

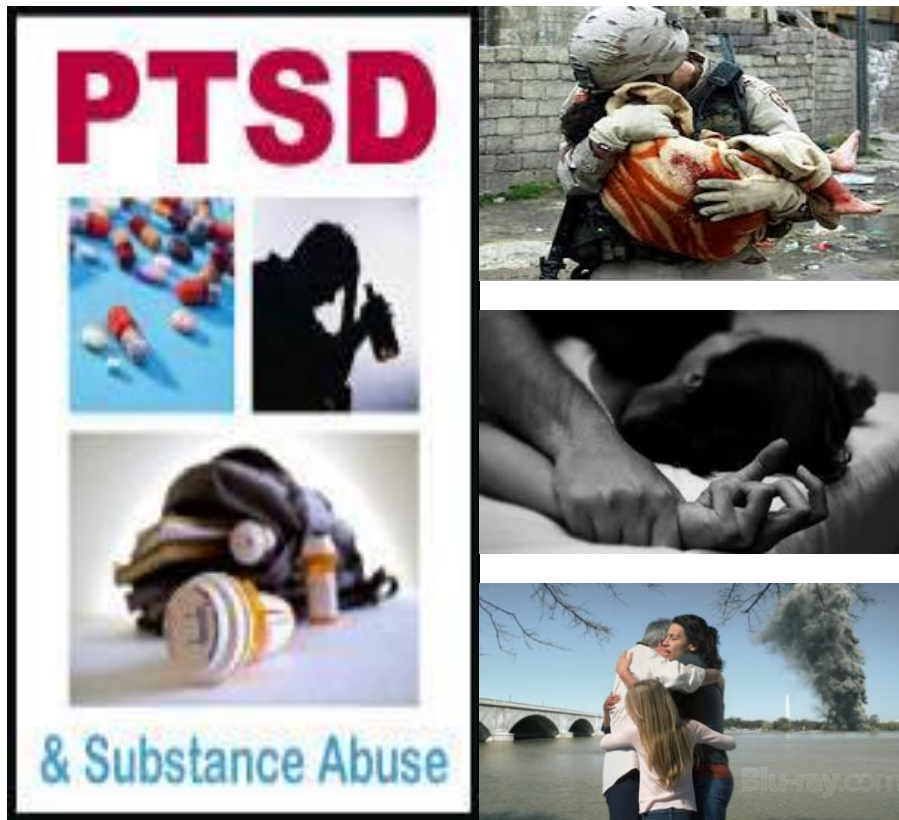


INVESTIGATING THE PATH FROM CHILDHOOD MALTREATMENT TO ALCOHOL PROBLEMS IN A SAMPLE OF CHILD WELFARE-INVOLVED YOUTH

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BACKGROUND: TRAUMA, PTSD, AND SUBSTANCE MISUSE



- Trauma exposure associated with increased risk of substance misuse
- PTSD: Stress disorder following trauma exposure
 - Hyperarousal
 - Re-experiencing
 - Avoidance
 - Numbing
- Those with PTSD at 2-4x increased risk for substance use disorder including alcohol use disorder

BACKGROUND: CHILDHOOD TRAUMA AND ITS CONSEQUENCES



- Childhood trauma – abuse and neglect
 - Physical abuse
 - Sexual abuse
 - Emotional abuse
 - Physical neglect
 - Emotional neglect
- Adverse outcomes of childhood trauma
 - Emotional distress: anxiety, depression, PTSD
 - Alcohol and drug misuse in adolescence and adulthood

RESEARCH PROBLEM: IDENTIFY HOW CHILDHOOD TRAUMA IS LINKED TO ALCOHOL PROBLEMS IN ADOLESCENCE (MECHANISM)



- Relevant theories:
 - Tension reduction model (Cappel & Greeley)
 - Stress response dampening model (Sher)
 - Self-medication model (Khantzian)
- All hold that individuals learn to drink for alcohol's negatively reinforcing effects

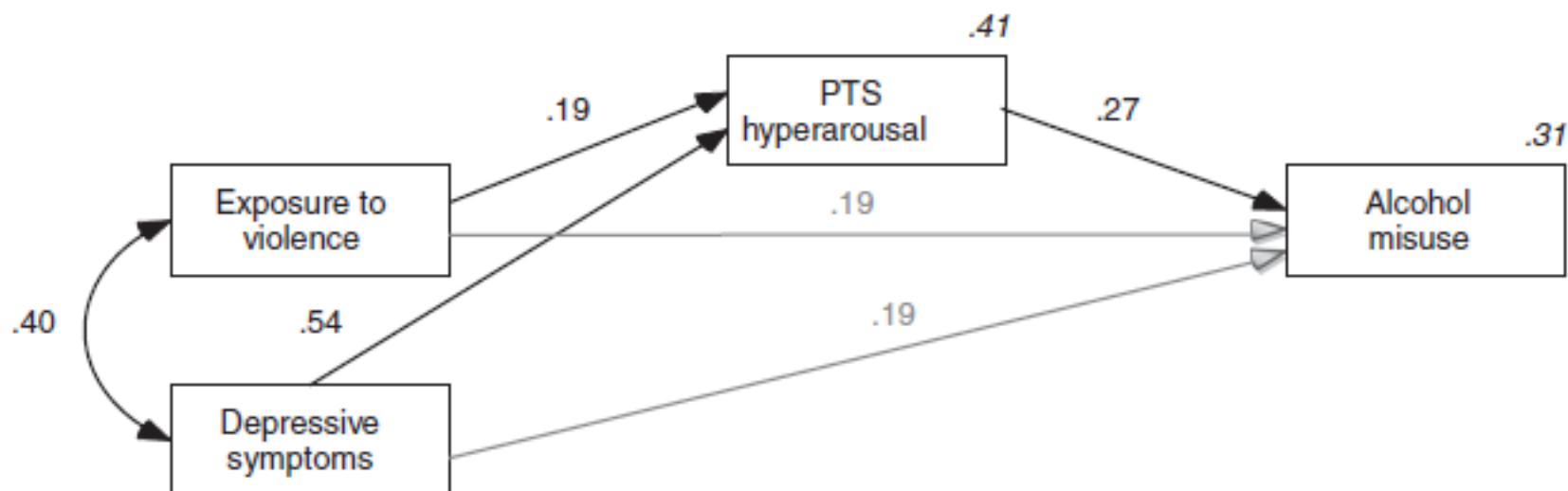


Posttraumatic Stress Hyperarousal Symptoms Mediate the Relationship Between Childhood Exposure to Violence and Subsequent Alcohol Misuse in Mi'kmaq Youth

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POPULATION OF INTEREST: CHILD WELFARE YOUTH

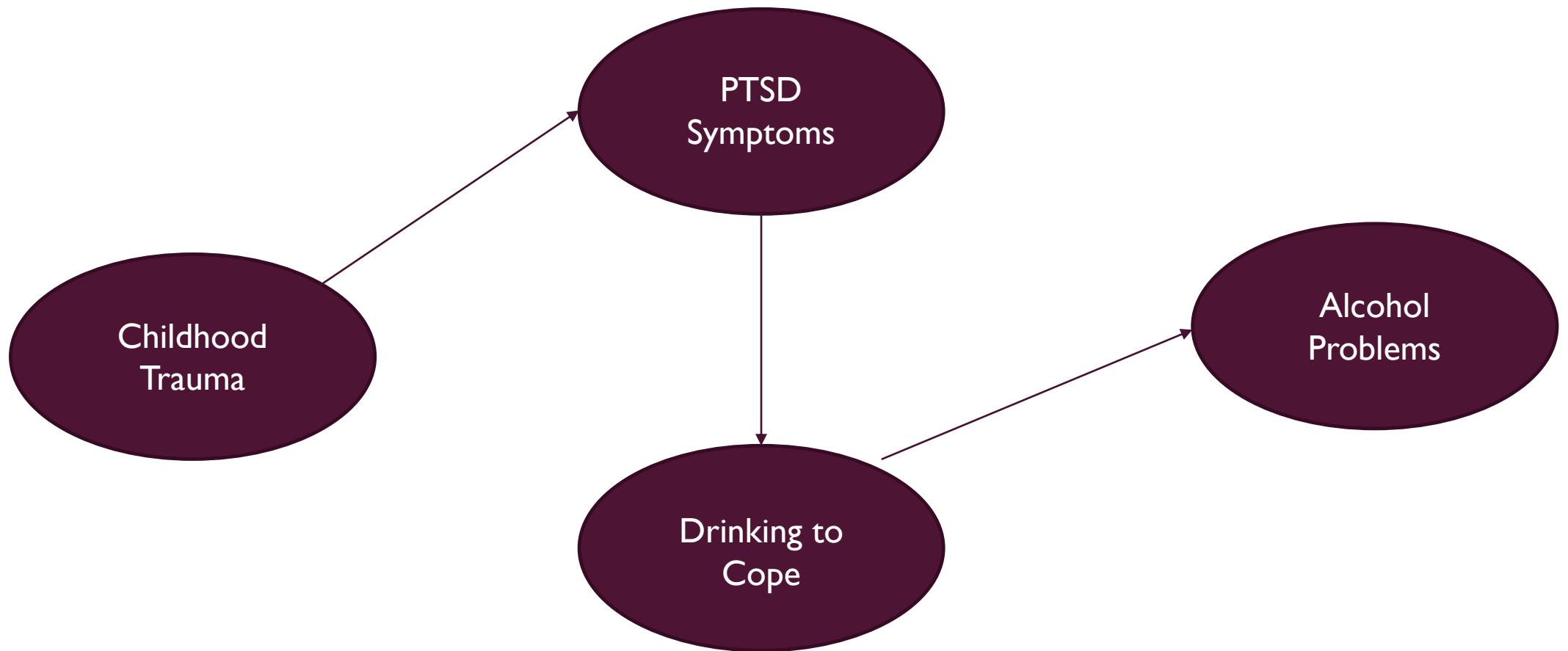
- High rates of childhood trauma
- Above average alcohol use and problems compared to normative data on adolescents in Ontario (Wekerle et al., 2009)
- Followed longitudinally in the **Maltreatment and Adolescent Pathways** (MAP) project (Wekerle et al., 2009)

STUDY DESIGN



- Semi-longitudinal model (Cole & Maxwell, 2003) making use of first two waves of MAP data
- Tested `chained mediation` model
 - Two mediators are hypothesized to exert their influences in sequence
 - Both mediators are required to explain the relation of the predictor to the outcome

HYPOTHESIZED CHAINED MEDIATION MODEL



METHOD: PARTICIPANTS

- 568 adolescents (54% girls) randomly selected through Ontario child welfare agencies
- Part of the MAP project (Wekerle et al., 2009)
- On average, participants were 15.9 (SD = 1.1) years old at baseline
- Approximately 60% of the sample were Crown wards (parental care terminated)
- 28% white, 21% black, 31% biracial, 5% Asian, 3% Latin American, 2% Aboriginal, 10% other

METHOD: MEASURES

- **Childhood Trauma Questionnaire (CTQ; Bernstein & Fink, 1998)**
 - 28-item measure of childhood abuse and neglect (emotional, physical, sexual)
- **Trauma Symptom Checklist for Children (TSCC; Briere, 1996)**
 - 6 scales; only PTSD scale used in present study
- **Drinking Motives Questionnaire Revised (DMQ-R; Cooper, 1994)**
 - 20-item, 4 scale measure assessing reasons for drinking; only used coping scale
- **Rutgers Alcohol Problem Index (RAPI; White & Labouvie, 1989)**
 - 23-item measure of negative consequences of drinking

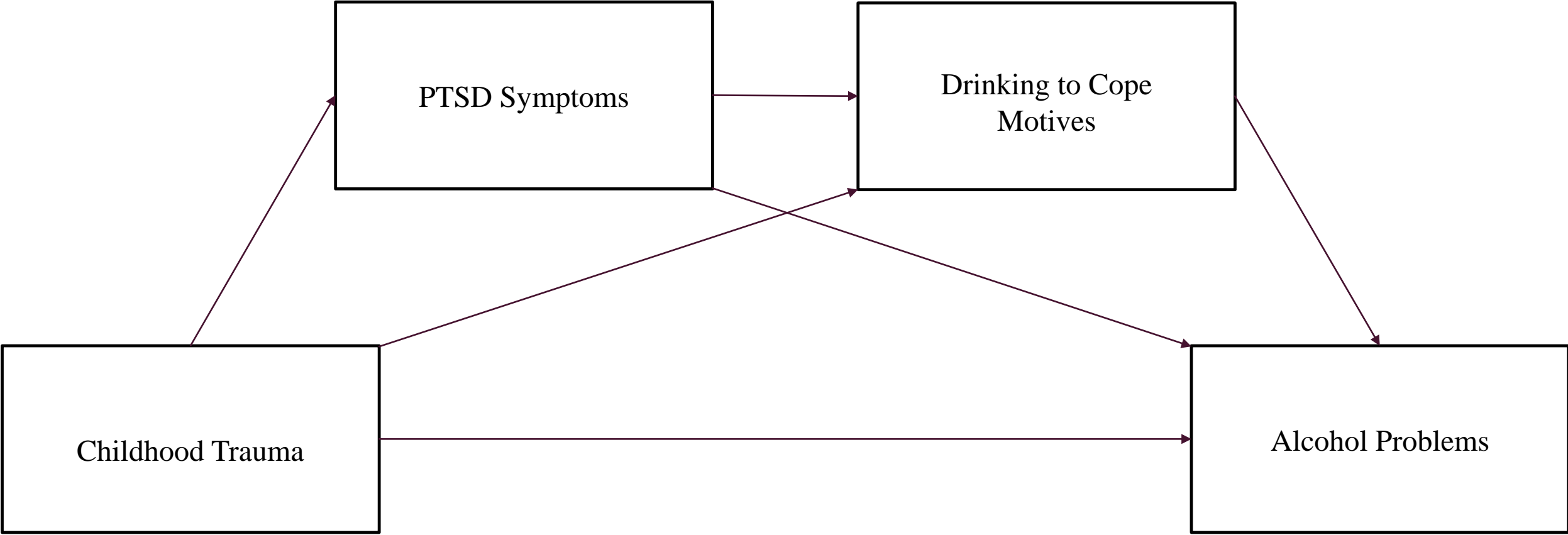
METHOD: PROCEDURE

- Measures administered at **two waves** separated by 6 months
 - All measures plus demographics administered at time 1
 - TSCC, DMQ-R, and RAPI administered at time 2
- **Sample retention** over the 6-months was good at 74%
- Consent procedure
 - Participants < 16 assented and had parents/guardians provide written consent
 - Participants \geq 16 provided written consent themselves



METHOD: STATISTICAL ANALYSIS

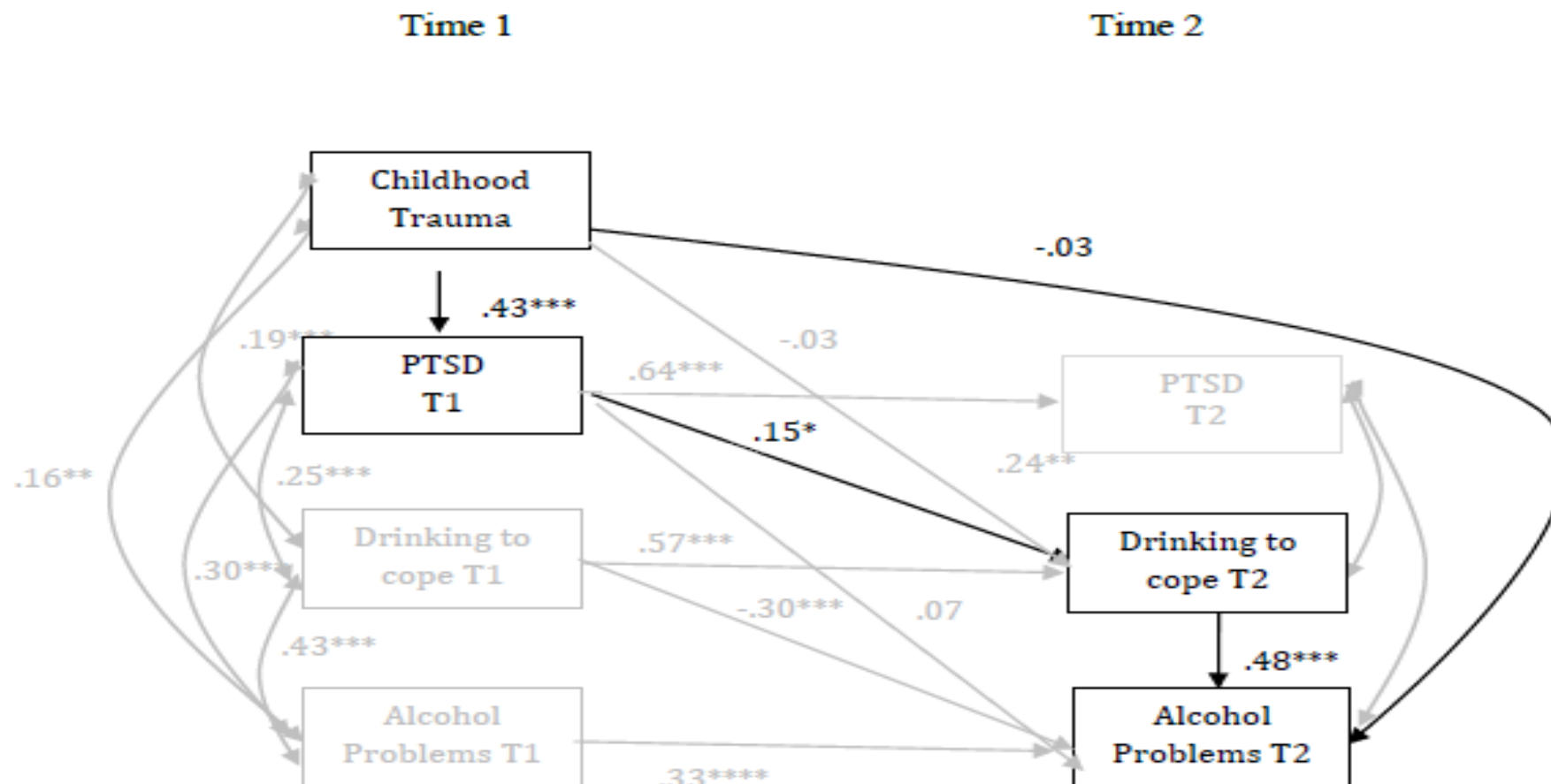
- Structural Equation Modelling and Mediation Tests conducted in Mplus
 - Predictor = T1 retrospectively-reported **childhood trauma**
 - Chained Mediator 1 = T1 **PTSD symptoms**
 - Chained Mediator 2 = T2 **Coping Drinking Motives**
 - Outcome = T2 **Alcohol Problems**
- Both T1 & T2 variables of each construct included in model save childhood trauma (reported retrospectively; not expected to change over time).
- Significance of **single mediator pathways** also examined
 - Childhood trauma to alcohol problems at T2 through PTSD at T1
 - Childhood trauma to alcohol problems at T2 through coping motives at T2



RESULTS: CORRELATIONS AND DESCRIPTIVE STATISTICS

	Mean (SD)	1.	2.	3.	4.	5.	6.	7.
1. CTQ T1	50.66 (19.12)	-----						
2. TSCC T1	6.65 (6.57)	0.44***	-----					
3. TSCC T2	6.17 (6.02)	0.32***	0.64***	-----				
4. DMQ-R T1	1.00 (1.12)	0.22***	0.33***	0.15*	-----			
5. DMQ-R T2	1.04 (1.11)	0.06	0.27***	0.33***	0.62***	-----		
6. RAPIT1	9.45 (12.08)	0.18***	0.36***	0.07	0.44***	0.27***	-----	
7. RAPIT2	8.07 (10.92)	0.06	0.19**	0.31***	0.13	0.40***	0.32***	-----

RESULTS: CHAINED MEDIATION MODEL



Model Fit Statistics:
 $\chi^2(4) = 5.88, p = .21$;
 RMSEA = .03, 90% CI
 [.00, .08]; CFI = 1.00

DISCUSSION

- Results replicate those of Zahradnik et al. with First Nations youth in showing the importance of PTSD symptoms in explaining the relation of childhood trauma to alcohol problems
- Extend to child welfare youth
 - A population with high rates of childhood trauma and drinking problems
- Extend Zahradnik et al.'s cross-sectional findings longitudinally over 6 month interval
- First direct test of chained mediation model implied by Zahradnik et al. findings
 - Both mediators necessary to explain link of childhood trauma to problem drinking in adolescence
- Results consistent with predictions of tension reduction, stress response dampening, and self-medication models

LIMITATIONS

- **Semi-longitudinal design** used to test mechanisms more ideally suited to three waves of data
- Childhood maltreatment assessed via **retrospective self-report**
 - Could be subject to under-reporting or over-reporting (e.g., memory errors)
- Child welfare sample
 - Findings **may not generalize** to youth with childhood trauma experiences outside of the child welfare system

INTERVENTION IMPLICATIONS

- Suggest that **intervention for PTSD in traumatized children** may prevent alcohol problems
- In traumatized youth who are experiencing PTSD symptoms, **targeted focus on coping drinking motives** may be helpful in preventing alcohol problems
- Point to the **importance of targeting both PTSD symptoms and drinking to cope** in intervening with alcohol problems in youth who have experienced childhood trauma

FUTURE DIRECTIONS

- Examining possible **gender differences** in chained mediation pathway
 - e.g., consequences of sexual abuse understudied in males
- Examining in a **fully longitudinal model**
- Examining results for **different types of childhood trauma** exposure
 - Abuse vs. neglect
 - Sexual vs. physical vs. emotional abuse
- Examining results for **different domains of PTSD** symptoms
 - Zahradnik et al. results suggest PTSD arousal domain may be particularly important to study

QUESTIONS

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