

Moderating Effects of Sex and Coping on the Relationship between Trauma and Addictive Behaviours: A Longitudinal Study using a Parallel Process Latent Growth Curve Model



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INTRODUCTION

- There is a paucity of longitudinal research investigating the association between early traumatic experiences (ETEs) and addictive behaviours.
- Previous studies have focused primarily on alcohol to the exclusion of other drugs and addictive behaviours such as gambling.
- One of the most frequently identified risk factors for addictive behaviour is exposure to early life adversity in the form of trauma or abuse (Sinha, 2008).
- A recent systematic review found that a majority of studies (63.5%) reported no significant association between interpersonal traumatic experiences and addictive behaviour (Konkolý Thege et al., 2017).
- These null findings may be attributed to the large number of studies that did not include mediators and moderators in their studies or analyses.
- Given this gap in the literature, further research into the impact of mediating and moderating factors on the relationship between ETEs and addictive behaviours is warranted

OBJECTIVE

- To investigate the relationship between ETEs and addictive behaviours (substance use and gambling) in adolescents, with a focus on coping and sex as moderating factors.

HYPOTHESES

- (1) ETEs will be associated with greater drug use and gambling problem severity.
- (2) Coping and sex will moderate the relationship between ETEs and addictive behaviours.

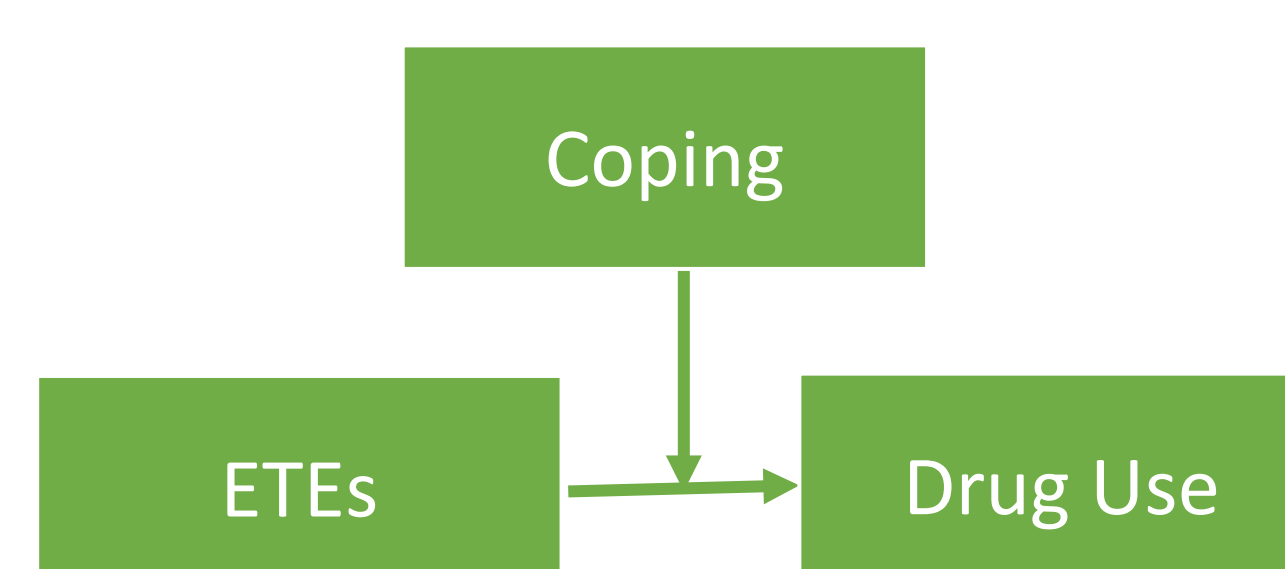
METHODS

- As part of the Leisure, Lifestyle and Lifecycle project, 436 adolescents were interviewed at age 13 to 16 in 2006 and last interviewed at age 17 to 21 in 2011
- The retention rate for the adolescent cohort was 71.6%
- Three waves of data were used for the current analysis
- Selected Measures:
 - Fisher DSM-IV-J-MR
 - Canadian Community Health Survey
 - Childhood Trauma Questionnaire
 - Coping Inventory for Stressful Situations

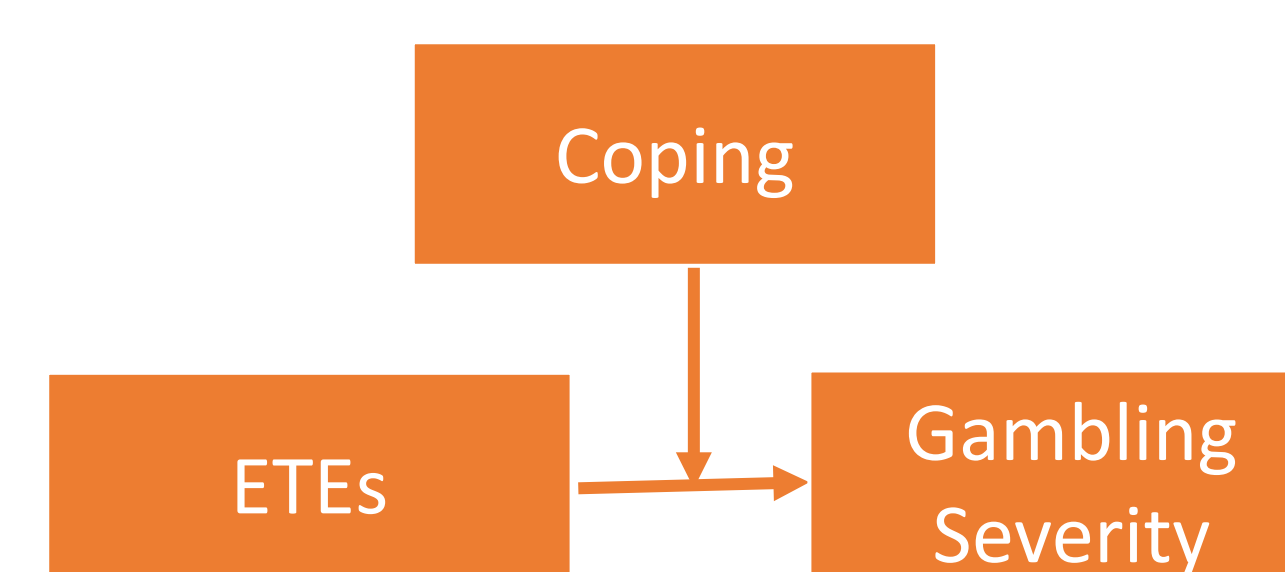
STATISTICAL ANALYSIS

- A moderation analysis using latent growth curve modeling
- Addictive behaviour was operationalized as:
 1. Drug use (including alcohol use)
 2. Gambling problem severity.
- Moderators (sex and coping) were added to the latent growth curve models.
- To account for missing data, the full information maximum likelihood estimation was used.

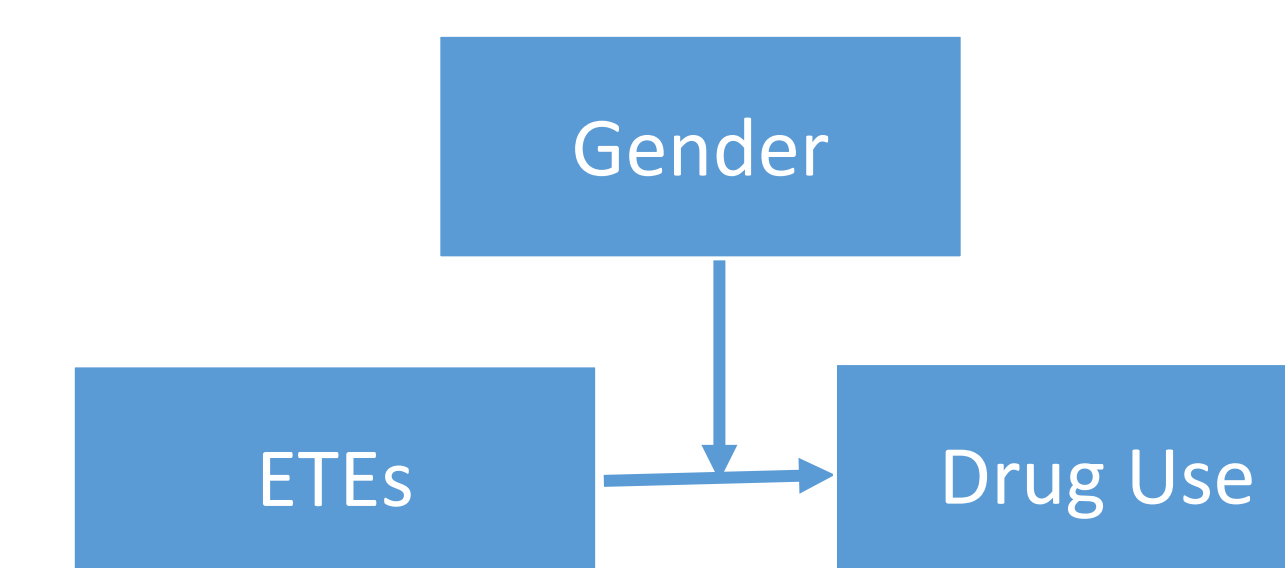
RESULTS



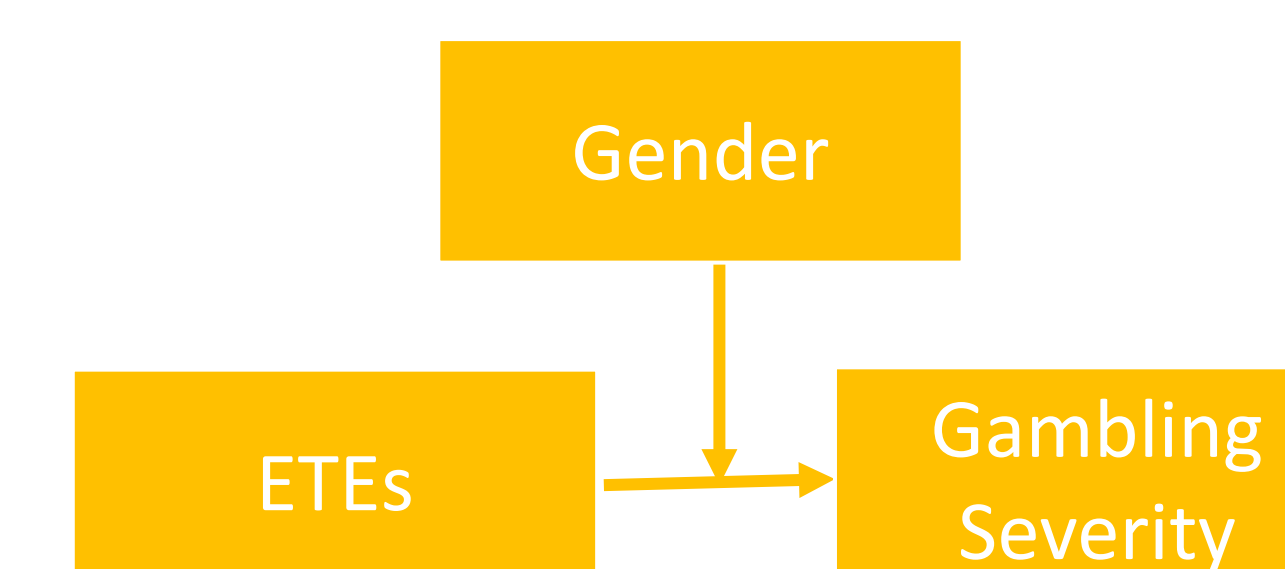
- The effect of the interaction between the intercept of ETEs and coping on the slope of drug use was significant ($B = -0.007, p < .05$), suggesting adolescents with higher coping skills had less growth in drug use than those with lower coping skills.



- Coping did not moderate the relationship between ETEs and gambling problem severity ($B = -0.347, p > .05$).



- Gender did not moderate the relationship between ETEs and drug use ($B = -0.072, p > .05$).
- Females displayed significantly lower baseline drug use than males ($B = -7.27, p < .05$), yet significantly greater growth in drug use ($B = 2.69, p < .05$)



- Gender did not moderate the relationship between ETEs and gambling problem severity ($B = -0.359, p > .05$).
- Females displayed significantly lower baseline gambling problem severity than males ($B = -1.46, p < .05$), and though not significant, females displayed greater growth in gambling problem severity ($B = -1.62, p > .05$)

DISCUSSION AND CONCLUSIONS

- Adolescents with higher trauma scores showed greater growth rate in drug use.
- Consistent with past studies, higher coping skills are a protective factor in reducing the risk of drug use in adolescents (Staiger et al., 2009).
- However, coping was not related to gambling problem severity in adolescent with ETEs, which may be due to the small portion of the sample who reported current gambling at each time point.
- Sex did not moderate the relationship between ETEs and drug use or ETEs and gambling problem severity.
- Females displayed significantly lower baseline drug use and gambling problem severity than males, yet significantly greater growth in both addictive behaviours.
- **Treatment implications:** (1) coping skills should be considered early in treatment; (2) trauma-exposed adolescents may benefit from coping skills therapy to offset future drug use; (3) gender-specific considerations may be critical to the development and planning of treatment interventions.

FUTURE DIRECTIONS

- More longitudinal studies examining the relationship between ETEs and both substance-related and behavioural addictions are required
- Knowledge on the impact of mediators and moderators may help promote targeted interventions in adolescents who have endured traumatic events and who struggle with substance and nonsubstance use problems.
 - **Mediators** provide insight into the mechanisms by which an adolescent who is exposure to early trauma develops an addiction
 - **Moderators** elucidate individual characteristics that may put an adolescent at risk for gambling and other addictive behaviours .

REFERENCES

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