



Development of a Brief Web-Based Intervention: TI Psychoeducation



Paulina Gonzalez & Danielle M. Morabito
Florida State University

Introduction

- Humans respond to threats in various ways, depending on individual and situational factors.
- These responses are known as “fight-flight-freeze” responses.
- Tonic immobility is a type of “freeze” response characterized by extreme fear, immobility, and dissociation (Lang et al., 1997).
- Tonic immobility (TI) can be an adaptive response when an individual doesn’t have a high chance of escape (Barlow, 2002).
- However, tonic immobility in response to a traumatic event can lead to increased guilt, shame, and posttraumatic stress symptoms (Bovin et al., 2014; Marx et al., 2008).
- It’s hypothesized that psychoeducation and skills for addressing common misconceptions about tonic immobility may alleviate these symptoms.

Method

Participants & Procedures

- Participants (N = 6) were recruited from the SONA subject pool based on prior TI exposure and elevated PTSD symptoms.
- Participants were all female and 18+ ($M = 18.50$; $SD = 0.84$)
- Participants completed informed consent, pre and post surveys, and the TIP intervention.

Measures

- Treatment acceptability questionnaire (Short et al., 2017) was used to assess treatment acceptability and engagement
- State Shame and Guilt Scale – 8 (SSGS-8; Calavera et al., 2017) was modified to assess guilt and shame related to TI experiences
- Tonic Immobility Questionnaire (TIQ; Taylor et al., 2007) was used to assess TI
- Posttraumatic Stress Checklist (PCL-5; Weathers et al., 2013) was used to assess PTSD symptoms

Intervention

- TIP is a 45-minute web-based intervention that addresses emotions and maladaptive conditions that are associated with tonic immobility.
- Throughout the intervention, practice exercise, vignettes, and self-ratings scaled were incorporated to engage the participants.
- Participant testimonial: “I liked how the videos showed the antelope first, it helped me understand that the reaction was completely natural and out of my control, because even animals do it.”

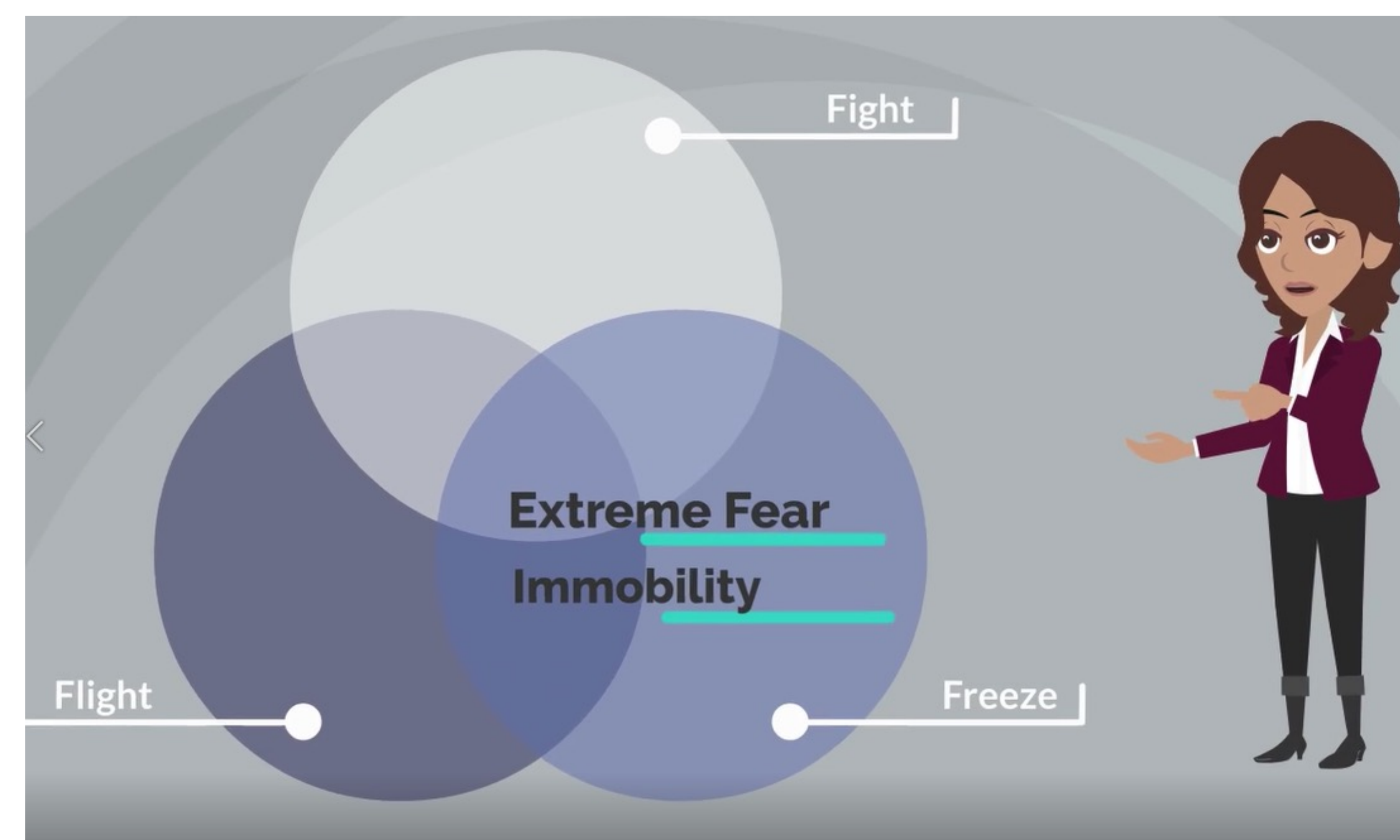
Results

Acceptability

- 100% of participants reported the presentation was easy to understand and follow.
- 100% of participants reported they’re at least “somewhat likely” to recommend the presentation to a friend.
- 66.7% of participants reported they’re “very likely” to use the information and techniques learned, and 33.3% reported they’re “somewhat likely”.
- 83.3% of participants found the information in the presentation applicable to their daily life, while 16.7% responded “somewhat applicable”.

Outcomes

- Guilt
 - On average, participants rated guilt 23% lower at post compared to pre-intervention.
 - Results from a paired samples t-test ($t = 3.40$, $d = 1.39$, $p = .019$), showed that this reduction was statistically significant.
- Shame
 - On average, participants rated shame 21% lower at post compared to pre-intervention.
 - However, t-test results ($t = 1.95$, $d = 0.80$, $p = .109$) indicated that this reduction was not statistically significant.

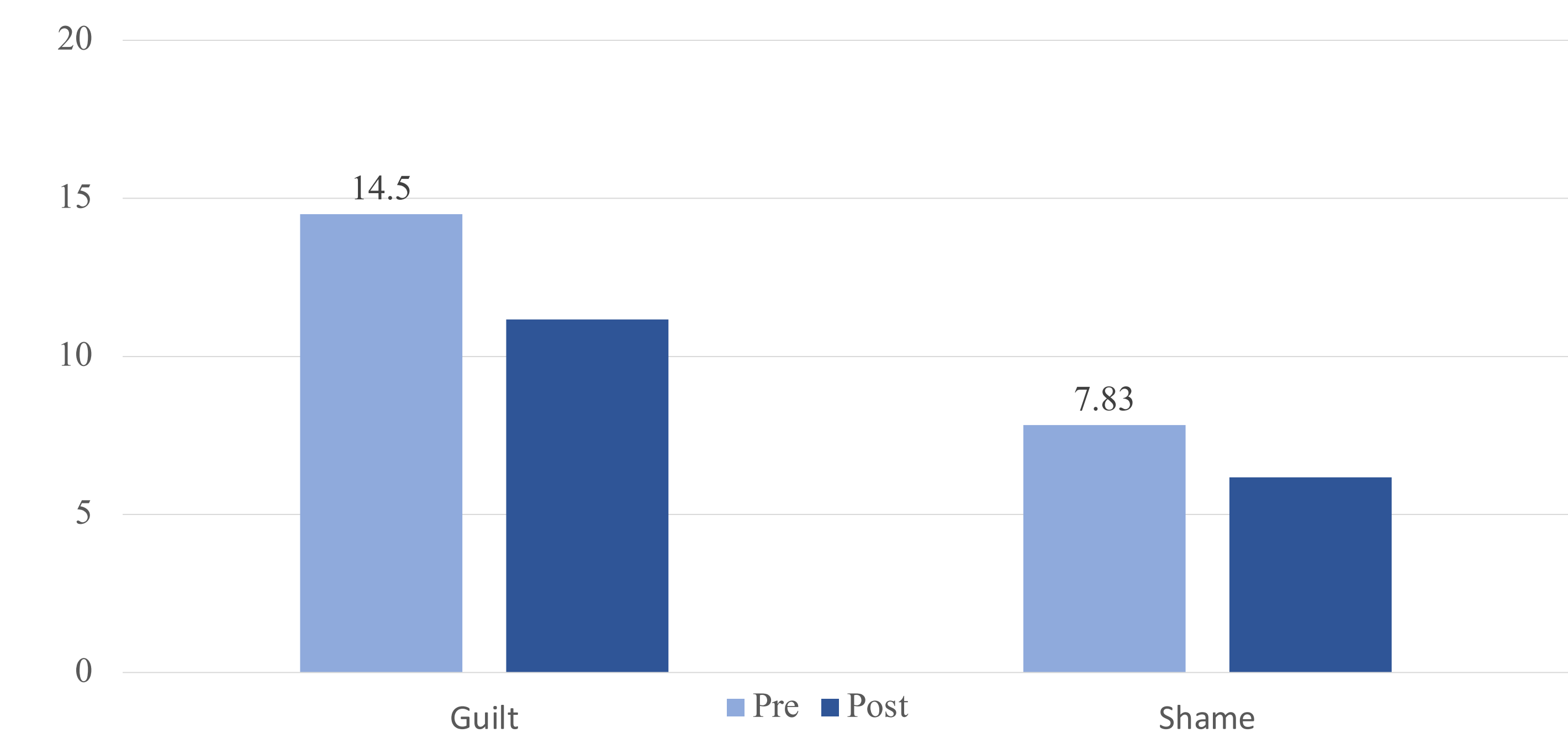


Acknowledgements

I would like to thank the Anxiety and Behavioral Health Clinic (ABHC) for their support and my research mentor, Danielle Morabito, for guiding me through this project and helping with my career & educational goals.

Results

Figure 1. Pre to Post Guilt and Shame Ratings



Discussion

- Results indicate that the TIP intervention is highly acceptable and promising in reducing trauma-related negative emotions.
- The small student sample limits generalizability and statistical significance.
- The lack of a control condition means that the study was vulnerable to potential confounds.
- Participant feedback was used to further refine the intervention.
- Future research is in progress to examine the effects of the refined TIP intervention compared to an active control condition in a larger community sample.

References

- Barlow DH. *Anxiety and its disorders*, 2. New York: Guilford Press; 2002.
- Bovin, M. J., Dodson, T. S., Smith, B. N., Gregor, K., Marx, B. P., & Pineles, S. L. (2014). Does guilt mediate the association between tonic immobility and posttraumatic stress disorder symptoms in female trauma survivors?. *Journal of Traumatic Stress*, 27(6), 721-724.
- Cavallera, C., Pepe, A., Zurloni, V., Diana, B., & Realdon, O. (2017). A short version of the State Shame and Guilt Scale (SSGS-8). *TPM-Testing, Psychometrics, Methodology in Applied Psychology*, 24(1), 99-106.
- Lang, P. J., Bradley, M. M., & Cuthbert, B. N. (1997). *Motivated attention: Affect, activation, and action. Attention and orienting: Sensory and motivational processes*, 97, 135.
- Marx, B. P., Forsyth, J. P., Gallup, G. G., Fusé, T., & Lexington, J. M. (2008). Tonic immobility as an evolved predator defense: Implications for sexual assault survivors. *Clinical Psychology: Science and Practice*, 15(1), 74-90.
- Taylor S, Stapleton J, Asmundson GJG. Tonic Immobility Questionnaire-Revised. Unpublished scale, University of British Columbia and University of Regina; 2007.
- Weathers, F. W., Blake, D. D., Schnurr, P. P., Kaloupek, D. G., Marx, B. P., & Keane, T. M. (2013). The life events checklist for DSM-5 (LEC-5). Instrument available from the National Center for PTSD.
- Short, N. A., Fuller, K., Norr, A. M., & Schmidt, N. B. (2017). Acceptability of a brief computerized intervention targeting anxiety sensitivity. *Cognitive Behaviour Therapy*, 46(3), 250-264.