### University of Missouri, St. Louis IRL @ UMSL

Undergraduate Research Symposium

UMSL Undergraduate Works

4-26-2019

## The Dimensional Relationship Between Age of First Traumatic Exposure and Perceptions of Control: A Pilot Study

Ellen L. Gruebbeling University of Missouri-St. Louis, elg3n3@mail.umsl.edu

Miranda Jany University of Missouri-St. Louis, mnjd45@mail.umsl.edu

Carissa Philippi University of Missouri-St. Louis, philippic@umsl.edu

Follow this and additional works at: https://irl.umsl.edu/urs

Part of the Psychology Commons

#### **Recommended** Citation

Gruebbeling, Ellen L.; Jany, Miranda; and Philippi, Carissa, "The Dimensional Relationship Between Age of First Traumatic Exposure and Perceptions of Control: A Pilot Study" (2019). *Undergraduate Research Symposium*. 21. https://irl.umsl.edu/urs/21

This Poster is brought to you for free and open access by the UMSL Undergraduate Works at IRL @ UMSL. It has been accepted for inclusion in Undergraduate Research Symposium by an authorized administrator of IRL @ UMSL. For more information, please contact marvinh@umsl.edu.

# IMSI

## The Dimensional Relationship Between Age of First Trauma and Perceptions of Control: A Pilot Study



Ellen L. Gruebbeling<sup>1</sup>, Carissa L. Philippi<sup>1</sup>, & Miranda N. Jany<sup>1</sup> <sup>1</sup>Department of Psychological Sciences, University of Missouri-St. Louis

#### INTRODUCTION

- An earlier age of trauma has been associated with greater psychological impairments, such as increased risk of psychopathology and greater distress in adulthood<sup>1,2,3</sup>.
- Previous studies have found that trauma exposure is linked to deficits in control<sup>4</sup>.
- Individuals who experience trauma earlier are more likely to have impairments in internal control<sup>5</sup>.
- However, the association between age of first traumatic exposure and control, specifically Self-Agency, is unclear.
- Self-Agency can be defined as the sense of control one has over their actions and/or thoughts<sup>6</sup>.

#### PREDICTIONS

- We hypothesize that participants who experienced earlier age of first trauma will have:
  - 1. lower ratings of perceived control on the selfagency judgment task than participants who experienced their first trauma later in life.
  - 2. greater psychological symptoms (e.g. post traumatic stress disorder (PTSD), anxiety, and depression) than participants who experienced their first trauma later in life.

#### METHODS AND MATERIALS

#### **Participants**

Fourteen healthy adult participants (Table 1) were recruited from the University of Missouri-St. Louis. Data collection is still ongoing.

#### Life Stressors Checklist (LSC-R)<sup>7</sup>

A 30-item questionnaire which examines exposure to traumatic and stressful events (e.g. jail time, neglect)

Computer Based Attribution of Self-Agency (SA) Task<sup>8,9</sup>

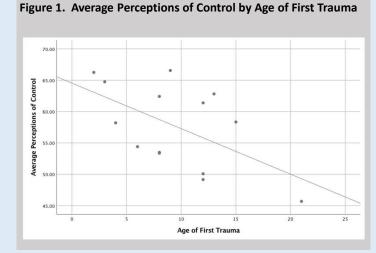
A computer based where participants were asked to rate their perceived control after moving a box on the computer in various noise conditions (0%, 30%, 75%, 90%, 100%)

Beck Depression Inventory (BDI-II)<sup>10</sup>

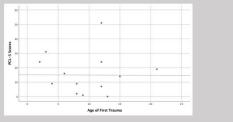
A 21-item questionnaire which assesses depression severity over the past two weeks.

Beck Anxiety Inventory (BAI)<sup>11</sup>

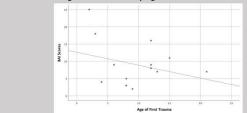
- A 21-item questionnaire which assesses anxiety symptoms over the past month.
- Posttraumatic Checklist for DSM-5 (PCL-5)<sup>12</sup>
- A 20-item questionnaire which assesses PTSD symptoms over the past month.



#### Figure 2. PCL-5 Score by Age of First Trauma



#### Figure 3. BAI Score by Age of First Trauma



#### Figure 4. BDI-II Score by Age of First Trauma

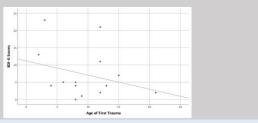


Table 1. DEMOGRAPHIC INFORMATION	
----------------------------------	--

N	M <sub>age</sub> (SD <sub>age</sub> )	Gender
14	24.00 (9.54)	F: 12, M: 2

#### RESULTS

- Results indicate that participants had a range of age of trauma from two to 21.
- Preliminary results show that there were statistically significant differences between age of trauma and agency ratings, such that earlier age of trauma predicted higher ratings of average control within all five conditions, t(12) - 2.30, p = .040 (Figure 1).
- Earlier age of trauma did not predict depression (t(12))= -1.06, p = .311; Figure 2), anxiety (t(12) = -1.06, p = .106, p = .106.312; Figure 3), or PTSD psychological symptom scores (t(12) = -0.02, p = .981; Figure 4).

#### PRELIMINARY CONCLUSIONS

- An earlier age of trauma is associated with an increased sense of agency, whereas, an earlier age of trauma was not predictive of psychological symptom scores (PTSD, depression, anxiety).
- These results suggest that earlier exposure to trauma may be associated with greater deficits in control later in life, possibly leading to excessive control rather than decreased perceptions of control.

#### FUTURE DIRECTIONS

- As data collection is ongoing, we will continue to examine the relationship between age of first trauma and perception of control, as well as its relationship to psychological disorders.
- Future studies could also consider how trauma type affects perceptions of control and Self-Agency.

#### REFERENCES

- Kapinu J, B. & Widom, C. S. (2007). Age of onset of child maltreatment predicts long-term mental health outcomes. Jour Abnornal Psychology 145, 176-1877. Muellers S, C. Maheu, F. S., Dobier M, Pelson, E, Mandel, D, Leibenkitt, E, Pine, D. S, Brinst, M. (2010). Early life stress associated with Impairment in cognitive control in addrescence: A MMB study. Avenus/psychologia, 43, 237-3044. Teicher, M. L, Samson, J. A., Polacia, A., Andersen, S. L. (2009). Length of time between the onset of childhood sexual ab emperince of depression in a young addit simple. J Clin Psychiatry, 70 (5), 684–691.

- Frazier, P. (2003). Perceived control and distress following sexual assault: A longitudinal tes
- ratie; P. (2003). Perceived control and distress tonowing is and Social Psychology, 84, 1257-1269.
  Natra's, Y. (2015). Sense of ownership and sense of agency of Bolger, K. E., & Patterson, C. J. (2001). Pathways from child mediators and moderators. *Development and Psychopatha* Wolfe, J., & Kimerling, R. (1997). Gender issues in the asis hology, 13, 913-940.
- er issues in the assessment of postt and PTSD (pp. 192-238). New York: Eds.). Assessing psychological trauma and PTSD (pp. 192-238). New York: Southord. Proopous to: 12226 hilippi, C. L., Feinstein, J. S., Khalsa, S. S., Damasio, A., Tranel, D., Landini, G., Willford, K., & Rudfard, D. (2012). P
- ensive bilateral brain damage to the insula, anterior cin arrer C & Frith C D (2002) Experi
- experience of agency. Neuroimage, 15(3), 596-603. Beck, A. T., Steer, R. A., Ball, R., Ranieri, W. (1996).
- Beck, A. T., Steec, R. A., Bail, R., Raineri, W. (1998). Comparison of Beck Degression Inventions:-I. A and -II in psychiatric outpatient Journal of Personality Assessment, G-5588-977
  Julian, L., 12011. Measures of anxiety: State-trait anxiety (STAI), beck anxiety inventory (BAI), and hospital anxiety and depressis acleanative (HOAS-J. Arthritics Core & Research, 63 (STAI).
  Bievins, C. A., Weathers, F. W., Davis, M. T., WIEB, T. K., & Domino, J. L. (2015). The Postraumatic Stress Bioxeder Checkist for DSA (51C-5). Development and Initial approximative anxiety of Longend Core and Cor