Latent Profiles of Adverse Childhood Experiences and Substance Use in Latino College Students

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Background

Latinos in the United States (US) are disproportionately affected by Adverse Childhood Experiences (ACEs) [1,2] and related consequences, including alcohol and drug use problems.[3]

Prior research on ACEs-substance use cumulative risk scores on non-Latino populations, overlooking specific ACE patterns and cultural factors influencing substance use trajectories.

It is essential to understand the specific patterns of ACEs that affect alcohol and substance use trajectories in the Latino college students.

Aim

Identify specific risk pathways, or latent ACE classes that arise from the person-centered analysis on the sample and how each one is associated with Alcohol- and Substance- Use Disorders (AUD, SUD).

Sample

Our sample included data from Latino college students (N = 3,119) from research participant pools within Psychology Departments at eight universities between Fall 2023 and Spring 2025.

Results

Four Latent Classes (ACEs): High Adversity (N=542, 18.9%), Polyvictimization (N=482, 16.8%), Household Dysfunction (N=466, 16.3%), and Low Adversity (N=1375, 48.0%).

OR (95% CI), Significant Results (bolded) - *p<.05, **p<.01, ***p<.001

- Participants in High Adversity (29.5%, 25.5%) and Polyvictimization (25.5%, 19.3%) classes were more likely to develop Alcohol- and Substance- Use Disorders (χ^2, p<.001).
- Notably, these two classes, High Adversity (25.4%) & Polyvictimization (16.0%) are more likely to engage in early onset (≤14) drinking as well.

Data Analysis

Latent Class Analysis (LCA) was performed on the top 13 ACEs to identify distinct clusters. Wald chi-square tests (p < .001) using BCH-adjusted models assessed the associations and significance of alcohol & substance use outcomes across classes.
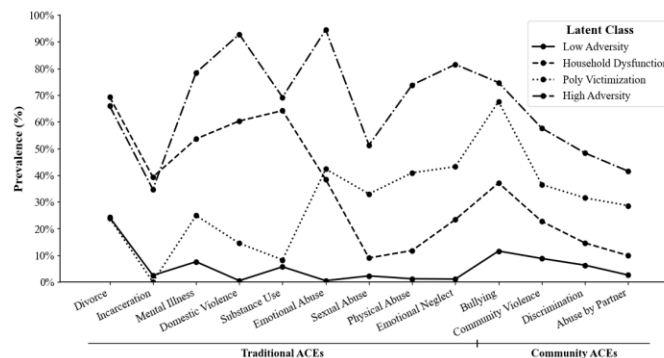
Conclusions

Childhood traumatic stressors can increase the risk of alcohol and substance use, while fewer or less severe childhood adversities are not.

Assessing specific ACE clusters is needed to understand varying levels of alcohol/ substance use risk better.

Future prevention and intervention strategies should continue exploring ACE clusters to address the specific needs of vulnerable populations in the US.

Key References

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