

Examining Changes in Active Coping Strategies Among Latinx Adolescents: A Latent Growth Curve Analysis

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Literature Review

Active Coping Strategies

- Involve engagement in cognitive or behavioral efforts to understand and resolve problems (Ayers et al., 1996)
- There is limited work and mixed findings on developmental changes in active coping strategies among adolescents
 - Work suggests uncontrollable stressors decrease active coping strategies during adolescence (Zimmer-Gembeck & Skinner, 2011)
 - There is also other work that finds increases in active coping strategies during adolescence (Evans et al., 2015)

Life Course Theory (Elder, 1998)

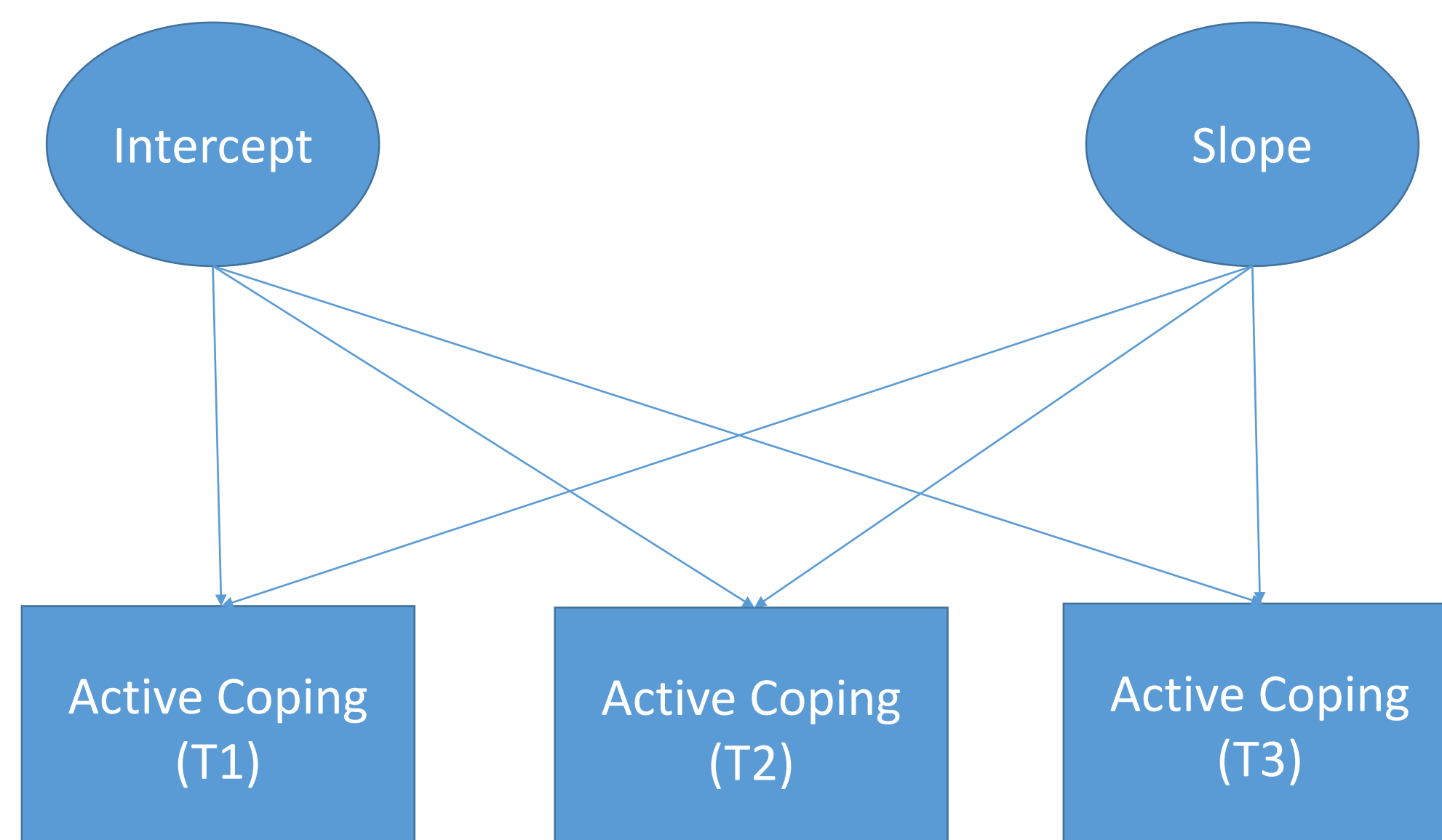
- Posits changes in environmental and social contexts (e.g., adolescents have added responsibilities) and
- Developmental changes (e.g., adolescents experience an increase in cognitive complexity)
- Guided by life course theory, active coping is re-calibrated and adjusted with changing ecologies in adolescence (Lerner et al., 2012)

Latinx Adolescents

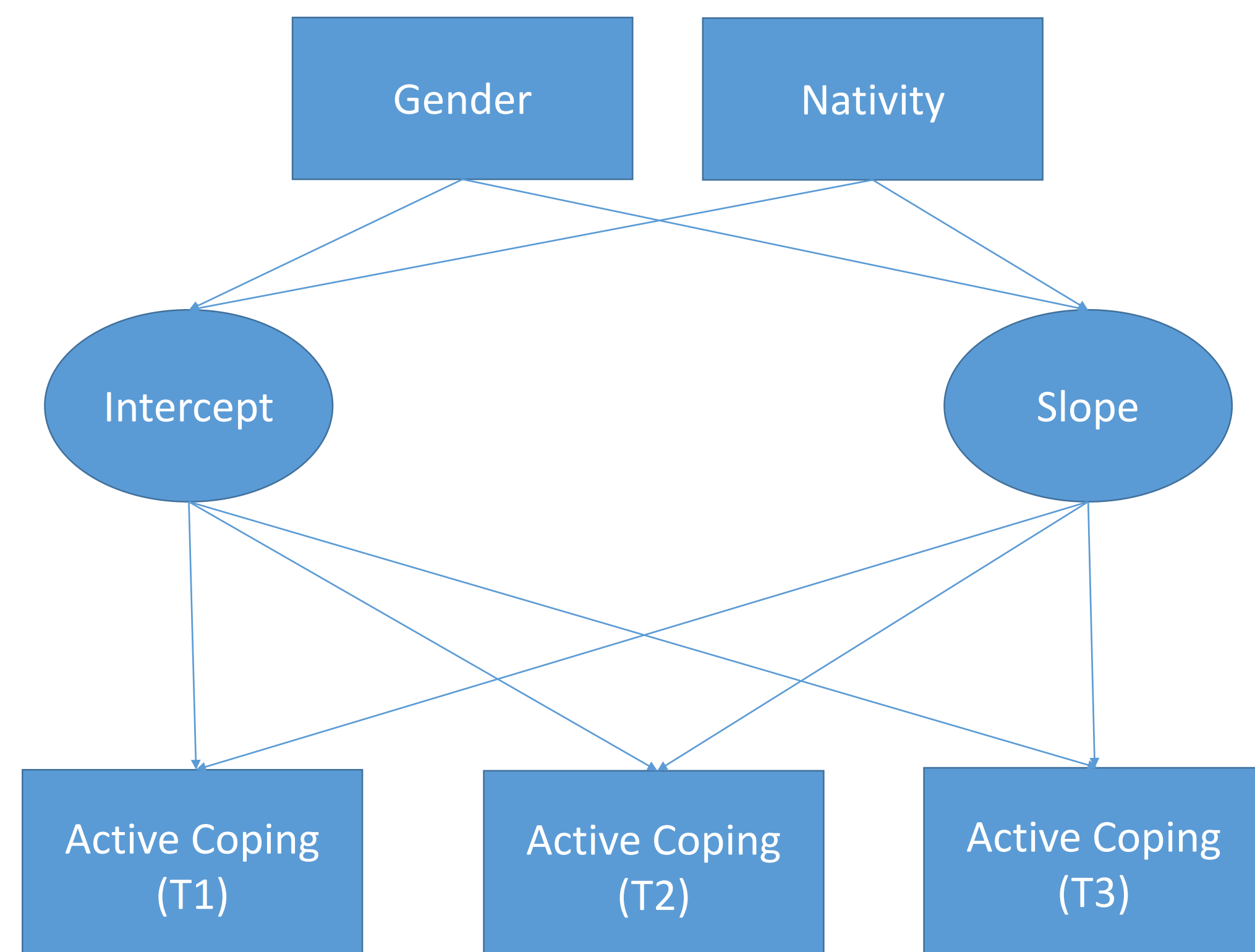
- Discrimination increases from middle to high school (Aud et al., 2010)
- Active coping may differ by gender and nativity
 - Latinx boys and girls may have different socializing agents of problem-solving skills (Raffaelli & Ontai, 2004)
 - Foreign-born adolescents use indirect coping strategies such as forbearance; U.S.-born adolescents use direct coping strategies such as active coping (Kuo, 2011)

Study Goals

- Goal 1:** Examine changes in Latinx adolescents' active coping strategies during the transition from middle to high school



- Goal 2:** Explore variations in the trajectories of active coping strategies by gender and nativity



Method

Participants

- 329 families (parent-child dyads)
- 288 middle school students are in this study
- Age = 13.69, SD = .56
- 42% female
- 86% U.S.-born

Measures

Demographics

- Adolescent gender (0=male, 1=female)
- Nativity (U.S. Born=1, Foreign Born=0)
- About 50% of parents reported receiving some form of government assistance (e.g., food stamps, Medicaid, or state health insurance)

Analysis Plan

- Analyses in Mplus version 8.3
- Model fit
 - Chi-square (χ^2) value
 - Comparative Fit Index (CFI > .90)
 - Root Mean Square Error of Approximation (RMSEA < .10)
 - Standardized Root Mean Square Residual (SRMR < .10; Hu & Bentler, 1998)

Procedures

- Recruited from middle schools in the southwest
- Telephone interviews in either English or Spanish.

Active coping strategies

- Children's Coping Strategies Checklist (Ayers et al., 1996; Sandler et al., 1997)
- 12 items (e.g., "You did something to solve the problem.")
- Scale 1 = almost never or never to 5 = almost always or always
- Cronbach's alpha T1 .93, T2 .90, T3 .92

Study Goal 1

- Run a series of latent growth curve models (LGCM)
 - LGCM random-intercept only
 - Linear growth curve model
 - LGCM with quadratic slope term, variance set to zero
 - Compare model fit

Study Goal 2

- Gender and nativity predicting the intercept and slope of the best-fitting LGCM

Results

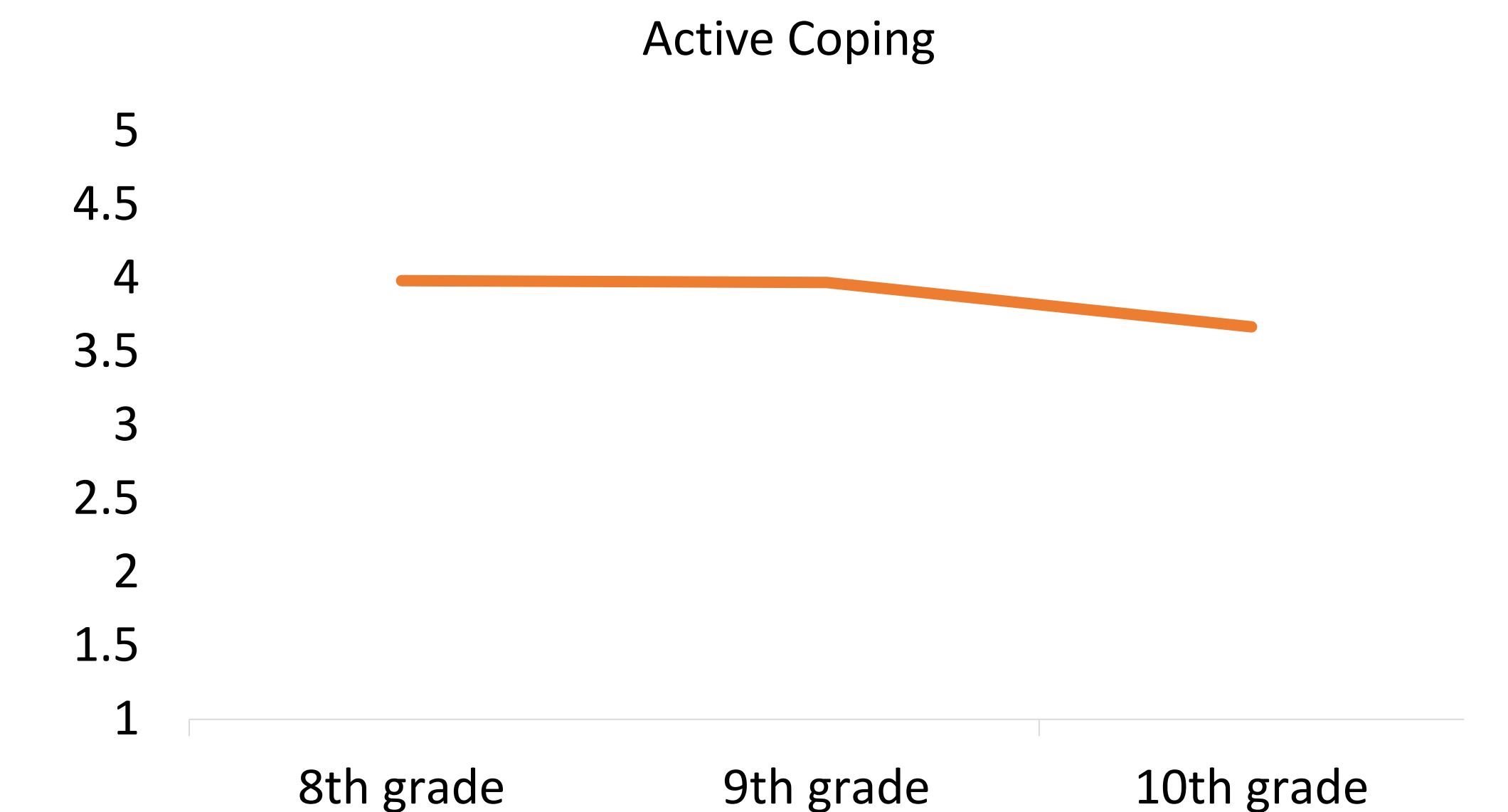
Goal 1. Latent Growth Model of Active Coping (See Table 1)

- LGCM random-intercept only
 - $\chi^2 (6) = 44.64, p = .00; CFI = 0.25; RMSEA = 0.15; SRMR = 0.30$
 - Poor fit suggests changes in active coping
- Linear growth curve model
 - $\chi^2 (3) = 10.26, p = .02; CFI = 0.86; RMSEA = 0.09; SRMR = 0.17$
 - Poor fit suggests there is no linear change in active coping
- Quadratic growth model
 - $\chi^2 (2) = 1.06, p = .59; CFI = 1.00; RMSEA = 0.00; SRMR = 0.0$
 - Acceptable fit suggests there is a quadratic change in active coping

- CFI Compare
 - $\Delta CFI = 0.75$; random intercept/quadratic growth models
 - $\Delta CFI = 0.14$; linear/quadratic growth models

| Growth Curve Component | B (SE) |
|---------------------------------|-----------------|
| Intercept mean | 3.98 (0.04)*** |
| Intercept variance | 0.31 (0.05)*** |
| Linear mean | 0.14 (0.10) |
| Linear variance | 0.070 (.03)** |
| Quadratic mean | -0.149 (0.05)** |
| Quadratic variance ¹ | 0.00 (0.00) |

Note. Estimates are presented as B(SE); ¹variance was set to 0; *** $p < .001$. ** $p < .01$. * $p < .05$.



Goal 2. Gender and Nativity Variations in Active Coping Growth

- No significant differences found by gender or nativity in the quadratic growth model

Discussion

Goal 1

- About half of the adolescents in our sample are from households that receive government assistance
- Latinx adolescents in the 10th grade are more cognitively mature than in 8th or 9th grades, capable of understanding and aware of their family's economic and social struggles (Elder, 1998)
- And collectivistic values may prompt 10th grade Latinx adolescents to take on or be given more parental responsibilities such as caring for younger siblings or contributing to the household finances as they are now legally able to hold after-school jobs and have driver's licenses (Kuo, 2011)
- Greater awareness of their family's economic and social struggles and their added roles may be seen as uncontrollable stressors that Latinx adolescents cannot change because contributing to the family is seen as part of their responsibilities and align with collectivistic cultural values, thus decreasing the use of active coping (Kuo, 2011)
- Latinx adolescents' active coping trajectories are not linear
 - This may be because Latinx adolescents in the 9th grade do not take on or are not given as many responsibilities as they are in the 10th grade
 - This study provides evidence for curvilinear trajectories of active coping among Latinx adolescents
- Latinx adolescents may use other coping strategies to cope with uncontrollable stressors

Goal 2

- No differences in the changes in active coping by gender or nativity
 - Both Latinx girls' and boys' cognitive development is similar and may have increased roles and responsibilities at similar times (Elder, 1998)
 - 10th grade both girls' and boys' equally perceive their added responsibilities as uncontrollable stressors
- No differences in the change in active coping by nativity.
 - The sample of foreign-born Latinx adolescents was too small to detect differences in the change in active coping.

Limitations and Future Directions

- Only examined active coping
 - Future work should examine other types of coping strategies
- Small sample of foreign-born Latinx adolescents
 - Future work should use a more even distribution of foreign-born and U.S.-born Latinx adolescents
- Sample from the Southwest
 - Future work should use a nationally representative sample

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