DISTRESS TOLERANCE AS AN ETIOLOGICAL FACTOR IN THE RELATION BETWEEN STRESS AND GUT-RELATED MALADY?

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BACKGROUND

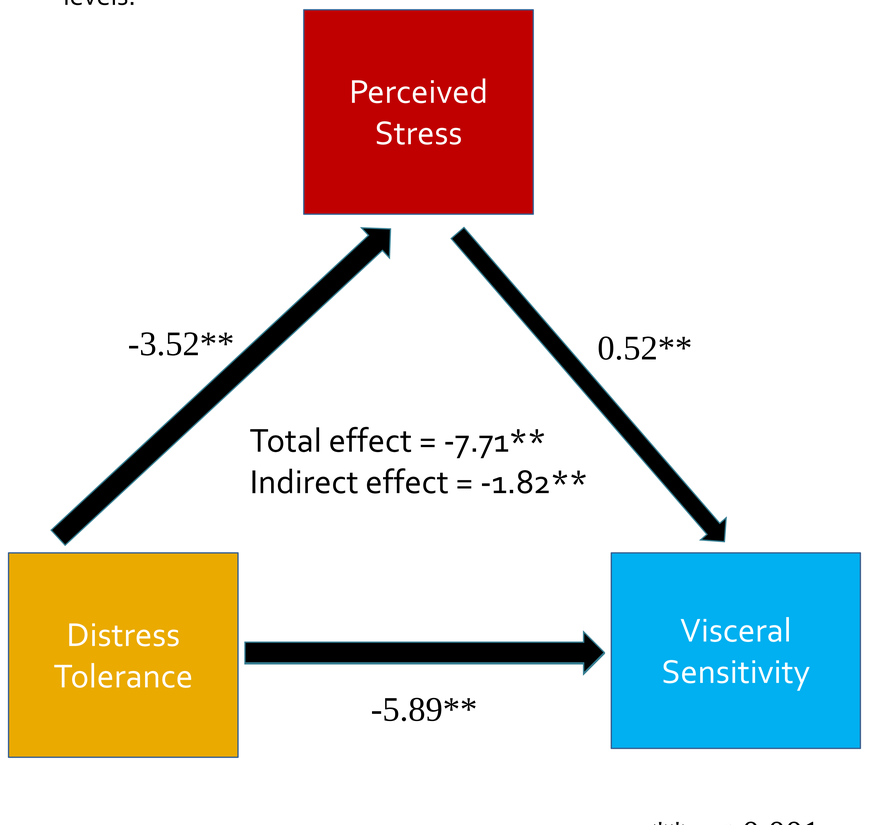
- Gastrointestinal (GI) permeability is an important factor in partially explaining a number of chronic inflammatory diseases (e.g., Celiac disease, multiple sclerosis, type I diabetes; Sturgeon & Fasano, 2016).
- Permeability of GI tissues leads to a breakdown of barrier function resulting in bloating, pain, loose stools, villi atrophy, etc. (Fasano, 2011).
- GI symptom-specific *anxiety* and *stress* have been associated with functional GI disorders (i.e., irritable bowel syndrome) both physiologically and psychologically (Labus et al., 2004).
- **Distress tolerance, or the trait-like capacity to withstand uncomfortable or negative emotional states** (Simons & Gaher, 2005) has not been explored in relation to the effects of stress on gut-related malady. This study aimed to advance on prior work and test the possible etiological role of distress tolerance in predicting stress and gut distress.

METHODS

- Data were collected from Amazon Mechanical Turk
- Included 828 adults (M_{age} = 48.0 years, *SD* = 12.7; 81.1% White, 9% African American).
- A model was tested to explore whether participant distress tolerance scores (*Distress Tolerance Scale;* Simons & Gaher, 2005) predicted gut-related anxiety (*Visceral Sensitivity Index;* Labus et al., 2004) both directly and indirectly through experienced stress (*Perceived Stress Scale;* Cohen et al., 1983), while controlling for covariates (i.e., age, sex, education, income).
- SPSS 24 and the PROCESS 3.0 (Hayes, 2017) extension were used to test the mediation model, as well as estimate any direct and indirect effects.

RESULTS

- Distress tolerance scores were predictive of both stress (b = -3.52, $p < .001$) and gut-related malady (b = -5.89, $p < .001$).
- There also was a significant indirect effect (β = -1.82, CI = -2.63—1.07) where higher levels of distress tolerance were associated with lower levels of gut-related distress through perceived stress levels.



CONCLUSIONS

- Distress tolerance was shown to be associated with visceral sensitivity, suggesting that targeting one's ability to endure negative emotional states should be further studied, particularly in treatment research.
- Likewise, distress tolerance indirectly affected GI-specific anxiety symptoms through actual perceived stress levels. Future work may focus on the understanding of how distress *in*tolerance can lead to more stress and more gut-related symptomology.

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