

Research Program and Trajectory

My research focuses on expanding our understanding of emotional disorders, with the eventual goal of informing the most effective (and innovative) ways to modify psychotherapy for a greater diversity of populations. This overarching research interest drives the three major domains of my work: (1) elucidating psychological mechanisms by which anxiety disorders, OCD, and PTSD are maintained/treated, (2) applying a cross-cultural and diversity lens in order to address the outcomes that matter to our communities, and (3) utilizing technology innovations to enhance such examinations. Currently ongoing projects at the University of Utah in these three domains are reviewed below.

(1) Mechanisms of Treatment Outcome in Fear-Based Disorders

My initial foray into clinical psychological science was with a focus on expanding our understanding about the mechanisms through which psychological treatments work (and do not work), a consistent theme in my current work. To this end, I have been heavily involved in the study design, paradigm programming, acquisition of data, and statistical analysis of clinical trials and experimental studies examining emotion (dys)regulation as a core mechanism by which emotional disorders are maintained and successfully treated prior to my time here¹⁻⁵. I have also expanded my exploration to a wider range of hypothesized mechanisms (e.g., anxiety sensitivity, resilience, cultural values) underlying the maintenance of PTSD, OCD, and anxiety disorders over the course of effective behavioral treatments for these disorders⁶⁻¹⁰. I have incorporated numerous measures including subjective self-report data, objective timed/rated response in the context of various lab-based, computerized paradigms, and psychophysiological correlates to measure these constructs of interest.

My current experimental work is a natural extension of my previous work and involves a mechanistic examination of distress tolerance using an experimental, between-subject, randomized design examining the relative impact of three different interventions adapted from evidence-based therapies for anxiety disorders (interoceptive exposure, mindfulness, and positive self-efficacy induction) on improving tolerance to distress in undergraduate participants. A range of measurement methods that are both subjective (i.e., self-report state and trait measures) and objective (i.e., latency/tolerance indices, and video-coded safety behavior in collaboration with colleague Dr. Jason Goodman at the Salt Lake City VA) are being employed. This study was conceived and set up/submitted for IRB approvals over the Fall of my first year; we had just opened up experimentation slots to start running the study in March 2020 when the University shut down due to the COVID-19 pandemic. We then spent the past summer completely porting it to an online format and modifying the methods (e.g., removing our planned psychophysiology measures) to make sure we could conduct it over a live Zoom session, piloting it with 6 subjects to hone the procedure. We now have it running with 5 undergraduate RAs who have undergone an extensive 3-week training on the study procedures and checks for intervention fidelity under my supervision. We are on target to have data from 120 subjects collected by mid-Spring 2021, which will provide ample data for lab writing projects.

(2) Community-Based Work and Diversity Considerations

Against this backdrop of using lab-based methods to elucidate mechanisms underlying emotional symptoms, I have consistently weaved in an examination into how these processes differ as a function of diversity of the sample. My previous work in this area has included investigating prevalence and diagnostic differences in various race-ethnic groups¹¹⁻¹², examining potential factors affecting symptom report, such as discrimination¹³, highlighting inherent cultural exclusions due to wording of diagnostic criteria¹⁴, exploring factor structure of diagnoses¹⁵ and presenting differences in symptom presentation of fear-based pathology based on race/ethnicity (e.g.¹⁶⁻¹⁷) and gender¹⁸⁻¹⁹. From a clinical standpoint, I have also engaged in scholarship around ways to increase our treatment alliance in cross-cultural therapy situations in an empirically-informed fashion²⁰. In addition, I have engaged

actively with underserved, inner city, and racial minority youth populations to understand how to more efficiently detect mental health symptoms following trauma exposure in such diverse settings²¹⁻²². I was awarded the Emerging Researcher Award by the APA Society for the Psychological Study of Culture, Ethnicity and Race in 2015 in recognition of this work.

My goal of greatly expanding this work to bring evidence-based approaches to diverse community settings in Utah is already so wonderfully coming to fruition. In Fall of 2019, I applied for and received a pilot grant funded through the Utah Center for Clinical and Translational Science (CCTS) and the NIH National Center for Advancing Translational Sciences (NCATS) to conduct a one-year mixed methods data collection protocol in close collaboration and partnership with the Community Faces of Utah (CFU), a great organization here in Salt Lake City which brings together 5 diverse communities: Best of Africa, Calvary Baptist Church (primarily African Americans), Hispanic Health Care Task Force, National Tongan American Society, and Urban Indian Center of Salt Lake.

After a two-month delay from the original start-date due to COVID-19, we were able to begin the study officially in May 2020, and have already successfully completed Phase 1 data collection over the summer (conducting 6 community focus groups) to assess definitions, priority areas, barriers, and potential treatment options for mental health. We are currently systematically analyzing this rich qualitative dataset to better understand consistent themes and determine additional information we need to roll out Phase 2 quantitative data collection this semester. Data from both phases will inform a treatment framework for culturally-adapted, evidence-based treatment to be tested in an extramural grant (to be submitted in Spring 2021). I have been very lucky to have significant cross-disciplinary collaboration on this project with the study co-PI Dr. Ana Sanchez-Birkhead (Associate Professor in the College of Nursing), and also within our department with Dr. Sheila Crowell and Dr. Jon Butner.

(3) Integration of Technology to Widen Reach to Global Settings

As I have become increasingly steeped in examining mechanisms maintaining fear in community and demographically diverse samples, I have gained an appreciation for how incorporation of technological advances can facilitate this work, particularly in global settings. Aside from my previous work in incorporating technology in a variety of local communities²²⁻²⁴, I have been able to explore various technology innovations (virtual safe spaces, smart applications, interactive online trainings) in global settings, although this line of work is certainly at more preliminary stages. However, one project that has taken off despite the COVID-19 pandemic is my global training work with stakeholders in the Caribbean providing services for trauma survivors in the region. Specifically, I have an ongoing collaboration with a fantastic regional women's health rights advocacy organization, the HERStoire Collective, which has allowed me to conduct several in-person trauma education and provider self-care workshops with some 100 stakeholders in Saint Lucia over the past 2 years.

This most recent workshop held in February 2020 was funded by an award I applied for and received from the Equality and Justice Alliance, a U.K.-based human rights group which supports public health initiatives that focus on addressing health disparities for women and the LGBTIQI community. Importantly, for this workshop we incorporated a remote component that allowed my team to expand the reach to telecast the training to (and collect data from) providers in Grenada, St. Vincent, Barbados, Antigua and Jamaica. Currently, the lab is collecting remote follow-up data on implementation of evidence-based skills taught to these workshop attendees (N=52), and we have added assessments on impacts to service provision in the region given the stress of the current COVID-19 public health crisis, with 3-month data already collected and 6-month follow-up data collection nearing completion. In addition, we have already published two papers during my time here on this work²⁵⁻²⁶, and have several accepted posters/presentations on this research at national conferences by my lab. In addition, one of my students' posters received a first-place distinction honor at the APA annual meeting, and I just received the Outstanding Early Career Psychologist Award through APA Division 52 (International Psychology) in August 2020, underscoring the importance of this work.

Selected Cited Publications (full bibliography in CV)

* Indicates Primary Mentor/Corresponding Authorship on publication

** Indicates Co-First Authorship on publication

1. Hofmann, S. G., Heering, S., Sawyer, A. T., & **Asnaani, A.** (2009). How to handle anxiety: The effects of reappraisal, acceptance, and suppression strategies on anxious arousal. *Behaviour Research and Therapy*, *47*(5), 389-394.
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2. **Asnaani, A.**, Sawyer, A. T., Aderka, I. M., & Hofmann, S. G. (2013). Effect of suppression, reappraisal, and acceptance of emotional pictures on acoustic eye-blink startle magnitude. *Journal of Experimental Psychopathology*, *4*(2), 182-193.
doi:10.5127/jep.028112
3. Bullis, J.R., Boe, H.J., **Asnaani, A.***, & Hofmann, S.G. (2014). The benefits of being mindful: Trait mindfulness predicts less stress reactivity to suppression. *Journal of Behavior Therapy & Experimental Psychiatry*, *45*, 57-66.
doi:http://proxy.library.upenn.edu:2097/10.1016/j.jbtep.2013.07.006
4. Kaczurkin, A.N., **Asnaani, A.***, Zhong, J., & Foa, E.B. (2016). The moderating effect of state anger on treatment outcome in female adolescents with PTSD. *Journal of Traumatic Stress*, *29*(4), 325-31.
5. **Asnaani, A.**, Tyler, J., McCann, J., Brown, L., Zang, Y. (2020). Anxiety sensitivity and emotion regulation as mechanisms of successful CBT outcome for anxiety-related disorders in a naturalistic treatment setting. *Journal of Affective Disorders*, *267*, 86–95.
6. **Asnaani, A.**, Alpert, E., McLean, C. P., & Foa, E. B. (2015). Resilient but addicted: The impact of resilience on the relationship between smoking withdrawal and PTSD. *Journal of Psychiatric Research*, *65*, 146-153. doi:10.1016/j.jpsychires.2015.03.021
7. **Asnaani, A.**, Farris, S., Carpenter, J., Zandberg, L., & Foa, E.B. (2015). The relationship between anxiety sensitivity and posttraumatic stress disorder: What is the impact of nicotine withdrawal? *Cognitive Therapy and Research*, *39*, 697-708.
8. **Asnaani, A.**, Kaczurkin, A., Tannahill, H., Fitzgerald, H. (2016). Moderators of change in social anxiety during CBT in a transdiagnostic, naturalistic treatment-seeking sample. *Journal of Experimental Psychopathology*, *7*, 655-670.
9. Tyler, J., Mu, W., McCann, J., Belli, G., & **Asnaani, A.***(in press). The unique contribution of perfectionistic cognitions in predicting anxiety disorder symptoms in a treatment-seeking sample. *Cognitive Behaviour Therapy*.
10. Kaczurkin, A.N., Brown, L., Simon, S., & **Asnaani, A.*** (revised and resubmitted). The relationship between cultural self-construal and social anxiety symptom severity in a clinical sample of treatment-seeking patients. *Transcultural Psychiatry*.
11. **Asnaani, A.**, Gutner, C.A., Hinton, D.E., & Hofmann, S.G. (2009). Panic Disorder, panic attacks, and panic attack symptoms across race-ethnic groups: Results of the Collaborative Psychiatric Epidemiology Studies. *CNS Neuroscience & Therapeutics*, *15*(3), 249-254.
doi:http://proxy.library.upenn.edu:2097/10.1111/j.1755-5949.2009.00092.x
12. **Asnaani, A.**, Richey, J. A., Dimaite, R., Hinton, D. E., & Hofmann, S. G. (2010). A cross-ethnic comparison of lifetime prevalence rates of anxiety disorders. *Journal Of Nervous And Mental Disease*, *198*(8), 551-555. doi:10.1097/NMD.0b013e3181ea169f
13. Chou, T., **Asnaani, A.***, & Hofmann, S.G. (2012). Perception of racial discrimination and psychopathology across three U.S. ethnic minority groups. *Cultural Diversity and Ethnic Minority Psychology*, *18*, 74-81.
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14. Hofmann, S. G., **Asnaani, A.**, & Hinton, D. E. (2010). Cultural aspects in social anxiety and social anxiety disorder. *Depression and Anxiety, 27*(12), 1117-1127.
doi:10.1002/da.20759
15. **Asnaani, A.**, Aderka, I.M., Marques, L., Simon, N., Robinaugh, D.J., & Hofmann, S.G. (2015). The structure of feared social situations among race-ethnic minorities and Whites with social anxiety disorder in the United States. *Transcultural Psychiatry, 52*, 791-807.
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16. Kaczurkin, A.N., **Asnaani, A.***, Hall-Clark, B., Peterson, A.L., Yarvis, J.S., Foa, E.B., & the STRONG STAR Consortium. (2016). Ethnic and racial differences in clinically relevant symptoms in active duty military personnel with Posttraumatic Stress Disorder. *Journal of Anxiety Disorders, 43*, 90-98.
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21. Foa, E. B., **Asnaani, A.****, Zang, Y., Capaldi, S., & Yeh, R. (2018). Psychometrics of the child PTSD symptom scale for DSM-5 for trauma-exposed children and adolescents. *Journal of Clinical Child and Adolescent Psychology, 47*(1), 38-46.
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23. **Asnaani, A.**, Zandberg, L.J., Petersen, J. (2016). Barriers to CBT training: Is mobile technology the solution? *The Clinical Psychologist, 69*(4), 6-13.
24. **Asnaani, A.**, Benhamou, K., Kaczurkin, A.N., Turk-Karan, E., & Foa, E.B. (2020). Beyond the constraints of an RCT: Naturalistic treatment outcomes for anxiety-related disorders. *Behavior Therapy, 51*, 434-446.
25. **Asnaani, A.**, Charlery White, S.R., Majeed, I., & Phillip, T.-M. (2020). Trauma education and stigma reduction in global settings: An evaluation of the impact of a one-day trauma psychoeducation workshop with community stakeholders in the Caribbean nation of Saint Lucia. *International Journal of Environmental Research and Public Health, 17*, 2255.
26. **Asnaani, A.**, Charlery White, S.R., & Phillip, T.-M. (in press). Mobilizing mental health training efforts to align with advocacy for disenfranchised groups in global contexts: Trauma-related training in the Caribbean as an example. *The Behavior Therapist.*