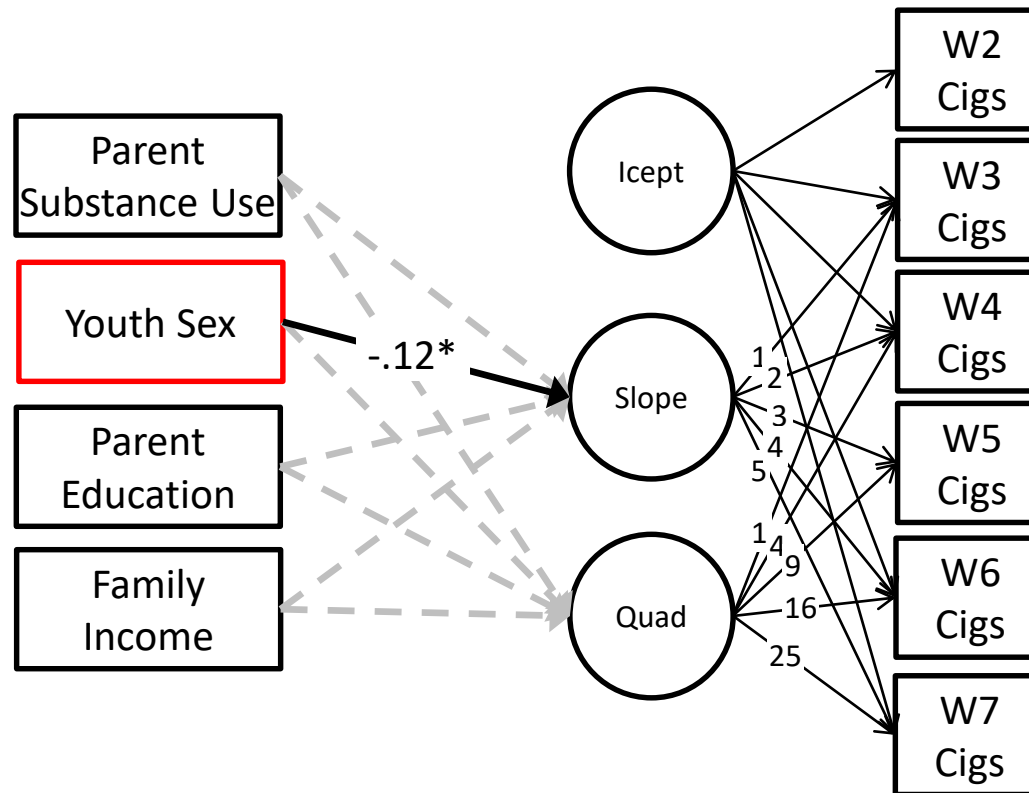
# Predicting Slope



# Cigarette Use Analyses



## 2. Covariate Predictors of Cigarette Use



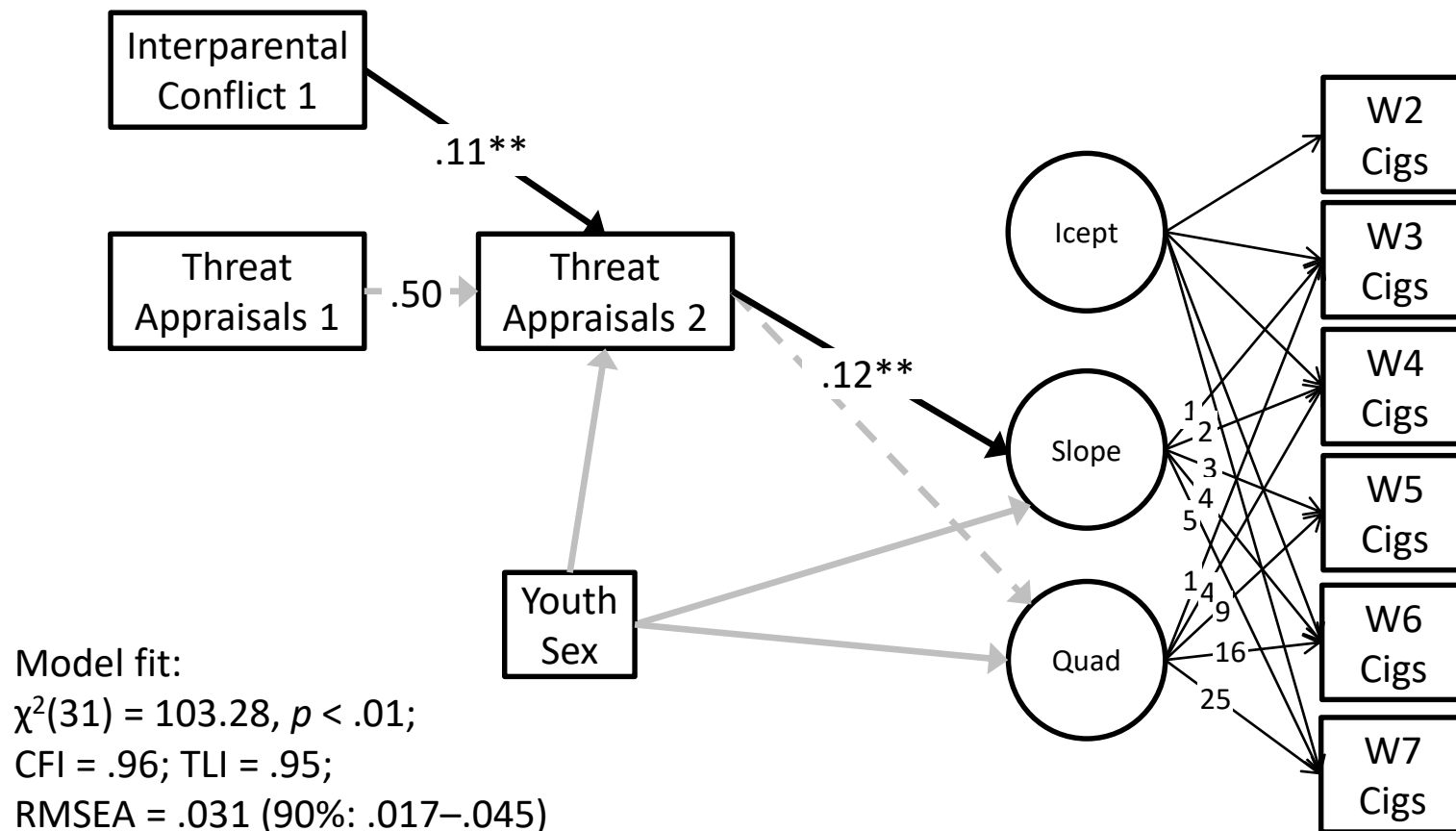
Model fit:

$\chi^2(30) = 63.40, p < .01;$

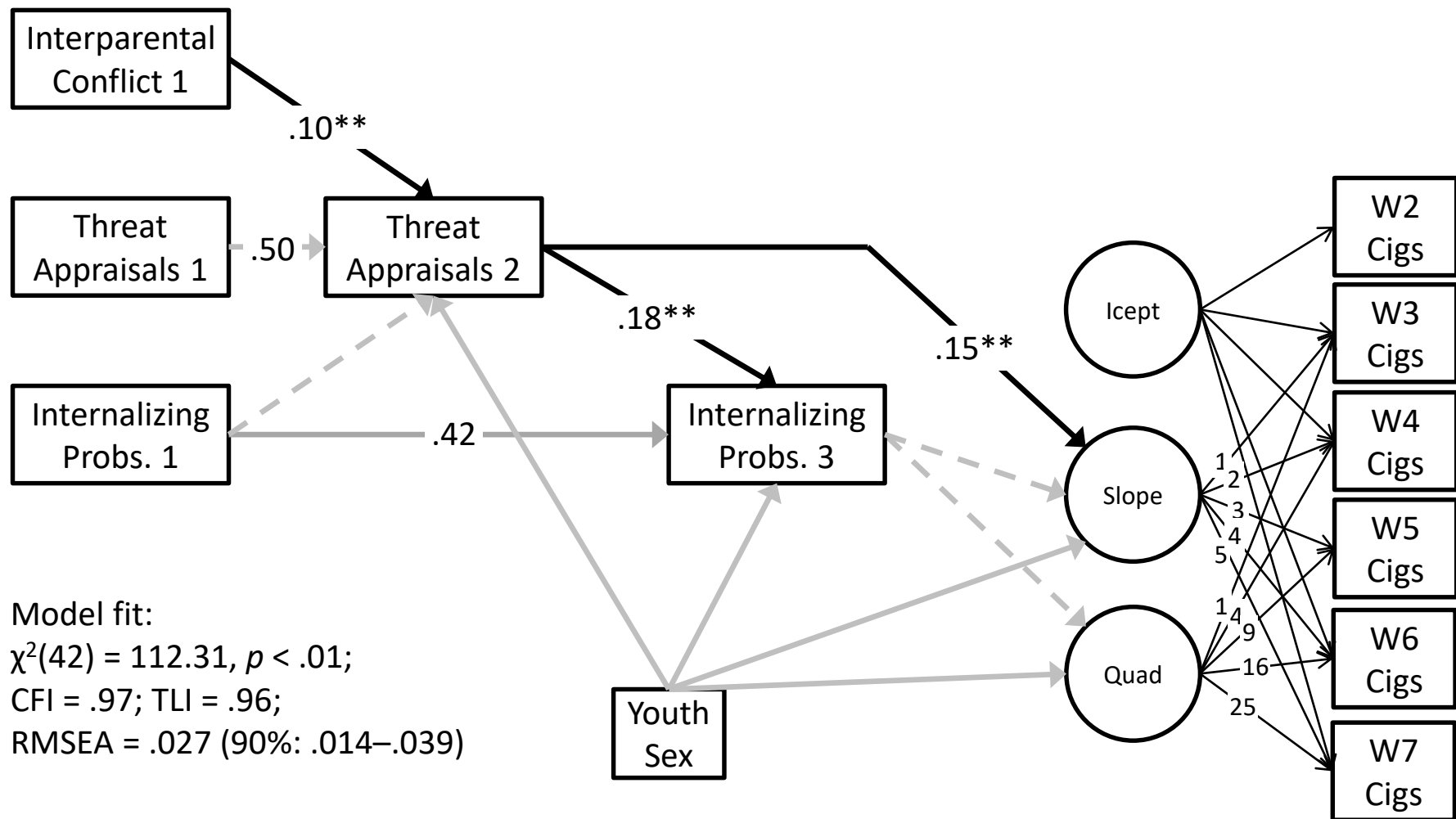
CFI = .99; TLI = .99;

RMSEA = .009 (90%: .000–.031)

### 3. Threat Predicting Cigarette Use

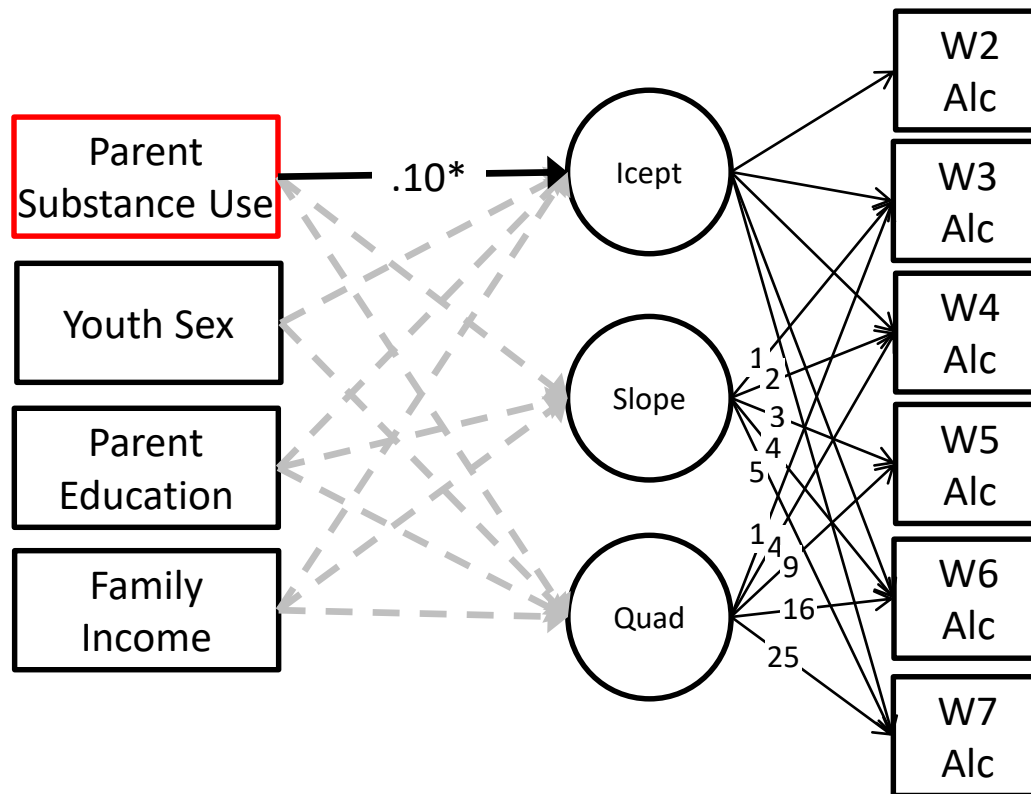


## 4. Cigarettes: Threat via Internalizing Problems



# Alcohol Use Analyses

## 2. Covariate Predictors of Alcohol Use



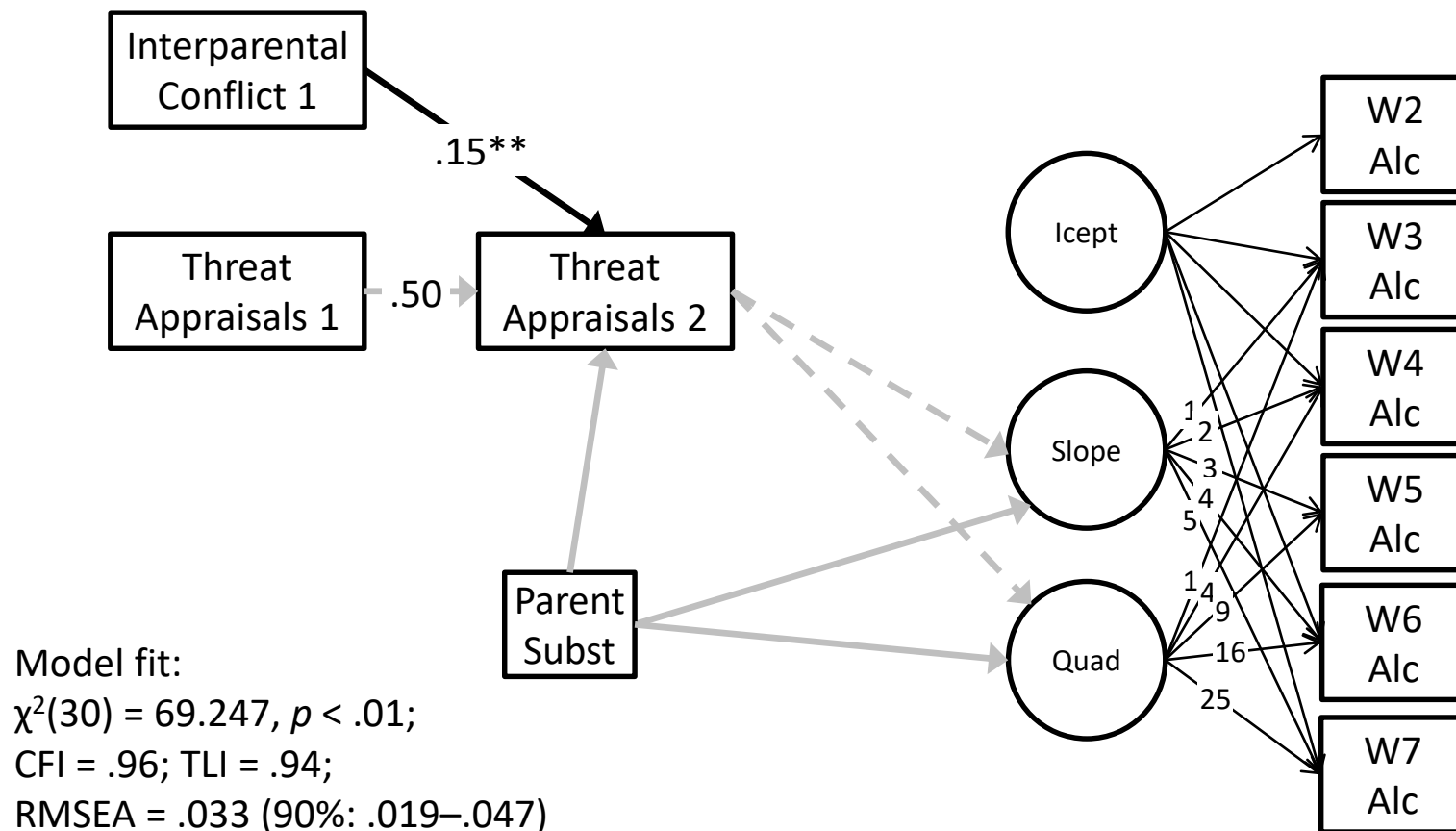
Model fit:

$\chi^2(24) = 29, p = .49;$

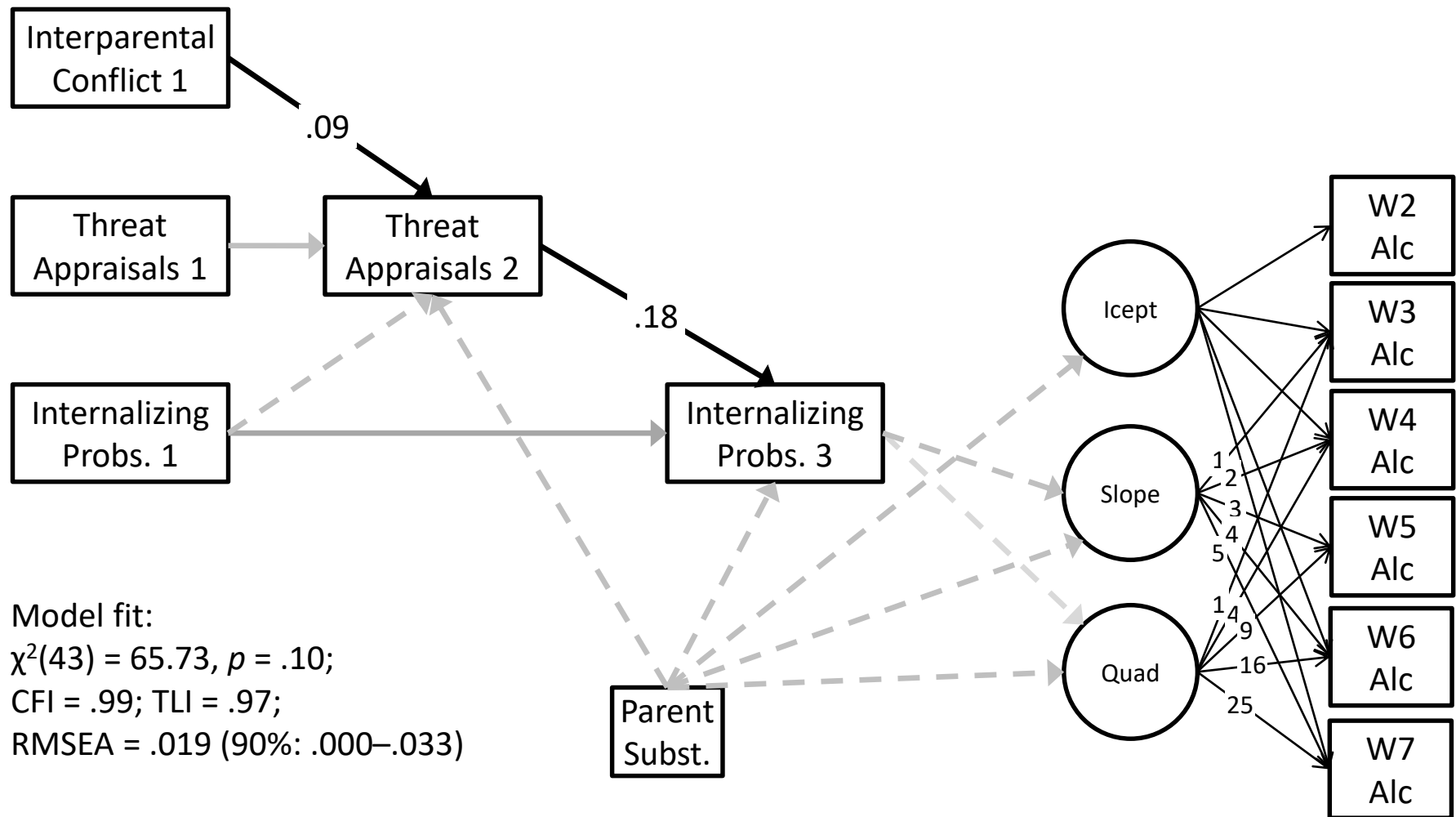
CFI = 1.00; TLI = 1.00;

RMSEA = .000 (90%: .000–.031)

### 3. Threat Predicting Alcohol Use



# Threat Cascade Model Predicting Alcohol Use



# 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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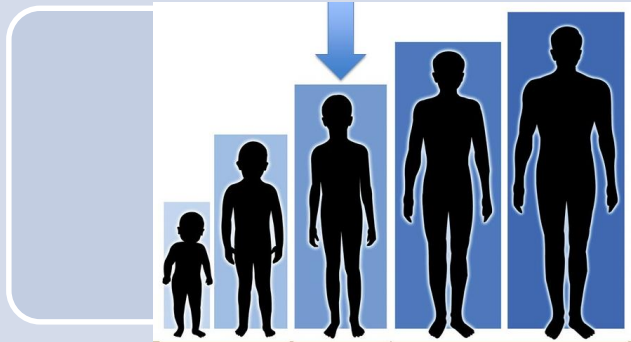


Atkinson et al., 2009; Davies & Cummings, 1994; Davies & Woitach, 2008; Grych et al., 1992; Fosco et al., 2007; Grych & Cardoza-Fernandez, 2001; Martin et al., 2014

# 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*

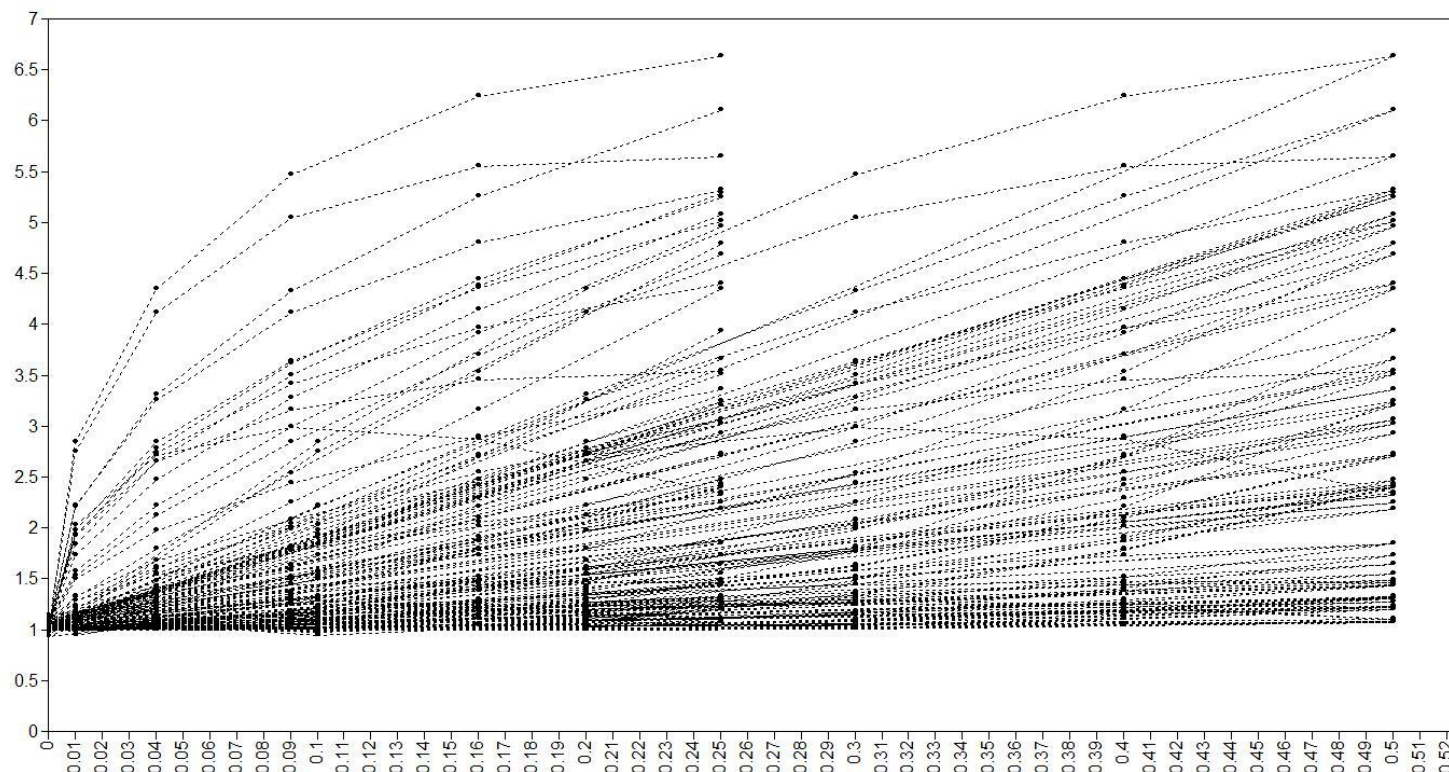


# Past Month Cigarette Use Trajectories Gr 6-11

Individual Estimated Curves

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

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



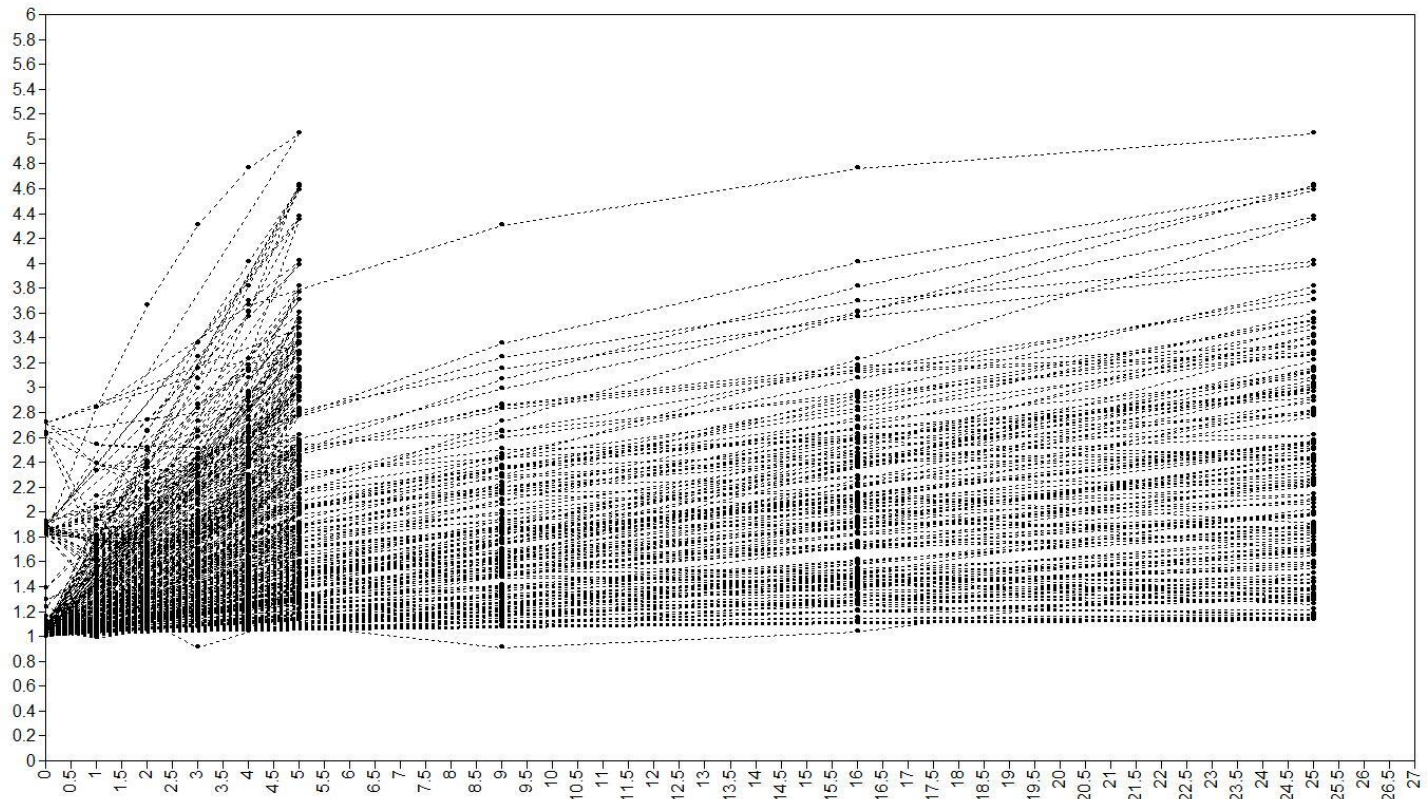
Unconditional LGCM:  $\chi^2(12) = 68.34, p = .054$ ; CFI = .97, TLI = .96 RMSEA = .03

# Past Month Alcohol Use Trajectories Gr 6-11

Individual Estimated Curves

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;