

Prospective Links Between Difficult Temperament and Family Adversity and Internalizing Symptoms in Early Adolescence: Protective Role of Physical Activity

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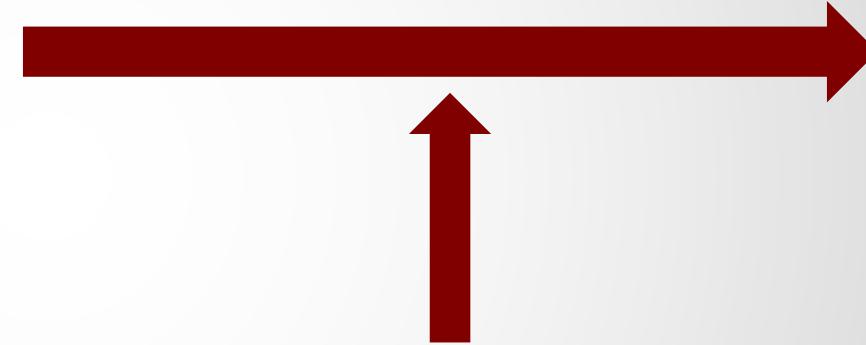
Difficult temperament/Family adversity and internalizing symptoms



Difficult temperament



Family adversity



Internalizing symptoms



Physical activity (PA)

Purpose of the study

To determine whether PA practice at age 12 years and it's change from ages 12 to 13 years can reduce internalizing symptoms in youth with difficult temperament or exposed to family adversity.



Methods

Participants

- Quebec Longitudinal Study of Child Development (QLSCD) which follows a representative sample of children aged from five months to 21 years.
- The study → 1,312 participants aged 17 months, 12 and 13 years

Measures

- Family adversity (family dysfunction, income adequacy) and difficult temperament were reported by mothers (ages 12 years)
- PA duration and internalizing symptoms were reported by youth (ages 12 and 13 years).

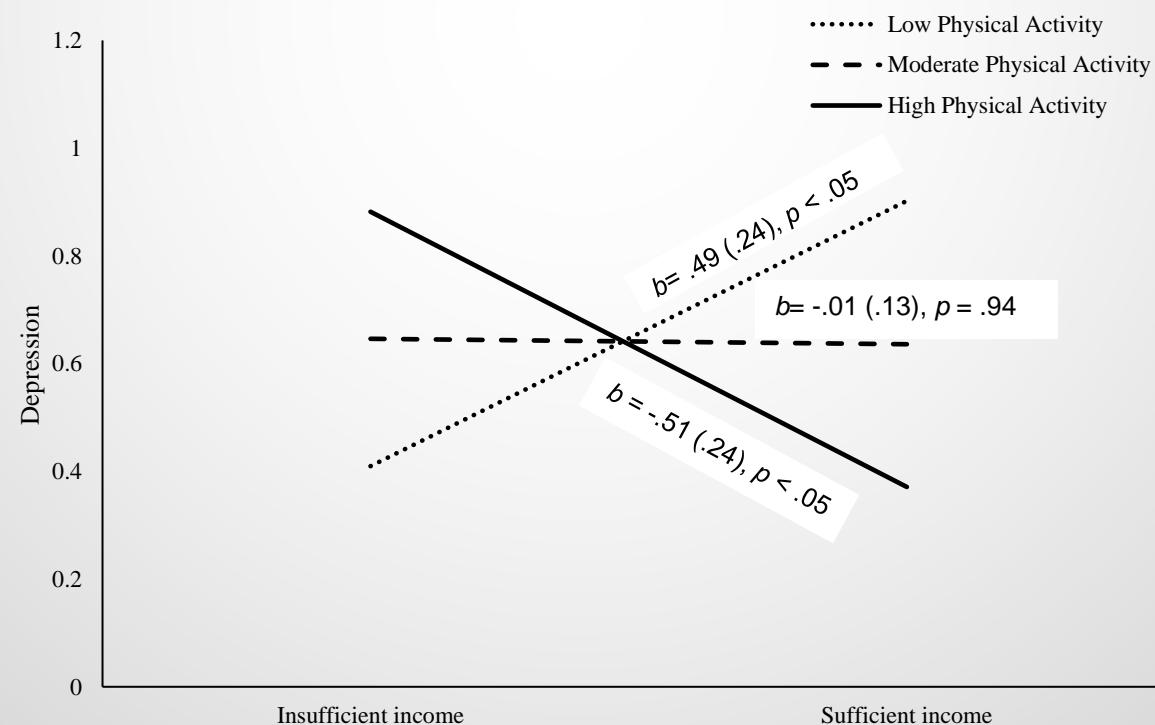
Analyses

- Linear regression models → moderating role of PA of the associations between difficult temperament (age 17 months), family adversity indicators (age 12 years) and depressive and anxious symptoms (age 13 years).

Results

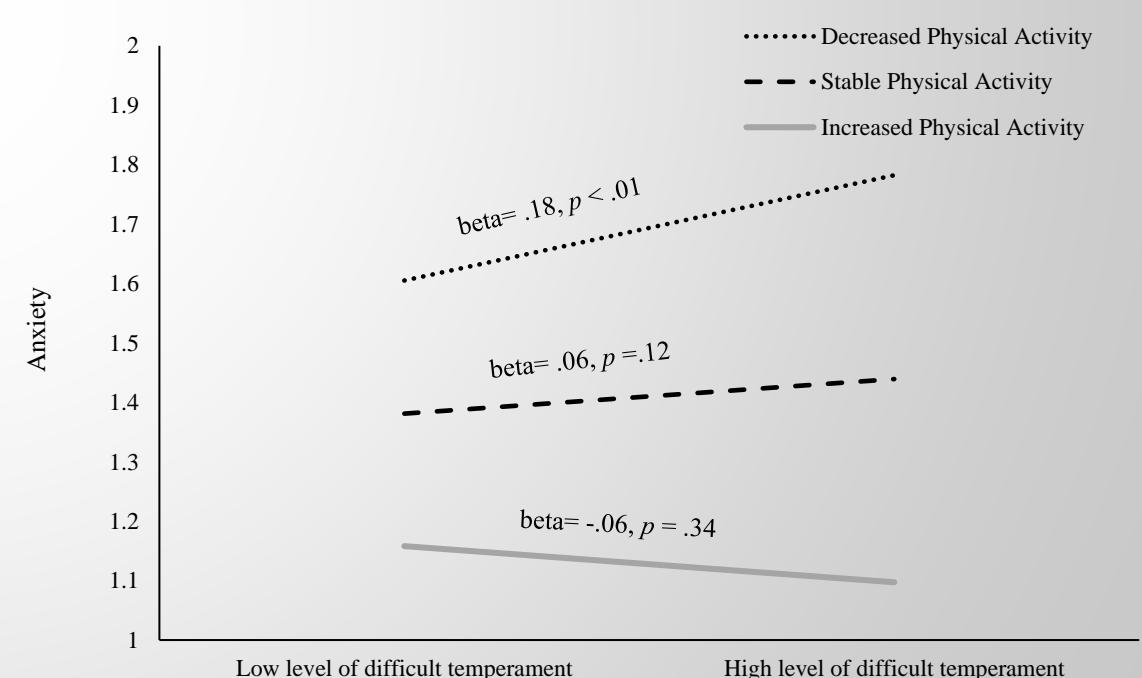
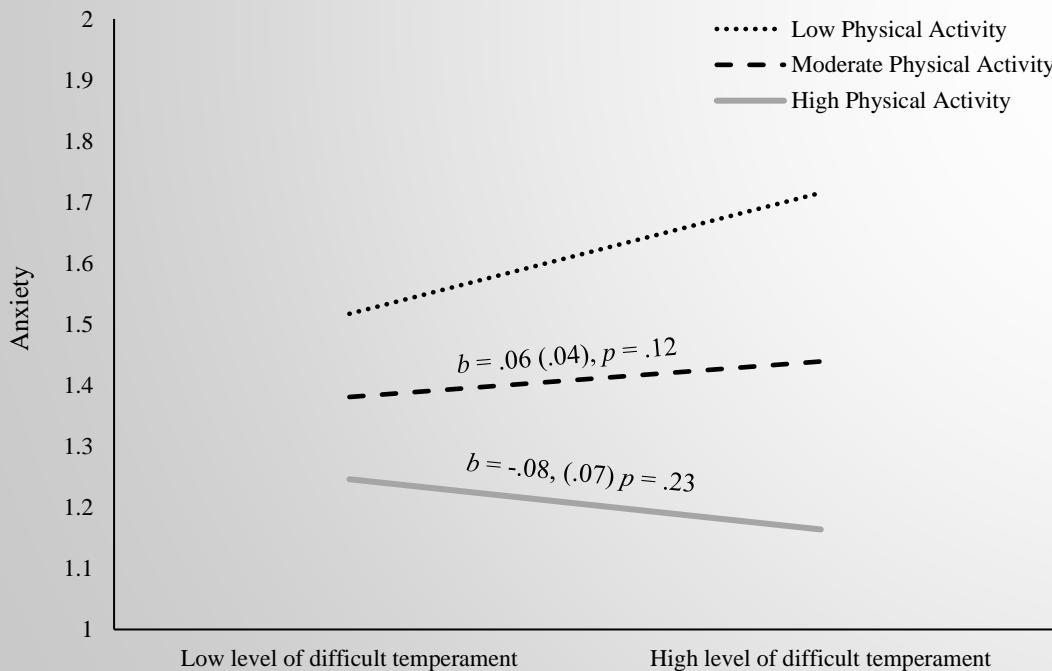
Depressive symptoms outcome

- No direct association was found between difficult temperament, income adequacy, and family dysfunction with depressive symptoms ($b = 0,02, p = 0,61; b = - 0,02; p = 0,88; b = 0,29, p = 0,12$, respectively).
- An **interaction** was found between **income adequacy** and **PA at age 12 years** in predicting **depressive symptoms** ($b = -0,50, p < 0,01$).



Anxious symptoms outcome

- No direct associations was found between difficult temperament, income adequacy, and family dysfunction with anxious symptoms ($b = 0,05, p = 0,17$; $b = - 0,02, p = 0,93$; $b = 0,20, p= 0,38$, respectively).
- An interaction was found between **difficult temperament** and **PA at age 12 years and it's change from ages 12 to 13 years** ($b = - 0,14, p < 0,05$; $b = -0,12, p < 0,05$, respectively) in predicting anxious symptoms.



What's next?

- 1) Continue to promote PA to parents and schools, especially during the school transition period
- 2) Reducing the costs of organized PA in schools and allocating funds to create organized PA programs provided by qualified adults in disadvantaged neighborhoods



Thank you for your attention



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