

On the Importance of Examining Reciprocal Deterministic Relationships in Positive Psychology



Presentations:

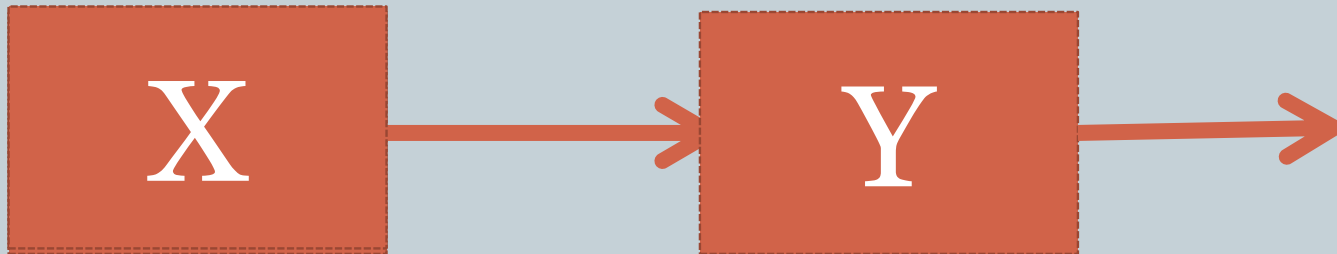
- 1. Attending Class is Only the First Step in Being Present in Class: Attendance is Not Presence**
 - Gareau, Gaudreau, & Miranda
- 2. Psychological Need Satisfaction as an Antecedent and Consequence of Coping and Goal Progress**
 - Gunnell, Fecteau, & Gaudreau
- 3. Examining the Mediating Role of Coping in the Differential Associations of Affective and Motivational States with Affective Spillover**
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Reciprocal Relationship



Antecedent

Consequence



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Psychological Need Satisfaction as an Antecedent and Consequence of Coping and Goal Progress



**KATIE GUNNELL,
MARIE-CLAUDE FECTEAU,
PATRICK GAUDREAU**

Introduction



- **Academic Achievement**
 - Goal progress

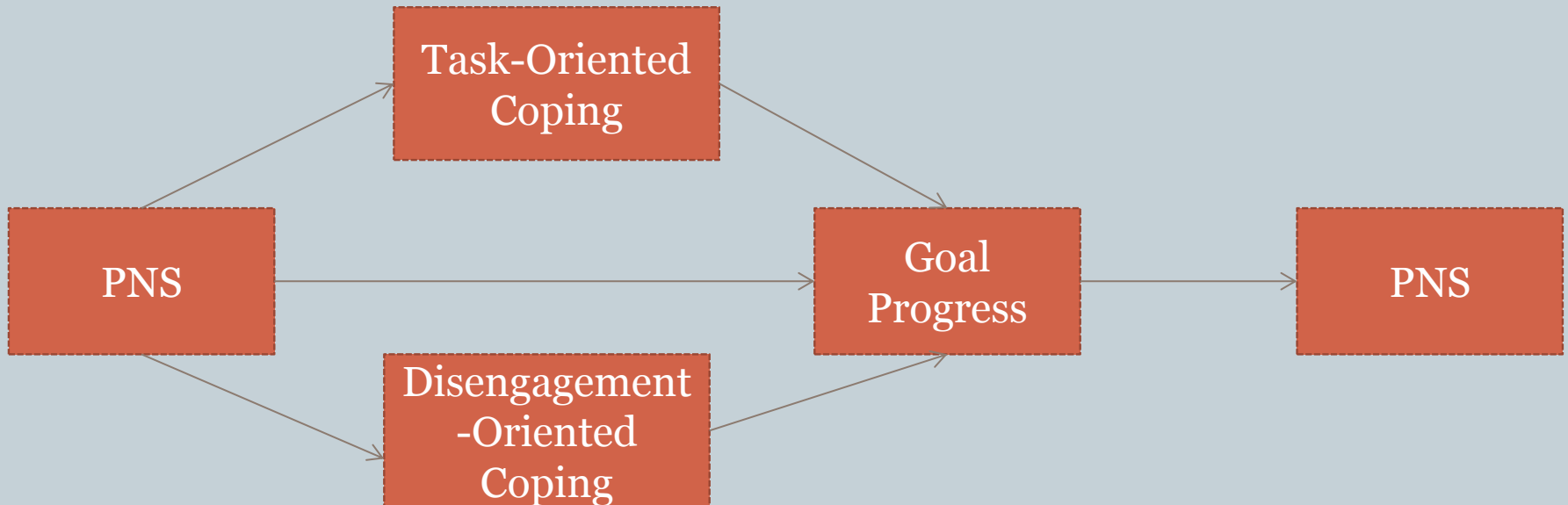
- **Self-Determination Theory** (Deci & Ryan, 2002)
 - Psychological Need Satisfaction (PNS)
 - ✦ Competence
 - ✦ Autonomy
 - ✦ Relatedness

- **Coping**
 - Task-Oriented Coping
 - Disengagement-Oriented Coping

Purpose 1



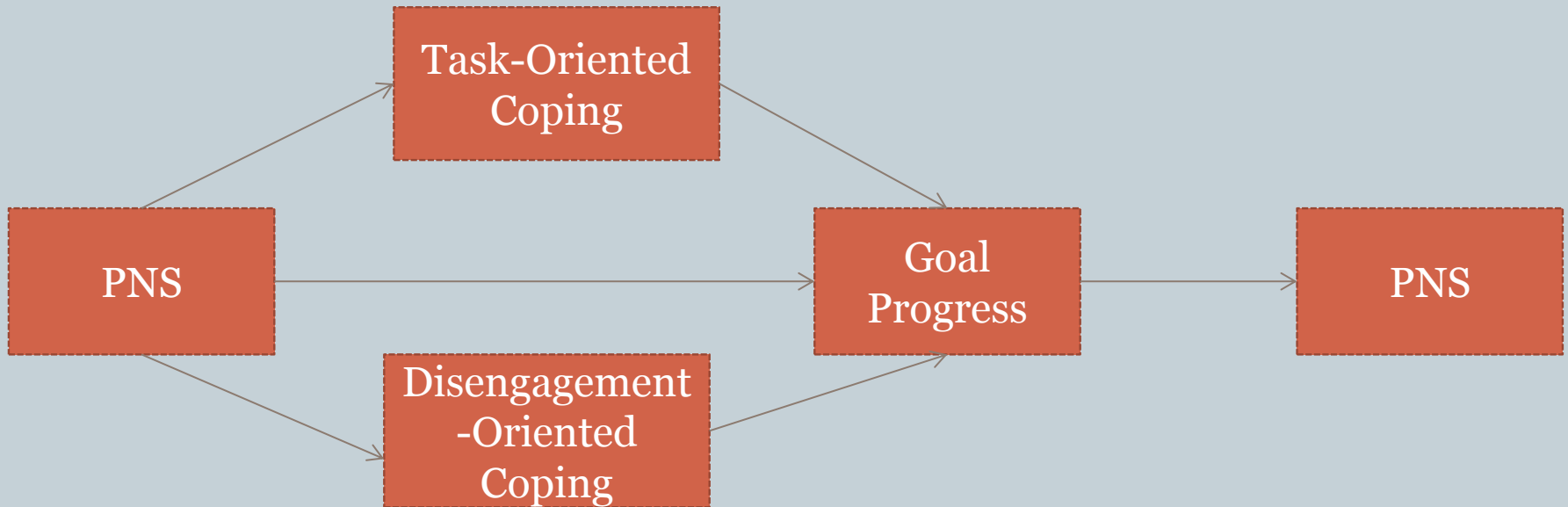
- Examine the complex relationships between
 - Psychological need satisfaction (PNS)
 - Coping
 - Academic goal progress



Purpose 2



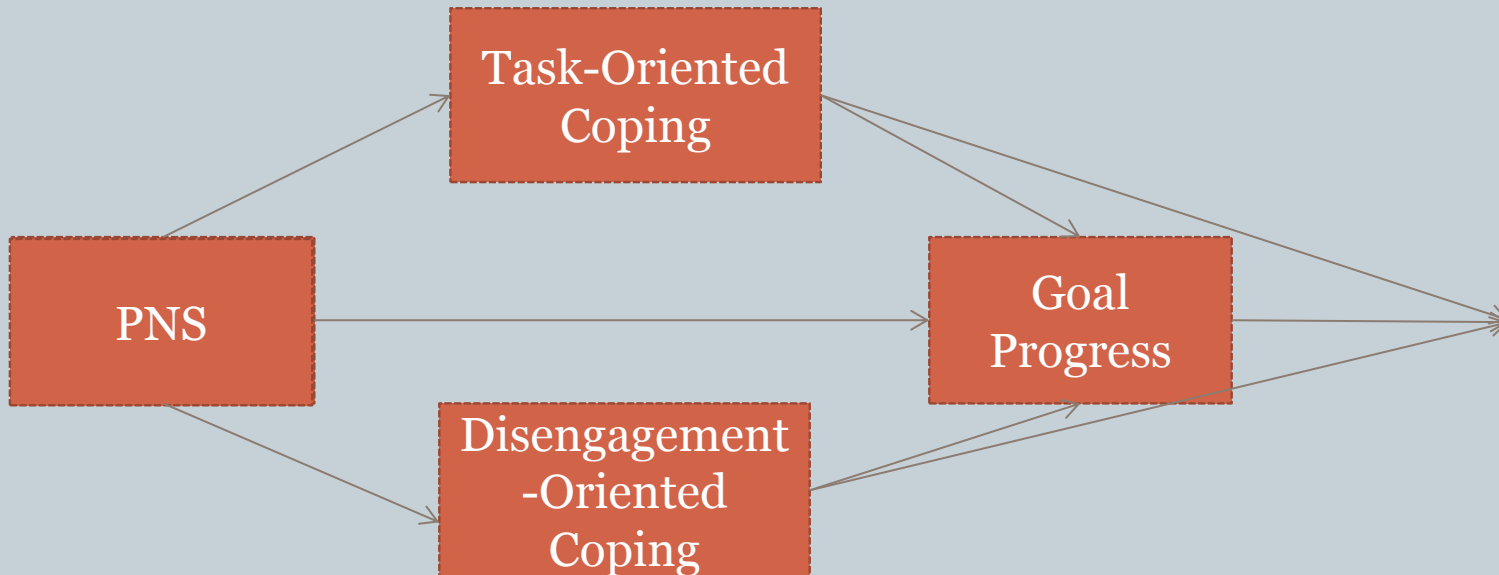
- Examine Coping as a mediator
 - Between PNS and goal progress



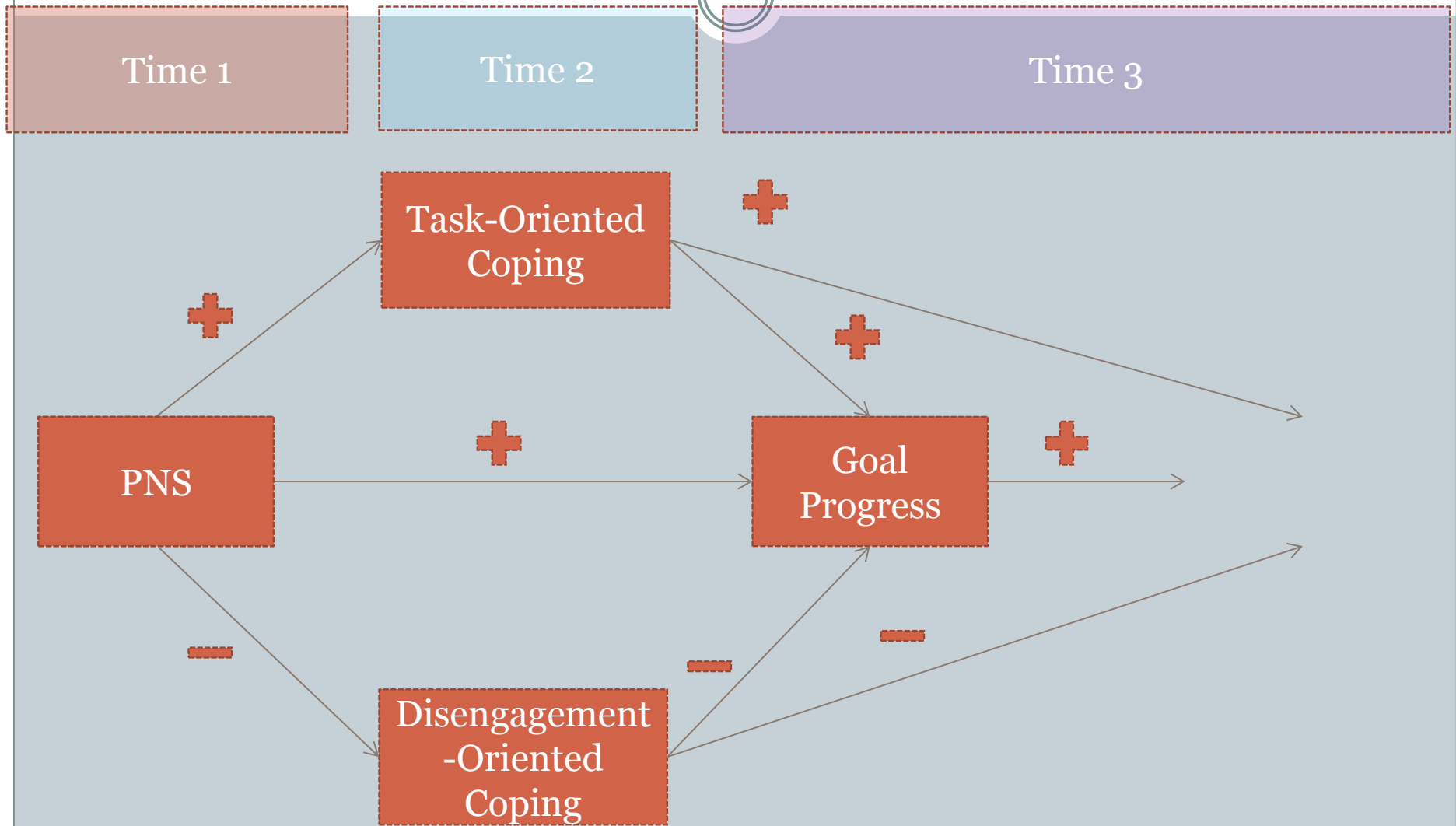
Purpose 3



- Examine the reciprocal relationships between PNS and coping/goal progress



Hypotheses



Method



- **Procedures**
 - Time 1: Start of semester (Early October)
 - Time 2: A few weeks after midterms (Late November)
 - Time 3: Winter semester (Early February)
- **Participants**
 - N = 269 undergraduate students
 - Age Range: 16 to 48 years (M =19.47, SD = 3.29)
 - Female = 67.3%
 - Most first year students (58.4%)
 - Most Caucasian (65.9%), Asian (18.2%)
- **Measures**
 - Participants self-reported an academic goal



- **Measures**

- **Time 1 & Time 3:**

- ✦ PNS: Basic Psychological Need Satisfaction Scale adapted to academic contexts (12-items; Gagné, 2003)

- **Time 2:**

- ✦ Coping: Short COPE(Carver, 1997) and achievement-related coping questionnaire (16-items; Gaudreau & Blondin, 2002)

- **Time 3:**

- ✦ Goal Progress: Three items from Dugas et al., 2012

Data Analyses



- All Analyses conducted using Mplus 7.0

- 1. Preliminary Data Screening

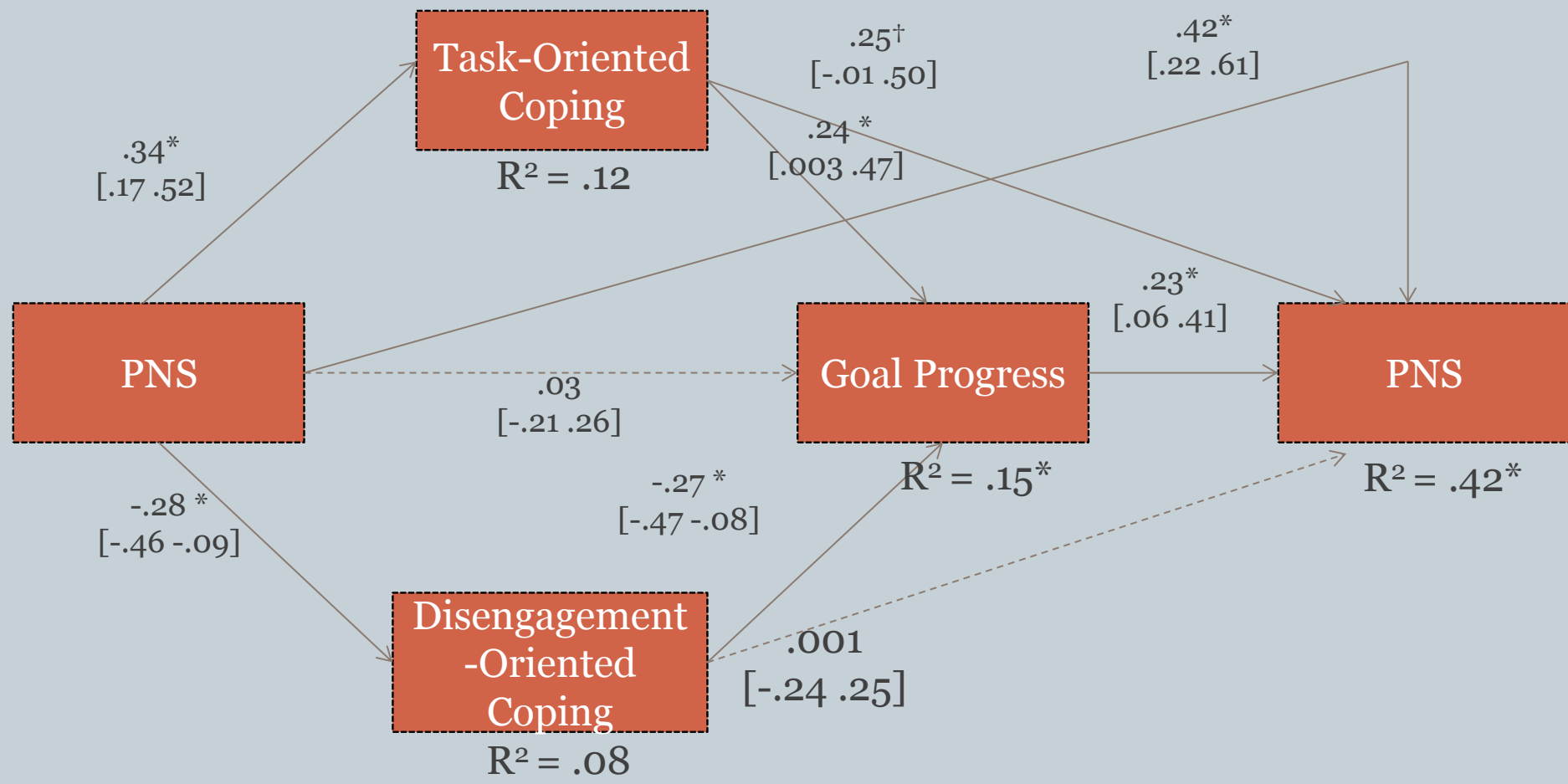
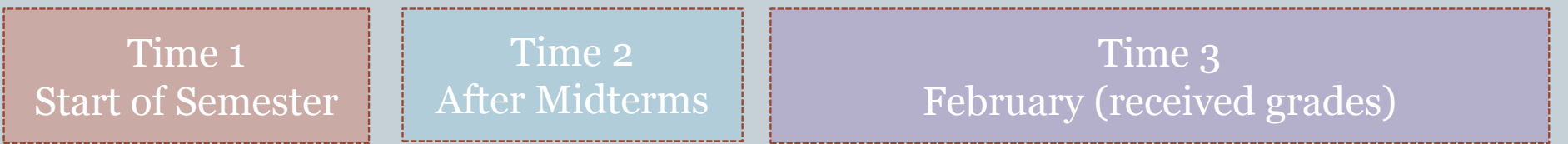
- 2. Longitudinal Invariance

- 3. Structural Equation Modeling
 - Mediation model
 - ✦ Bootstrapped Bias Corrected Confidence intervals

Results



- Attrition analyses
 - No differences on study variable
 - Gender difference between those who completed all 3 times points
- Longitudinal Invariance: loadings, intercepts, errors
- Measurement model:
 - $MLR\chi^2_{(85)} = 134.57, p = .0005,$
 - CFI = .97,
 - TLI = .96,
 - RMSEA = .05,
 - RMSEA 90% CI = .03 – .06



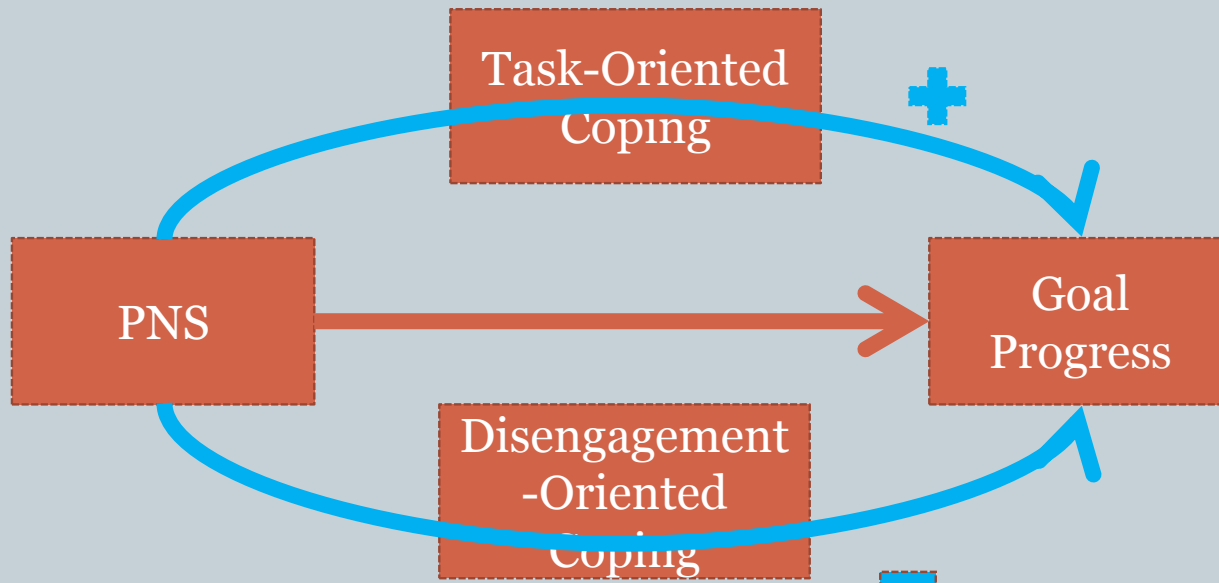
* $p < .05$, † $p < .06$. Standardized betas 95% confidence intervals around the standardized betas.

MLR $\chi^2_{(86)} = 134.32$, $p = .0007$, CFI = .97, TLI = .96, RMSEA = .05, RMSEA (90% CI = .03 – .06,) SRMR = .06.

Results



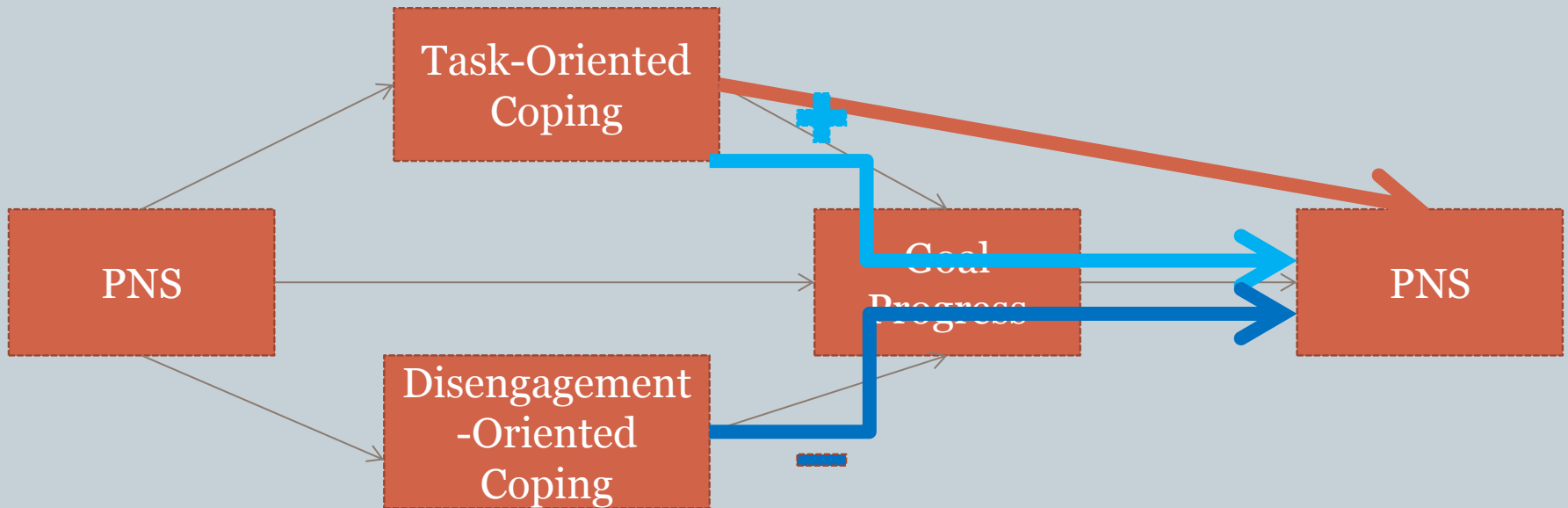
- Total effect and total indirect effect from PNS (T1) to goal progress (T3) was positive and significant
 - Mediated by task-oriented (T2) - positive
 - Mediated by disengagement-oriented coping (T2) - negative



Results



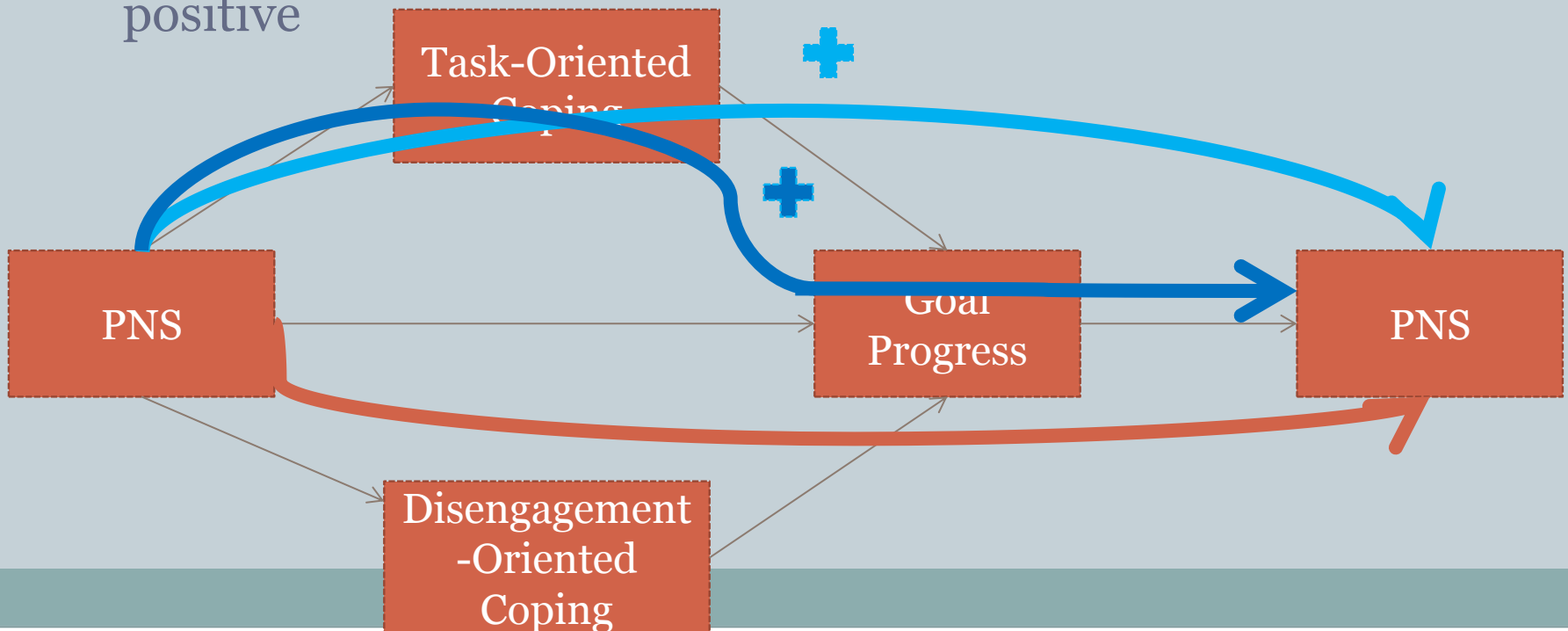
- Total effect from task-oriented coping (T2) to PNS (T3) was significant
 - Mediated by goal progress (T3) – positive
- Non-significant total effect from disengagement-oriented coping (T2) to PNS (T3)
 - Mediated by goal progress (T3)- negative



Results



- Total effect from Time 1 and Time 3 PNS was significant:
 - Mediated by task-oriented coping (T2) - positive
 - Mediated by Task-oriented coping (T2) to goal progress (T3) - positive



Discussion



- Integrative reciprocal model accounted for small to large proportions of variance
 - 8-42%
- Reciprocal relationship
 - PNS leads to greater task-oriented coping and less disengagement-oriented coping
 - In turn, coping lead to greater PNS through goal progress

Limitations and Future Directions



- **Limitations**

- Self-report
- Casual Conclusions
- Between-person design

- **Future Directions**

- Informant report
- Cross-lagged Analyses
- Within-person design

Practical Implications



- The strategy of managing effort leads to progressing on academic goals.
- Coping intervention to improve academic achievement
- Stress management programs
 - Gaudreau and colleagues currently running a randomized controlled trial

Acknowledgements



- This research was supported by the Social Sciences and Humanities Research Council of Canada



Social Sciences and Humanities
Research Council of Canada

Conseil de recherches en
sciences humaines du Canada

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- This research was part of a manuscript has been submitted for publication

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