

MALADAPTIVE BELIEFS AND PTSD/DEPRESSION COMORBIDITY

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Background

- **Existing Facts:** highlight the role of maladaptive cognitions in posttraumatic stress disorder (PTSD) and major depressive disorder (MDD)
 - Beck's Cognitive Theory of Depression: distorted beliefs in the cognitive triad-> core drivers (1967)
 - Cognitive Theory of PTSD: maladaptive post-traumatic beliefs-> development and maintenance of PTSD symptoms (Ehlers & Clark, 2000)
 - Existing studies: maladaptive trauma-related appraisals predict PTSD severity, shared cognitive mechanisms linked to both PTSD & MDD
 - PTSD/MDD comorbidity rate (30-50%) -> shared vulnerability pathway (Angelakis & Nixon, 2015)
 - Janoff-Bulman's shattered assumptions model (1992) & Abramson's hopelessness theory (1989) -> changes in core beliefs-> depressive worldviews
- **Shortcomings of Existing Research:**
 - identified cognitive vulnerabilities following trauma, have not tested how they may mediate the development of comorbid outcomes
 - emphasis on trauma-specific appraisals rather than global belief systems
- **Purpose:** test a mediation model in which interpersonal trauma predicts comorbid PTSD/MDD through posttraumatic maladaptive belief systems.
- **Hypothesis:** individuals reporting interpersonal trauma would show higher odds of comorbid PTSD/MDD, interpersonal trauma would be associated with elevated maladaptive belief scores, and these beliefs would account for the relationship between interpersonal trauma and comorbidity.

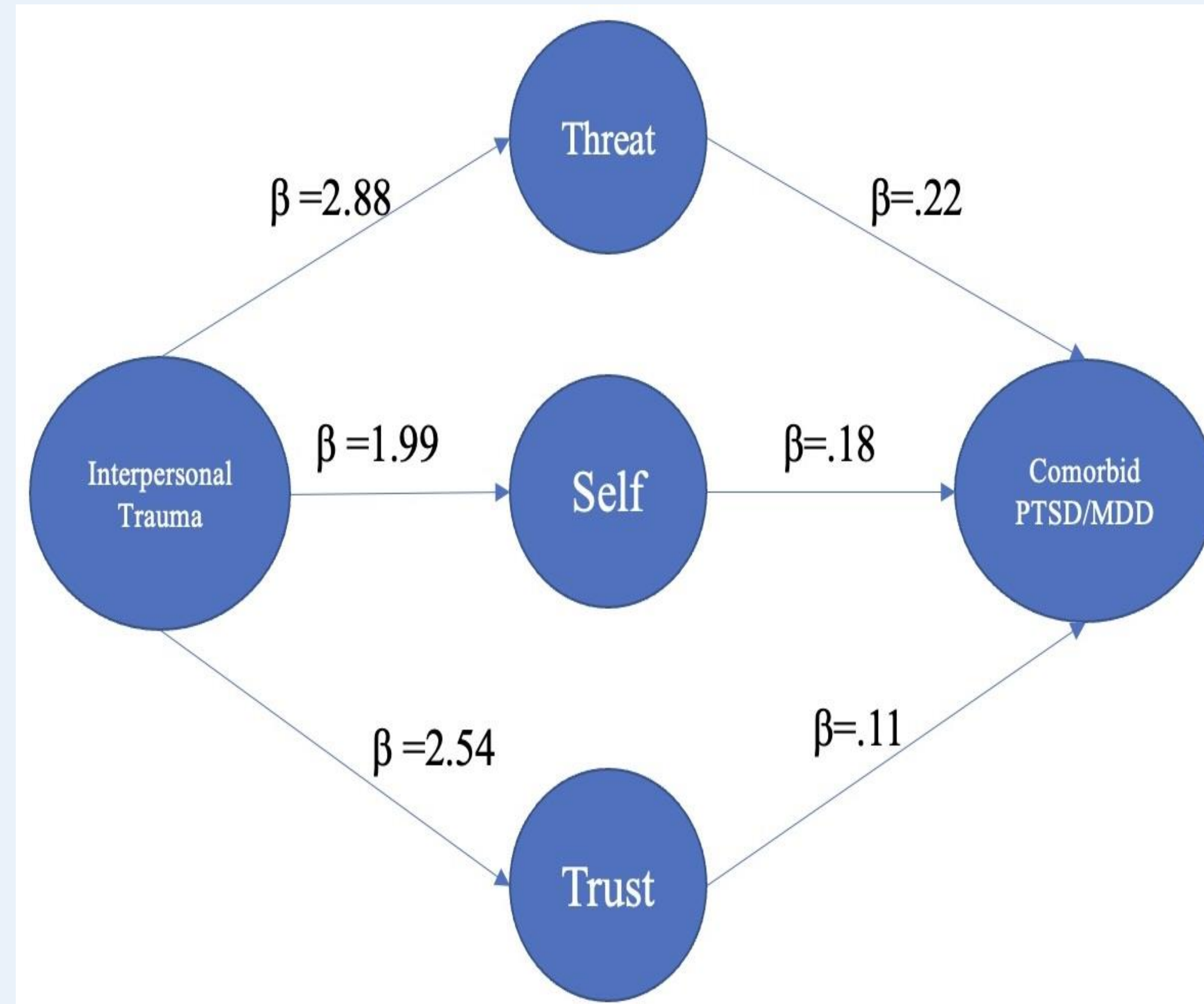


Figure A: Interpersonal trauma predicts maladaptive beliefs about threat of harm, self-worth, and trust in others, which mediate risk for comorbidity.

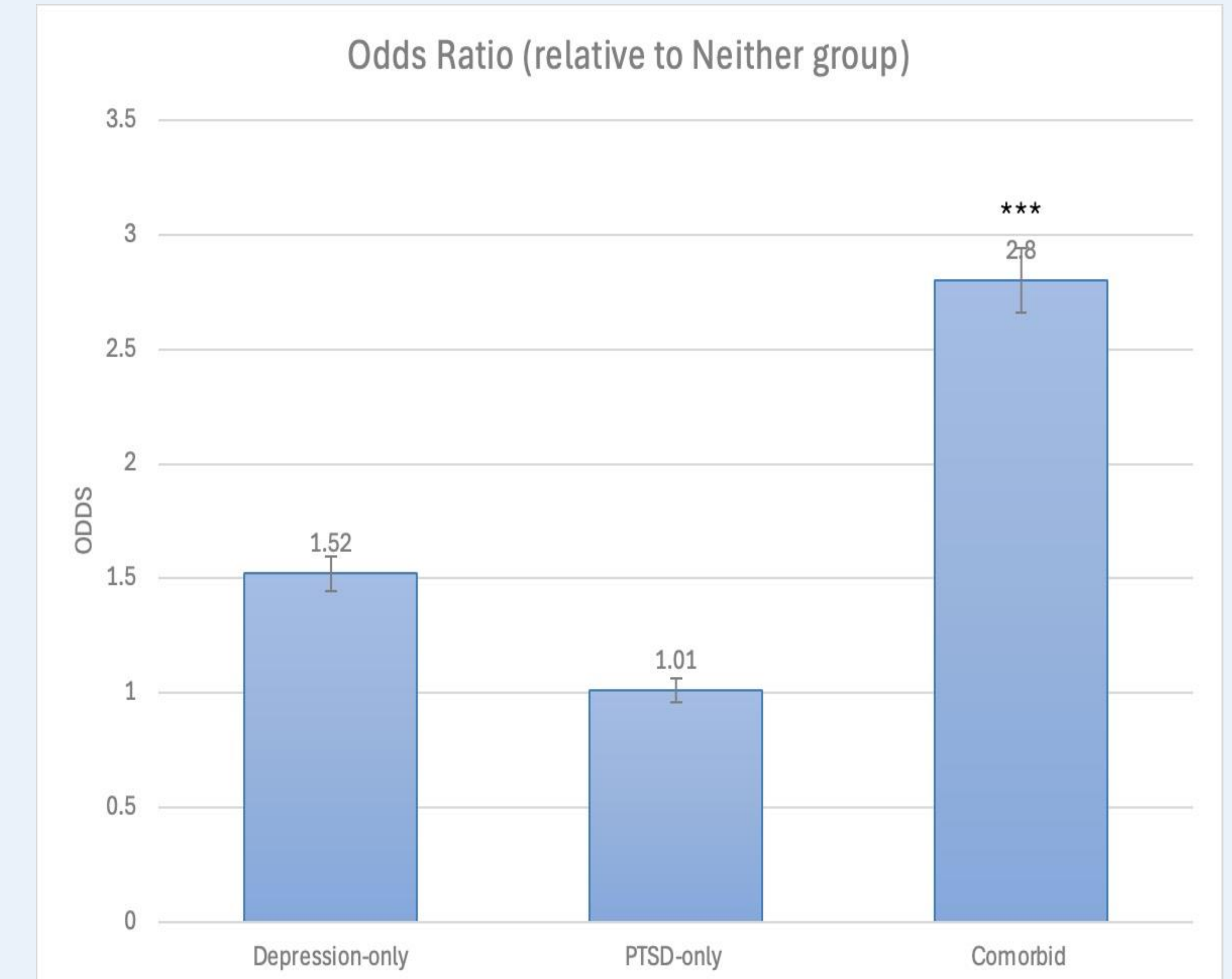


Figure B: Odds ratio for diagnostic outcomes relative to neither group following interpersonal trauma.

Method

- **Participants:** large (N=583) sample of trauma-exposed and non-trauma-exposed adults - Procedure: Participants completed standardized self-report measures assessing PTSD, depression, and trauma-related belief systems, allowing comparison across groups meeting criteria for PTSD only, depression only, comorbid PTSD/MDD, or neither.
- **Methods:**
 - Participants reported trauma history-> two categories: interpersonal trauma (physical assault, unwanted sexual experience, sexual assault) and non-interpersonal trauma (natural disaster, fire, transportation accident)
 - Completed questionnaires: PCL-5 (PTSD symptoms), PROMIS Depression scale, Posttraumatic Maladaptive Beliefs Scale (PMBS)
 - categorized into 4 diagnostic groups: PTSD-only, Depression-only, comorbid PTSD/Depression, neither
- **Data Analysis:** conducted in R in 3 steps,
 1. Logistic regression- whether trauma type predicted odds of comorbidity
 2. Multinomial logistic regression- whether trauma type predicted diagnostic group
 3. Mediation analyses- whether PMBS total and subscale scores explained associations between interpersonal trauma and diagnostic outcomes

Results

- **Logistic Regression:** only interpersonal trauma predicted comorbidity
 - Interpersonal trauma->Comorbidity: B=.88, SE=.26, p<.001
 - Non-interpersonal trauma->Comorbidity: B=-.31, SE=.29, p=.27
- **Mediation (PMBS):** PMBS fully mediated trauma-comorbidity
 - Interpersonal trauma->PMBS: B=7.42, SE=1.42, p<.001
 - Full mediation model (PMBS->comorbidity): B=.09, SE=.009, p<.001
- **Mediation (PMBS Subscales):** all belief scales predicted comorbidity
 - Threat of Harm: B=.22, p<.001, strongest association
 - Self-Worth: B=.18, p<.001
 - Trust in Others: B=.11, p<.001
- **Multinomial Logistic Regression:** Interpersonal trauma reliably increased odds of comorbidity only
 - Comorbid: OR=2.8, p<.001
 - Depression-only: OR=1.52, p=.058
 - PTSD-only: OR=1.01, p=.99

Discussion

- **Summary:** Interpersonal trauma appears to increase risk for PTSD-depression comorbidity through maladaptive beliefs about threat of harm, self-worth, and trust.
 - Supports a full cognitive mediation model of comorbidity
- **Limitations:** self-report measures, cross-sectional design
- **Strengths:** hypothesized effects showed very strong significance (p<.001), specific identification of interpersonal trauma types and PMBS subscales
- **Future Directions:** longitudinal studies to test causal pathways, examine PMBS-targeted interventions

References:

