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# Trauma as a Predictor of Lower Hope Mediated by PTSD and Anxiety

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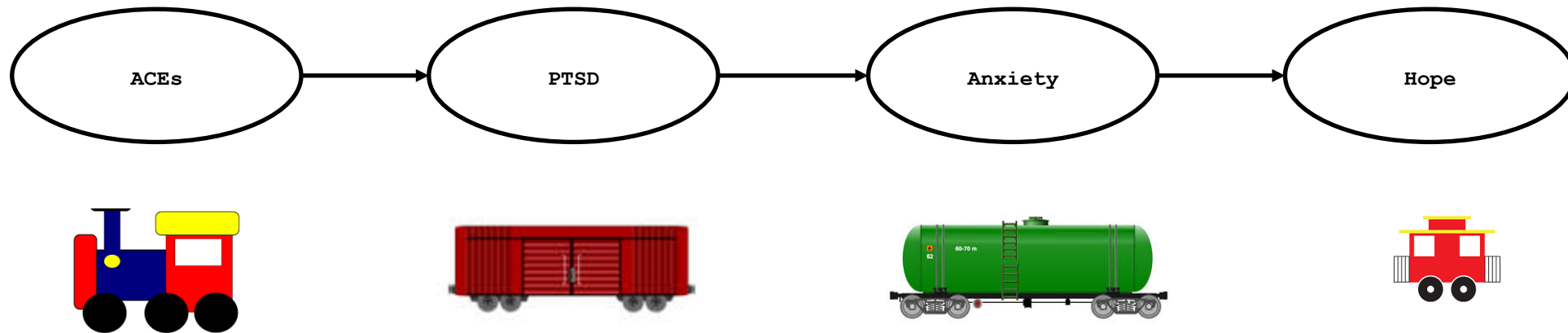
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# Theoretical Constructs

- Recent research suggests a negative relationship between hope and post traumatic stress disorder (Gilman, Schumm, Chard, 2012).
- **Hope** – *Prospective* appraisal involving the assessment of the likelihood of future goal attainment, based on assessment of agency (“I am capable”) coupled with appraisals of the suitability of the routes one has to those goals, known as pathways (“I see a way.”)  
Adult Hope Scale Item using a Likert response format: “I can think of many ways to get the things in life that are important to me.” (Snyder et al, 1991).
- **Post traumatic stress disorder checklist (8 item)** – PCL-8 measures PTSD in the following manner using a Likert response format:  
“How much have you been bothered by each problem in the past month:  
Repeated, disturbing memories, thoughts or stressful images from the past. “
- **General Anxiety Disorder (GAD-7).** - The GAD-7 is a 7-item anxiety scale designed to capture a respondent's feelings of anxiety over the proceeding 2 week period. The GAD-7 has demonstrated good psychometric properties, including good reliability, as well as criterion, construct, factorial, and procedural validity (Spitzer, Kroenke, Williams, Löwe, 2006).

# Theorized Directional Associations of Variables



# Sample Characteristics

- The study was cross sectional ( $n = 103$ ), conducted at a homeless outreach agency in a medium-sized city in the South Central United States. All participants self reported as homeless.
- The mean age of the sample was 47.20 years of age ( $SD = 12.17$ ).
- Consisted of 57% males and 46% females.
- Regarding ethnicity, 52% reported being white while 48% reported minority status.



# Scales

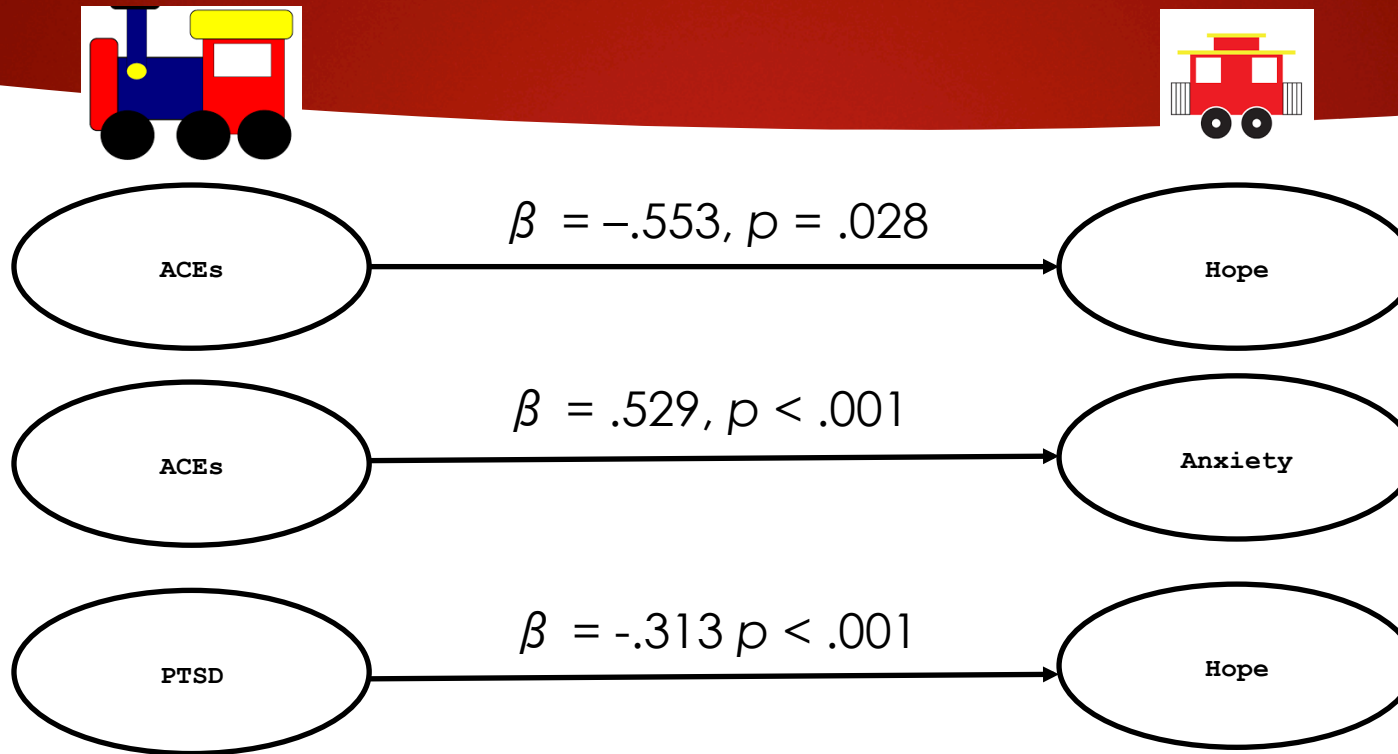
- ▶ **Adverse Child Experiences Scale (ACE).** The ACE Scale is a 10-item measure that captures the total number of ACEs experienced per respondent. Responses are captured in a “yes” or “no” format, with the number of categories of ACEs totaled to produce a score within a range of 0-10. ACE categories capture whether a respondent has experienced emotional, physical, or sexual abuse, emotional or physical neglect, witnessed domestic violence, grew up with a mentally ill or substance abusing household member, experienced the loss of a parent or divorce, or had a household member incarcerated.
- ▶ **Abbreviated Posttraumatic Stress Disorder Checklist (PCL-8).** The PCL-8 is an 8-item self-report questionnaire, corresponding to the DSM-5 symptom criteria for PTSD. The rating scale is 0 to 4 for each symptom, with the option for computing total severity scores or symptom cluster severity scores. Validation and reliability studies have consistently demonstrated that the PCL-8 demonstrates adequate psychometric properties.
- ▶ **General Anxiety Disorder (GAD-7).** The GAD-7 is a 7-item anxiety scale designed to capture a respondent's feelings of anxiety over the proceeding 2 week period. The GAD-7 has demonstrated good psychometric properties, including good reliability, as well as criterion, construct, factorial, and procedural validity (Spitzer, Kroenke, Williams, Löwe, 2006).
- ▶ **Adult Dispositional Hope Scale (AHS).** Individual differences in hope were measured using the Adult Hope Scale (AHS; Snyder et al., 1991). The AHS consists of 12 items with responses measured in a Likert format, with 4 items assessing hope agency, 4 assessing hope pathways, and 4 items serving as filler. Overall hope scores are additive, obtained by summing the agency and pathway subscales to achieve total hope scores ranging from 8-32, with higher scores indicating greater hope.

# Data Analysis

- ▶ **Consistent partial least squares structural equation modeling (PLS-SEM).** This study employed a PLS-SEM modeling technique known as consistent PLS (PLSc) (Dijkstra & Henseler, 2015). PLS-SEM is a variance based path modeling technique that uses aggregate scores of observed indicators to represent latent variables and the structural relationships between those latent variables.

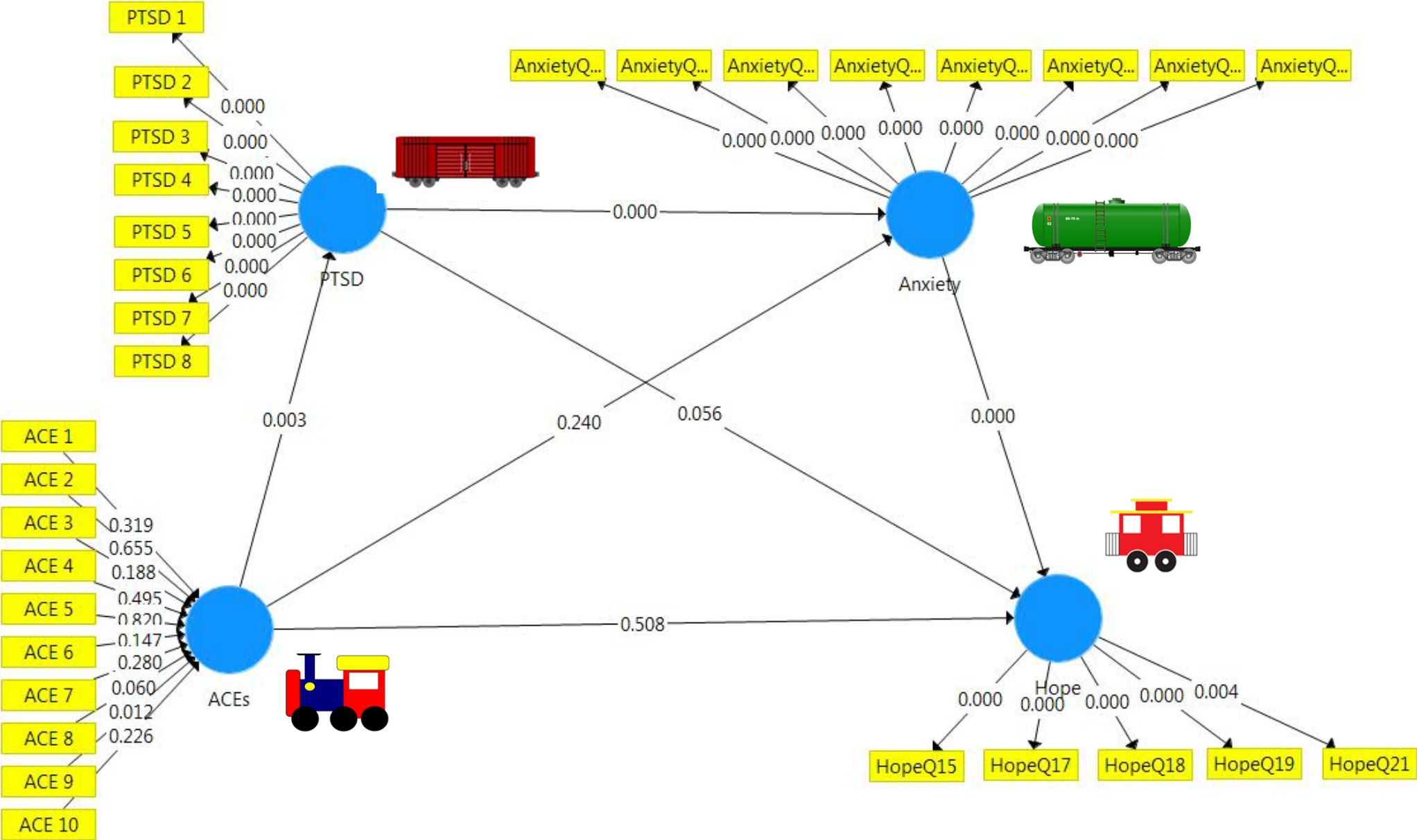
**Bootstrapping.** To determine the statistical significance of the parameters of a given model, PLS-SEM employs bootstrap re-sampling techniques to determine the statistical significance of the parameters of the model as estimates of the parameters in the parent population (Efron & Tibshirani, 1986). Bootstrapping involves re-sampling with replacement. For this study, a total of  $N = 5000$  bootstrap samples were run to generate point estimates for the calculation of the 95% CI for each parameter.

# Direct Effects of Variables



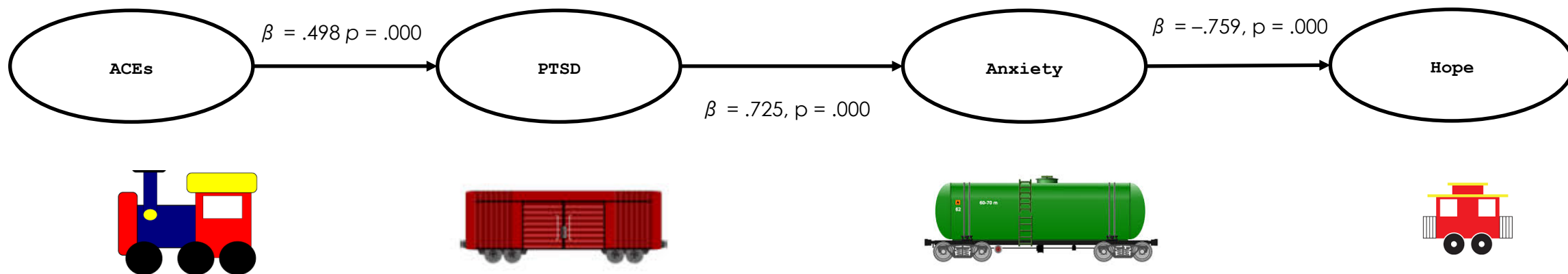
Although a significant direct effect is not a requirement for mediation (Zhao, Lynch, & Chen, 2010), mediation analysis is easier to interpret if the direct effects between variables are significant without the presence of a proposed mediator.

Results of bootstrapping (N = 5000)



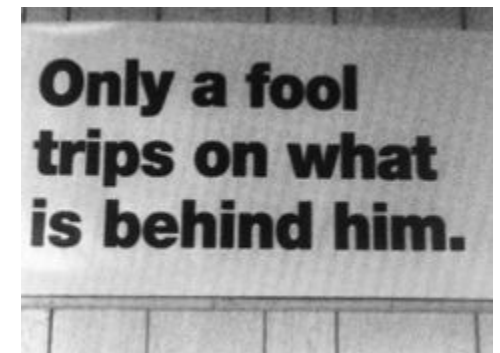


# Theorized Directional Associations of Variables



# Implications/Limitations

- ▶ Cross sectional research has limitations as to the strength of the conclusions that can be drawn as to “causality.” Future longitudinal research is needed to test the theorized directional associations between the variables.
- ▶ Future research into interventions that target increases in “executive control” of attention may be helpful in terms of learning how to better help individuals move attention away from the past and toward a positive future (Kabat-Zinn, 2012).



# References

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