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Spring 4-14-2020

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Examining the Influence of Childhood Trauma on College Alcohol Use and Mental Health: A Comparison Between United States and Philippines



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INTRODUCTION

- Drinking is a common way to forget the problems and create feelings of relaxation. Drinking to cope for those who have experienced trauma is associated with mental illness such as depression and anxiety.¹
- Alcohol has been found to mediate the relationship between childhood abuse and alcohol consequences in college students.² Drinking to cope has also been found as a mediator between stress and alcohol-related problems.³
- Though the existing research has found that childhood trauma negatively impacts future alcohol use in many individuals, the specific patterns of these relationships across different cultures are not well understood.
- The purpose of the present study was to understand how college students with different backgrounds such as childhood trauma, cultural differences, and mental health issues relate to alcohol consumption during college and to examine how these relationships vary across United States and Philippines.
- Based on the existing research on childhood trauma, mental health, and college alcohol use, we hypothesized that college students who experience childhood trauma will report more mental health symptoms and greater alcohol consumption.
- Furthermore, we planned to test the ability of trauma symptoms to mediate the relationship between trauma history and alcohol use across one large Midwestern public university, one small Midwestern private university, and Filipino sample. The literature was mixed on cultural differences in mental health and alcohol use, though we expected to find differences between the two cultures.

METHODS

PARTICIPANTS

Participants were included in the study as long as they reported drinking alcohol within the past 12 months. Participants partook in an online survey and received course credit for compensation.

University of Nebraska – Lincoln (UNL)

- N = 786, 17 to 57 years (M = 20.05, SD = 3.09); 76.3% females, and 80.6% European Americans, 2.8% African American, 2.6% Hispanic, 3.4% Asian, 0.2% Pacific Islander, 1.5% Native American, 0.4% Middle Eastern, and 2.6% Other.

Creighton University

- N = 521, 17 to 35 years (M = 19.17, SD = 1.606); 66.6% females, and 78.3% European Americans, 2.1% African American, 7% Hispanic, 7.3% Asian, 2.3% Pacific Islander, 0.3% Native American, 0.9% Middle Eastern, and 1.8% Other.

Philippines

- N = 212, 15 to 22 years (M = 17.42, SD = 1.207); 76.1% females, and, 5.2% Asian 1.3% Hispanic, 13% Pacific Islanders and 80.5% Other.

MEASURES

Alcohol Use

- *Alcohol Use Disorders Identification Test (AUDIT)*
Assesses aspects of alcohol use including consumption, frequency, and symptoms.
- *Rutgers Alcohol Problem Index (RAPI)*
Measures alcohol-related negative consequences.

Trauma

- *Posttraumatic Stress Disorder Checklist - Civilian Version (PCLC)*
Assesses severity of PTSD symptoms.

- *Early Trauma Inventory (ETI)*

Measures four domains of traumatic experiences (physical abuse, emotional abuse, sexual abuse, and general traumatic experiences) that occurred before 18 years old.

Mental Health

- *Positive and Negative Affect Schedule (PANAS)*

Measure both positive and negative affect (emotions and expressions).

- *History of Emotional or Mental Problems and Abuse*

Identifies whether participant had psychiatric history and had experienced physical abuse, emotional abuse, or sexual abuse

ANALYSIS

Descriptive statistics were run using SPSS 23 in order to test age, gender, sexual orientation, ethnicity, Greek status, psychiatric history, physical abuse, emotional abuse, sexual abuse, PCLC, ETI, and PANAS. Pearson’s Correlation and Multiple Regression were conducted to predict aspects of alcohol use. We also tested the ability of trauma symptoms (PCLC) to mediate the relationship between trauma history (ETI) and aspects of alcohol use (RAPI) using Hayes PROCESS macro for SPSS (age and gender as covariates). Results were judged at the 0.05 significance level.

RESULTS

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Dependent variable = AUDIT ($R^2 = 0.084$, $F(13, 393) = 2.762$, $p = 0.001$).

- PANAS Positive, ethnicity (White), and Greek membership were significantly and positively predicted AUDIT scores.
- All other predictors did not significantly predict AUDIT.

Dependent Variable = RAPI ($R^2 = 0.17$, $F(13, 369) = 5.798$, $p < 0.001$).

- PCLC, Gender (Male), Greek membership, and Emotional Abuse significantly and positively predicted RAPI scores.

- All other predictors did not significantly predict RAPI.

Creighton University

Dependent variable = AUDIT ($R^2 = 0.069$, $F(13, 251) = 1.423$, $p = 0.149$).

- Emotional Abuse significantly and positively predicted AUDIT scores.
- All other predictors did not significantly predict AUDIT.

Dependent Variable = RAPI ($R^2 = 0.115$, $F(13, 244) = 2.45$, $p = 0.004$).

- Greek membership and ETI significantly and positively predicted RAPI scores.

- All other predictors did not significantly predict RAPI.

Philippines

Dependent Variable = AUDIT ($R^2 = 0.205$, $F(13, 40) = 0.795$, $p = 0.661$)

- All predictors did not significantly predict AUDIT.
- Dependent Variable = RAPI ($R^2 = 0.444$, $F(13, 39) = 2.396$, $p = 0.018$).

- Sexual Orientation (Non-Heterosexual), Greek membership, and Physical Abuse significantly and positively predicted RAPI scores.

- All other predictors did not significantly predict RAPI.

Mediation Analyses

Since trauma and mental health variables did not significantly predict AUDIT scores across samples and a more consistent pattern of significance was observed across samples for predicting RAPI scores, trauma symptoms were tested as a mediator between childhood trauma exposure and RAPI scores.

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- PCLC significantly mediated the relationship between ETI and RAPI.

Creighton University

- PCLC significantly mediated the relationship between ETI and RAPI

Philippines

- There was no significant meditation effect of PCLC on the relationship between ETI and RAPI.

Table 1. Correlations for AUDIT Across Population

Variables	UNL r	Creighton r	Philippines r
Age	-0.023	-0.04	0.036
Gender [^]	-0.083*	0.076	0.177
Sexual Orientation ^{^^}	-0.069	0.032	0.103
Ethnicity ^{^^^}	-0.103**	-0.005	0.145
Greek Status ^{^^^^}	-0.194***	-0.033	-0.048
Emotional or Mental Problems ^{^^^^^}	0.051	-0.022	0.067
Physical Abuse ^{^^^^^^}	-0.002	-0.048	-0.012
Emotional Abuse ^{^^^^^^}	0.034	0.032	-0.234*
Sexual Abuse ^{^^^^^^}	0.004	-0.055	0.082
PCLC	-0.031	0.123*	0.195
ETI	0.017	0.153**	0.022
PANAS – Positive Affect	0.152***	0.01	0.184
PANAS – Negative Affect	-0.081	0.136*	0.12

[^]1 = Male, 2 = Female

^{^^}1 = Heterosexual (Straight), 2 = Others

^{^^^}1 = White, 2 = Others

^{^^^^}1 = Greek, 2 = Non-Greek

^{^^^^^}1 = Has history of emotional or mental problems , 2 = Did not have

^{^^^^^^}1 = Has experienced physical abuse, 2 = Never experienced physical abuse

^{^^^^^^}1 = Has experienced emotional abuse, 2 = Never experienced emotional abuse

^{^^^^^^}1 = Has experienced sexual abuse, 2 = Never experienced sexual abuse

*p < 0.05 **p < 0.01 ***p < 0.001

Table 2. Correlations for RAPI Across Population

Variables	UNL r	Creighton r	Philippines r
Age	-0.04	0.014	-0.175
Gender [^]	-0.161***	-0.003	-0.116
Sexual Orientation ^{^^}	-0.044	0.01	0.379**
Ethnicity ^{^^^}	-0.041	-0.045	-0.014
Greek Status ^{^^^^}	-0.154***	-0.147**	-0.229*
Emotional or Mental Problems ^{^^^^^}	-0.14**	-0.01	-0.304*
Physical Abuse ^{^^^^^^}	-0.073	-0.039	0.115
Emotional Abuse ^{^^^^^^}	-0.143**	-0.146**	-0.188
Sexual Abuse ^{^^^^^^}	-0.094*	0.029	0.003
PCLC	0.253***	0.201**	0.313*
ETI	0.125**	0.178**	0.318*
PANAS – Positive Affect	-0.001	0.04	0.073
PANAS – Negative Affect	0.155**	0.194**	0.166

[^]1 = Male, 2 = Female

^{^^}1 = Heterosexual (Straight), 2 = Others

^{^^^}1 = White, 2 = Others

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^{^^^^^^}1 = Has experienced sexual abuse, 2 = Never experienced sexual abuse

*p < 0.05 **p < 0.01 ***p < 0.001

UNL SAMPLE

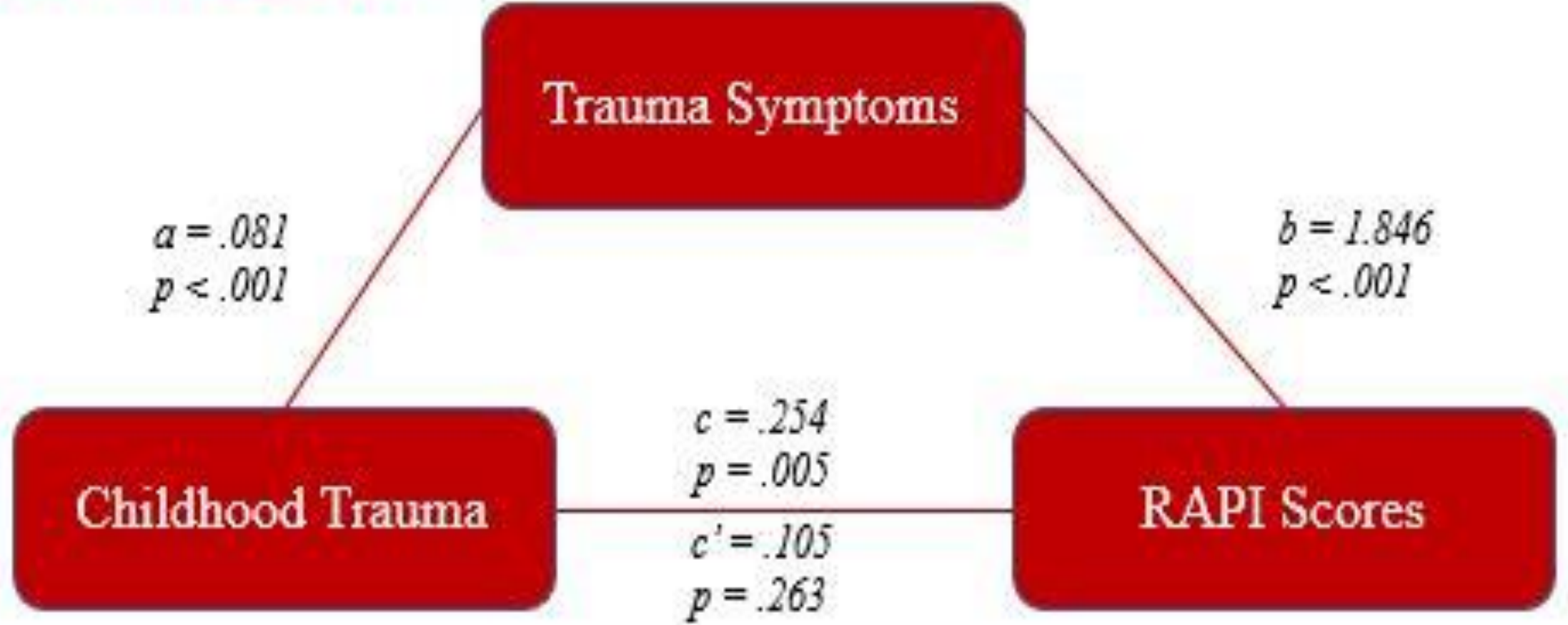


Figure 1. Mediation Model for UNL Sample

CREIGHTON SAMPLE

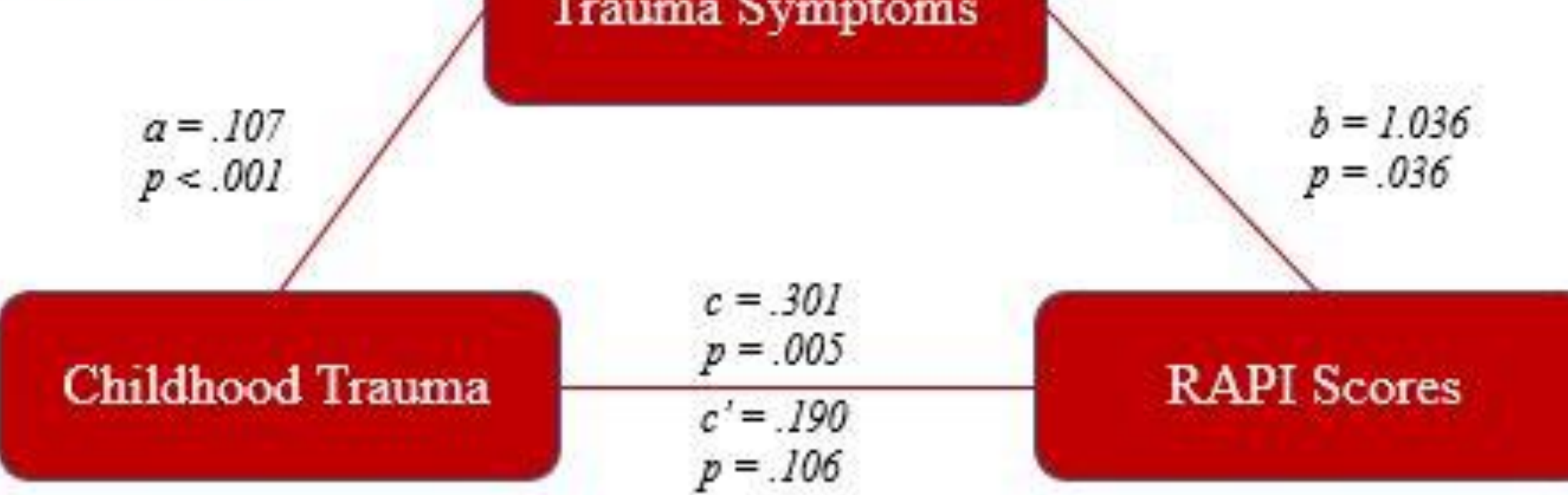


Figure 2. Mediation Model for Creighton Sample

PHILIPPINES SAMPLE

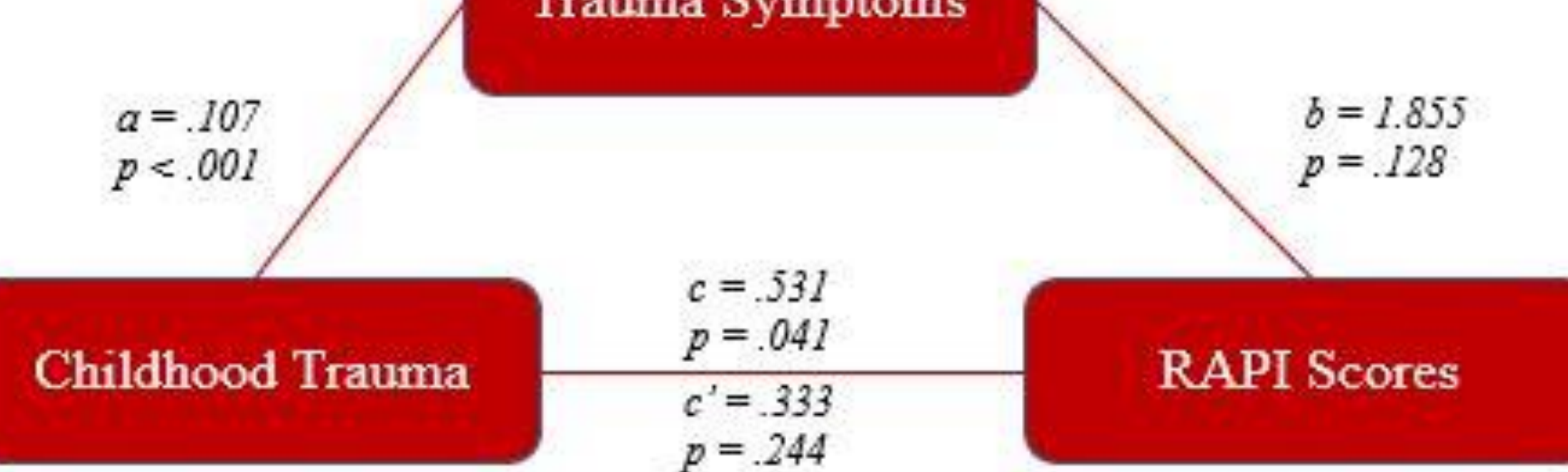


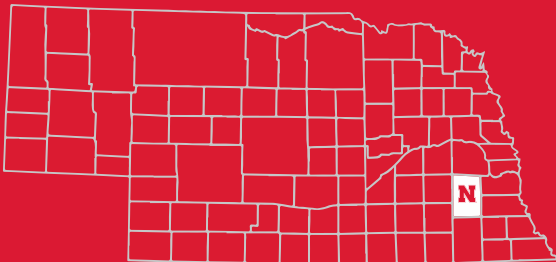
Figure 3. Mediation Model for Philippines Sample

DISCUSSION

- Trauma symptoms explained the relationship between childhood trauma and negative alcohol consequences in UNL and Creighton samples, which is consistent with previous research.²
- However there was no significant meditation effect of PCLC on the association between ETI and RAPI for the Philippines sample, this may be due to power problems considering the small size of this sample.
- Our study’s strengths include a large sample size for the Unites States samples, consistent measures of variable testing, and the proven validity of the AUDIT, PCLC, PANAS, and ETI, all which increase the reliability of our findings.
- Limitation of the study the sample was homogeneity of the samples with more females (76.3%), European Americans (80.6%), and freshmen (49.6%) for the Unites States samples. We also had small sample size for the Philippines sample with majority of freshman (46.3%) and females (76.1%).
- Future research can examine cross cultural differences in alcohol/mental health by using better sampling procedures to improve generalizability of the results and ensure representativeness of each country as these were understudied.⁴

REFERENCES

- ¹Strine, T. W., Dube, S. R., Edwards, V. J., Prehn, A. W., Rasmussen, S., Wagenfeld, M., ... Croft, J. B. (2012). Associations between adverse childhood experiences, psychological distress, and adult alcohol problems. *American Journal of Health Behavior*, 36, 408–423. doi: 10.5993/AJHB.36.3.11
- ²Goldstein, A. L., Flett, G. L., & Wekerle, C. (2010). Child maltreatment, alcohol use and drinking consequences among male and female college students: An examination of drinking motives as mediators. *Addictive Behaviors*, 35, 636–639. doi: 10.1016/j.addbeh.2010.02.002
- ³Rice, K. G., & Van Arsdale, A. C. (2010). Perfectionism, perceived stress, drinking to cope, and alcohol-related problems among college students. *Journal of Counseling Psychology*, 57, 439–450. doi: 10.1037/a0020221
- ⁴Tuliao, A. P., Landoy, B. V. N., & McChargue, D. E. (2016). Factor structure and invariance test of the alcohol use disorder identification test (AUDIT): Comparison and further validation in a US and Philippines college student sample. *Journal of Ethnicity in Substance Abuse*, 15, 127–143. doi: 10.1080/15332640.2015.1011731



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