

Experiences, Coping, and Health Outcomes Study (ECHOES)

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Chapter 1

Introduction

This wiki contains information for the Experiences, Coping, and Health Outcomes Study (ECHOES)

Chapter 2

Overview

2.1 Summary

ECHOES is a fully online study focusing on young adults' (ages 18-25) adversity experiences (early life and recent), current physical and mental health, and psychosocial risk/protective factors (e.g., coping style, alexithymia, social support).

2.2 Aims

The main project has the following aims:

Aim 1: Identify how adversity characteristics (type, timing) are related to psychosocial risk/protective factors and health in young adulthood.

- **Aim 1.1:** Test a 3-dimensional model of adversity based on recent theory (threat, deprivation, unpredictability), and, if this theorized model does not fit the data well, identify the best-fitting adversity dimensional model in this sample.
- **Aim 1.2:** Test how adversity dimensions are related to alexithymia.

Aim 2: Characterize profiles/groups of young adults according to their experiences, psychosocial risk/protective factors, and health.

2.3 Background

WILL ADD MORE HERE

Chapter 3

Study Details

3.1 Study Design

ECHOES is a fully online study that recruited entirely from Prolific. ECHOES was designed to get a relatively large sample size (target $N = 400$) with a brief protocol (~30 minutes). It is a cross-sectional study with 1 timepoint. Through Prolific, an equal number of male and female participants were recruited, and a ratio of White/non-White participants consistent with the United States population of young adults (212/400 or 53% White, 188/400 or 47% non-White).

3.2 Questionnaires

Questionnaires are listed below in the order they were administered to participants:

- **Demographics**
 - BAB Lab
- **Visceral Sensitivity Index (vsi)**
 - Adapted by FQ and BC from: Labus JS, Bolus R, Chang L, Wiklund I, Naesdal J, Mayer EA, Naliboff BD. The Visceral Sensitivity Index: development and validation of a gastrointestinal symptom-specific anxiety scale. *Aliment Pharmacol Ther.* 2004 Jul 1;20(1):89-97. doi: 10.1111/j.1365-2036.2004.02007.x. PMID: 15225175.
- **Rome IV IBS criteria (rome)**
 - BAB Lab
- **Patient Health Questionnaire, Depression Module (PHQ-9)**
 - Kroenke, K., Spitzer, R.L. & Williams, J.B.W. The PHQ-9. *J GEN INTERN MED* 16, 606–613 (2001). <https://doi.org/10.1046/j.1525-1497.2001.016009606.x>
- **Generalized Anxiety Disorder 7 (GAD-7)**

- Spitzer RL, Kroenke K, Williams JBW, Löwe B. A Brief Measure for Assessing Generalized Anxiety Disorder: The GAD-7. *Arch Intern Med.* 2006;166(10):1092–1097. doi:10.1001/archinte.166.10.1092
- **Somatic Symptoms (PHQ-15)**
 - Korber S, Frieser D, Steinbrecher N, & Hiller, W. Classification characteristics of the Patient Health Questionnaire-15 for screening somatoform disorders in a primary care setting. *Journal of Psychosomatic Research.* 2011;71(3). <https://doi.org/10.1016/j.jpsychores.2011.01.006>
- **Chronic Pain**
 - Created by BAB Lab based on the following 2 sources:
 - Deyo RA, Dworkin SF, Amtmann D, Andersson G, Borenstein D, Carragee E, Carrino J, Chou R, Cook K, DeLitto A, Goertz C, Khalsa P, Loeser J, Mackey S, Panagis J, Rainville J, Tosteson T, Turk D, Von Korff M, Weiner DK. Report of the NIH Task Force on research standards for chronic low back pain. *J Pain.* 2014 Jun;15(6):569–85. doi: 10.1016/j.jpain.2014.03.005. Epub 2014 Apr 29. PMID: 24787228; PMCID: PMC4128347.
 - Dahlhamer J, Lucas J, Zelaya C, Nahin R, Mackey S, DeBar L, Kerns R, Von Korff M, Porter L, Helmick C. Prevalence of Chronic Pain and High-Impact Chronic Pain Among Adults - United States, 2016. *MMWR Morb Mortal Wkly Rep.* 2018 Sep 14;67(36):1001–1006. doi: 10.15585/mmwr.mm6736a2. PMID: 30212442; PMCID: PMC6146950.
- **Brief Resilient Coping Scale (BRCS)**
 - Sinclair VG, Wallston KA. The development and psychometric evaluation of the Brief Resilient Coping Scale. *Assessment.* 2004 Mar;11(1):94–101. doi: 10.1177/1073191103258144. PMID: 14994958.
- **Multidimensional Scale of Perceived Social Support (MSPSS)**
 - Gregory D. Zimet , Suzanne S. Powell , Gordon K. Farley , Sidney Werkman & Karen A. Berkoff (1990) Psychometric Characteristics of the Multidimensional Scale of Perceived Social Support, *Journal of Personality Assessment*, 55:3–4, 610–617, DOI: 10.1080/00223891.1990.9674095
- **Mental Health Continuum Short Form (MHC-SF)**
 - Lamers S, Westerhof G, Bohlmeijer P, ten Klooster P, Keyes, C. Evaluating the psychometric properties of the mental health Continuum-Short Form (MHC-SF). *Journal of Clinical Psychology.* 2010. <https://doi.org/10.1002/jclp.20741>.
- **Toronto Alexithymia Scale (external thinking subscale removed)**
 - R.Michael Bagby, James D.A. Parker, Graeme J. Taylor. The twenty-item Toronto Alexithymia scale—I. Item selection and cross-validation of the factor structure. *Journal of Psychosomatic Research.* 1994;38(1).[https://doi.org/10.1016/0022-3999\(94\)90005-1](https://doi.org/10.1016/0022-3999(94)90005-1).

- **Childhood Trauma Questionnaire Short Form (CTQ-SF)**
 - Hagborg JM, Kalin T, Gerdner A. The Childhood Trauma Questionnaire-Short Form (CTQ-SF) used with adolescents - methodological report from clinical and community samples. *J Child Adolesc Trauma*. 2022 Mar 30;15(4):1199-1213. doi: 10.1007/s40653-022-00443-8. PMID: 36439669; PMCID: PMC9684390.
- **Questionnaire of Unpredictability in Childhood - Brief Version (QUIC-5)**
 - Lindert N, Maxwell M, Liu S, Stern H, Baram T, Davis E, Risbrough V, Baker D, Nievergell C, Glynn L. Exposure to unpredictability and mental health: Validation of the brief version of the Questionnaire of Unpredictability in Childhood (QUIC-5) in English and Spanish. *Frontiers in Psychology*. 2022;13. <https://doi.org/10.3389/fpsyg.2022.971350>.
- **Assessment of Parent and Child Adversity (APCA)**
 - Edited by BAB Lab for adult respondents to capture childhood, adolescence, adulthood, and current occurrences of stressful life events.
 - King LS, Humphreys KL, Shaw GM, Stevenson DK, Gotlib IH. Validation of the Assessment of Parent and Child Adversity (APCA) in Mothers and Young Children. *J Clin Child Adolesc Psychol*. 2023 Sep 3;52(5):686-701. doi: 10.1080/15374416.2022.2042696. Epub 2022 May 2. PMID: 35500216; PMCID: PMC9626394.
- **Perceived Stress Scale (PSS)**
 - Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A Global Measure of Perceived Stress. *Journal of Health and Social Behavior*, 24(4), 385–396. <https://doi.org/10.2307/2136404>

3.3 Study Contributions

FQ and BC designed study. FQ and GF collected data. FQ and GF (so far) carried out analysis.

3.4 Funding

ECHOES was funded through BC's startup fund from UCLA.

Chapter 4

Data Collection

4.1 Recruitment

Recruitment was completed through Prolific.

4.2 REDcap

All data collection was completed on REDcap – participants were redirected to the study's REDcap site.

4.3 Data Storage

Raw questionnaire data is stored on REDcap and on BAB Lab Box.

Chapter 5

Data Analysis

5.1 Analysis Plans

Dimensions of Adversity & Alexithymia (Aim 1.1, 1.2): FQ and GF

We used CFA to test the a-priori specified 3-dimensional model of adversity, after assigning each adversity questionnaire item to a dimension according to theory, and removing duplicate items. Since fit to the data was not adequate (LIST CUTOFFS HERE), we performed EFA using promax rotation. We selected 3 factors for the EFA based on the Silhouette and Parallel Plots methods. We then performed CFA on the model selected by EFA.

After obtaining factor scores for each participant from the CFA, we then used an OLS regression model to test associations of each factor (controlling of other factors, age, and sex) with alexithymia.

5.2 Analysis Scripts

Analysis scripts can be found at: [insert github repo link once public]