

STUDENTS' PHYSICAL ACTIVITY ACROSS JUNIOR HIGH SCHOOL YEARS

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INTRODUCTION

- Previous research has found adolescents' physical activity (PA) to decline during school years (Currie et al., 2008; Duncan et al., 2007; Trost et al., 2002).
- School physical education (PE) has been strongly recommended as a venue for increasing PA (Kahn et al., 2002; McKenzie, 2007; Morgan et al., 2007; Pate et al., 2010).

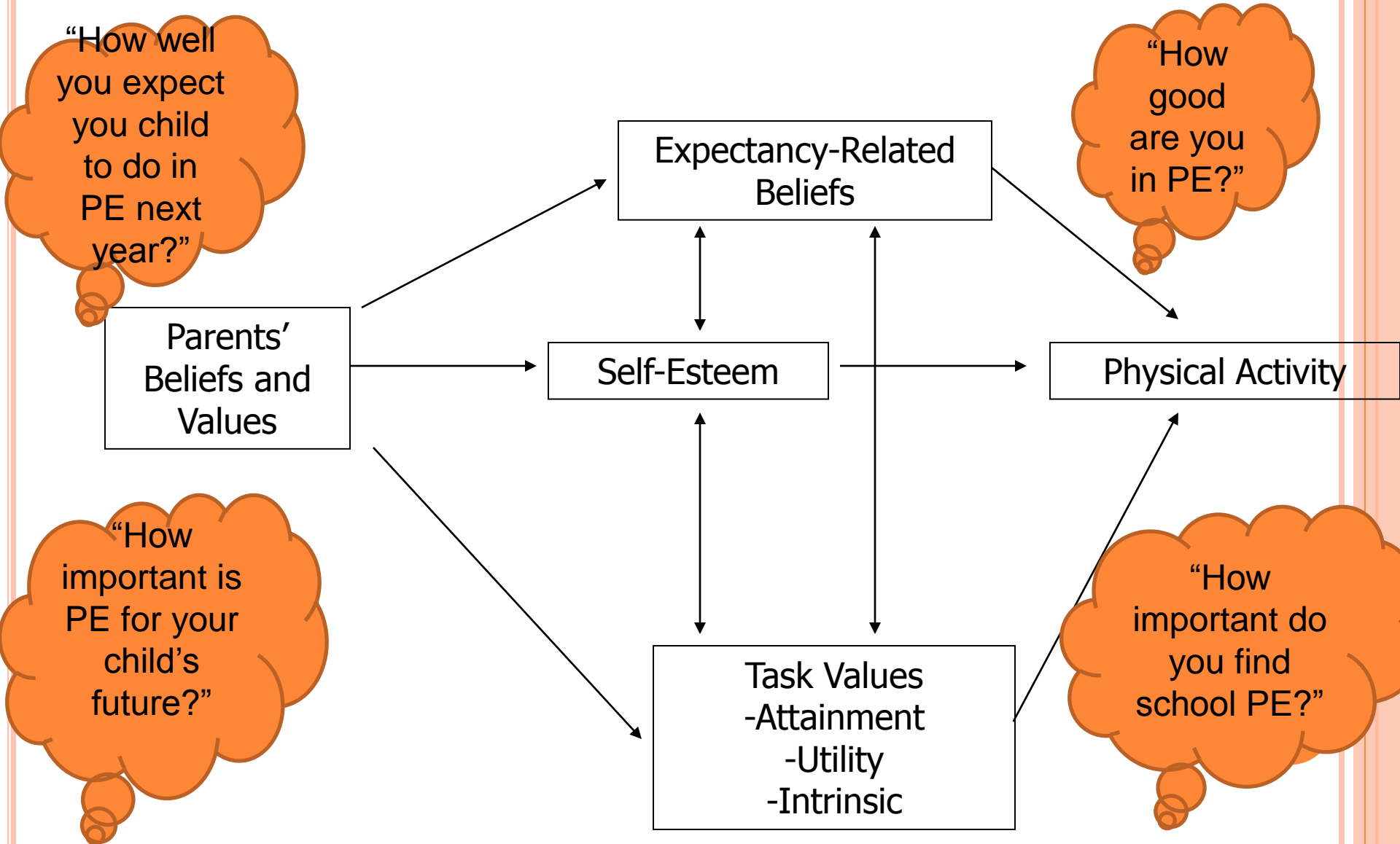


INTRODUCTION

- Scholars has advocated field-based studies to examine how motivation related processes toward PE predict actual PA patterns (Cox et al., 2007; Ferrer-Caja & Weiss, 2002; Hagger et al., 2003; Shen et al., 2008; Standage et al., 2007).
- In addition, parental role in this development is yet to be determined (See review, Edwardson & Gorely, 2011).



EXPECTANCY-VALUE THEORY (ECCLES ET AL., 1983; WIGFIELD ET AL., 2000)



PURPOSE OF THE STUDY

1. To examine the development of students' PA across the middle school years Grades 7 to 9.
2. To test the predictive strength of students' self-esteem and expectancy-related beliefs and task values toward PE in their development of PA.
3. To investigate the role of parents' expectancy-related beliefs and values toward PE in students' PE motivation and PA.



METHOD

- A total of 812 (382 girls, 430 boys)
- 8 middle schools and 40 PE classes (girls' = 19, boys' = 20, mixed = 1)
- 13-14 years old in the beginning of the study
- Parents ($n = 925$, mothers = 550, fathers = 375)
- PA was measured 5 times (T1-T5)
- Students' and their parents' beliefs and values as well as students' self-esteem were measured once (T1)
- In middle school (Grades 7-9) subject specific classes are widely used
- Single gender PE

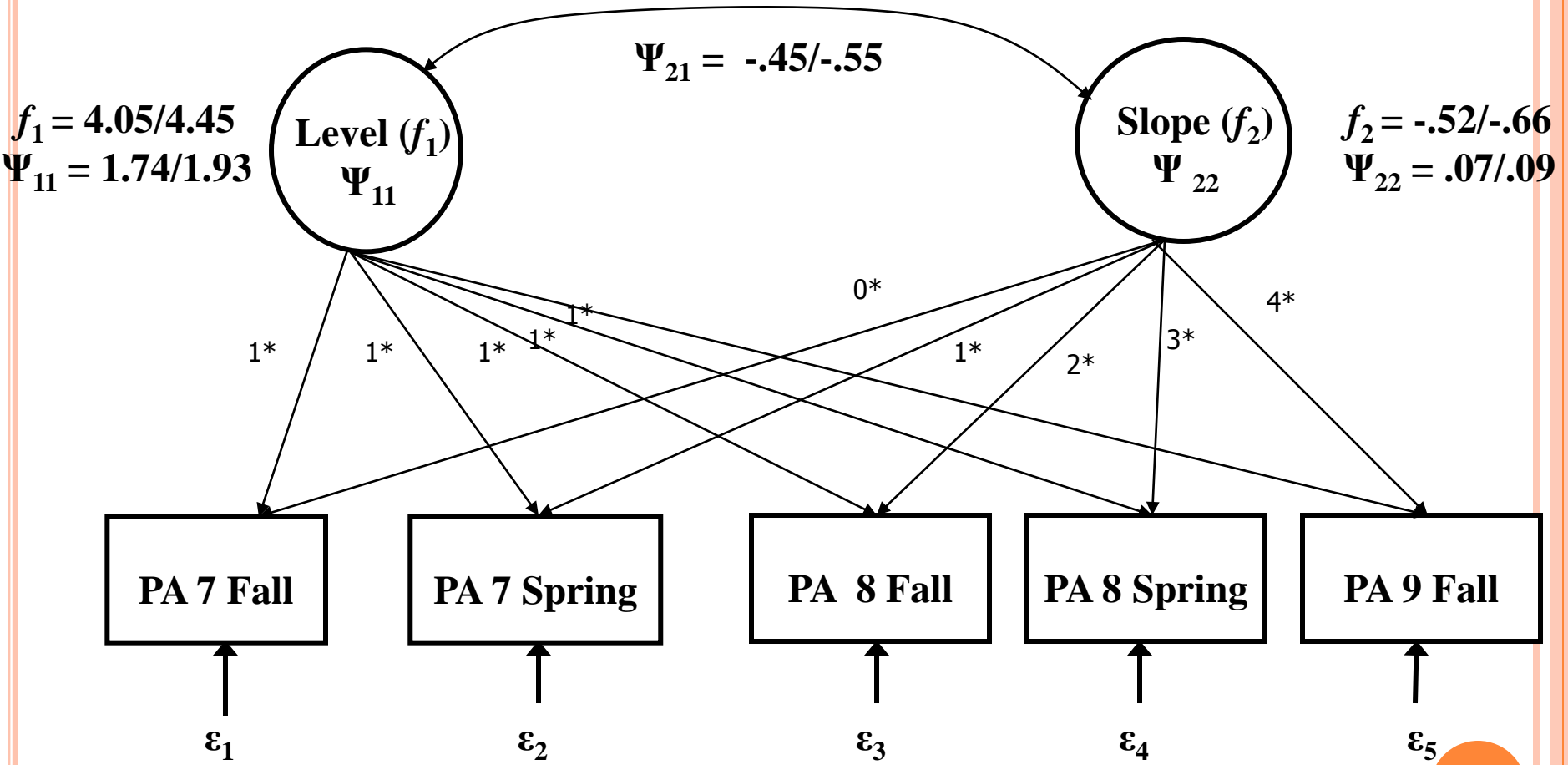


MEASURES

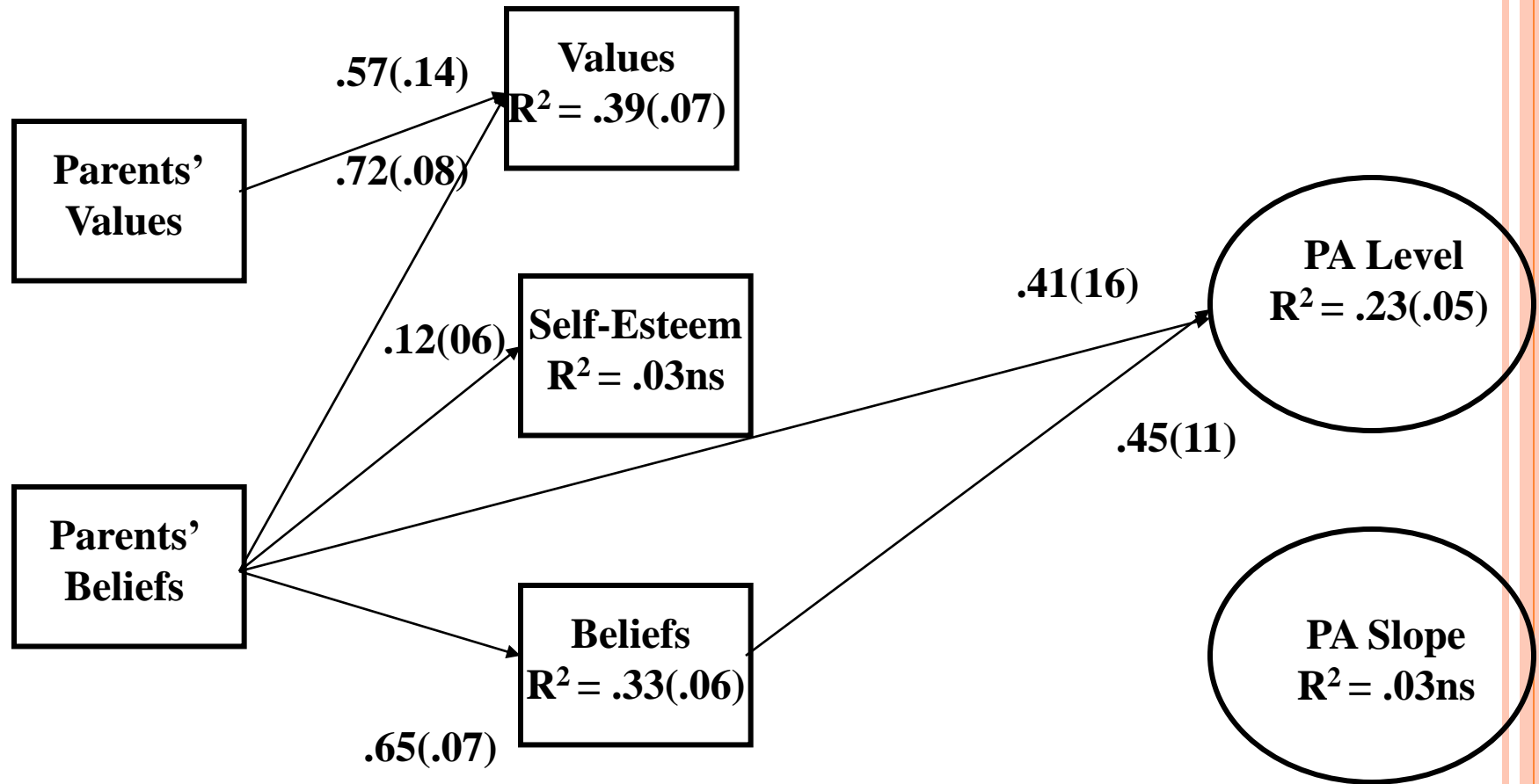
- Student Physical Activity Scale (World Health Organization Health Behaviour in School-Aged Children questionnaire; Currie et al., 2002; HBSC, 1996)
- Self-Perception Questionnaire (Eccles et al., 1983; Xiang et al., 2003)
- Task Value Scale (Niemi-virta, 2002; Xiang et al., 2003)
- Self-Esteem Scale (Rosenberg, 1965)



LATENT GROWTH CURVE MODEL FOR STUDENTS' PA



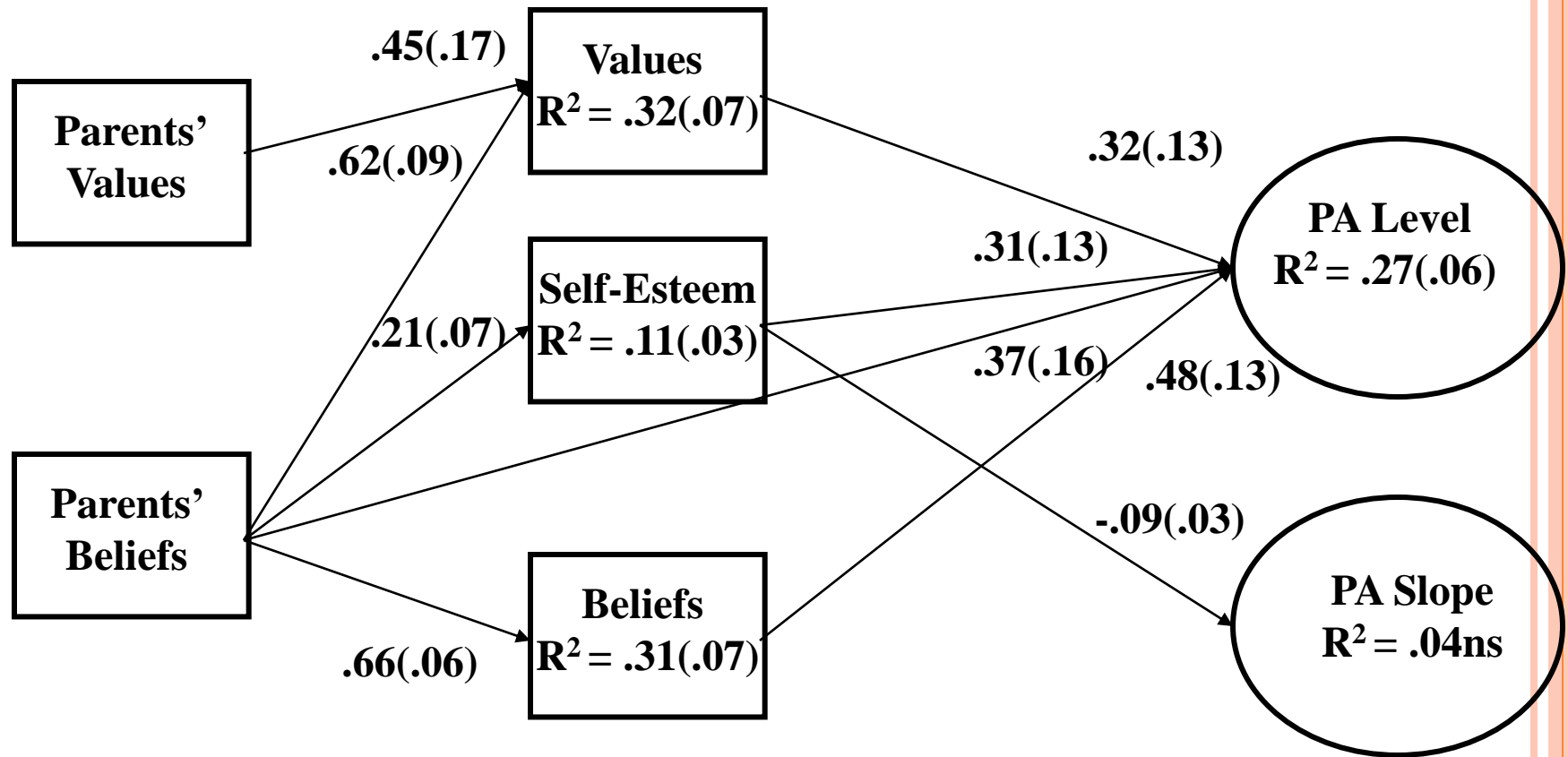
CONDITIONAL LATENT GROWTH CURVE MODEL FOR GIRLS



Model fit indices for girls:
 $\chi^2(25) = 41.60, p = .020$
 $CFI = .99, TLI = .98$
 $RMSEA = .042, 90\%, CI [.02, .07]$



CONDITIONAL LATENT GROWTH CURVE MODEL FOR BOYS



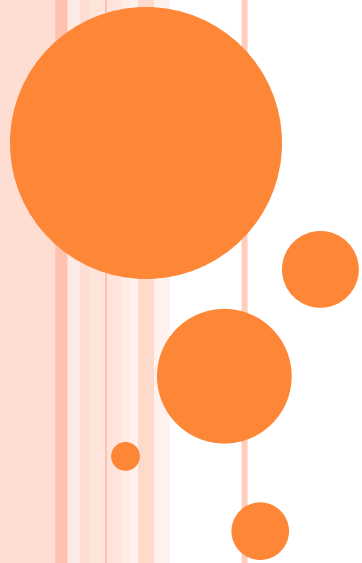
Model fit indices for boys:
 $\chi^2(25) = 28.41, p = .201$
 $CFI = 1.00, TLI = .99$
 $RMSEA = .023, 90\%, CI [.00, .05]$



DISCUSSION AND CONCLUSIONS

- Students' PA declined and students' individual differences diminished across middle school.
- Parents' beliefs and values toward PE has a role in students' PE motivation, while only parents' PE beliefs had a role in students' Level on PA.
- Only girls' expectancy-related beliefs in PE predicted their Level of PA, while boys' expectancy-related beliefs and task values toward PE and general self-esteem predicted their Level of PA.
- However, neither parents' PE beliefs and values nor students' PE motivation and self-esteem in the beginning of middle school did not predict the longitudinal development of PA.





THANK YOU!!