

CBT TREATMENT IN AN ADOLESCENT REFUGEE

EFFECTIVENESS OF COGNITIVE-BEHAVIORAL THERAPY FOR ANXIETY AND  
DEPRESSION IN AN ADOLESCENT REFUGEE: A CASE STUDY

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EFFECTIVENESS OF COGNITIVE BEHAVIORAL THERAPY FOR ANXIETY AND  
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### **Abstract**

Refugee mental health has been very under-researched in terms of the impact and implications their experiences have for treatment (Kim & Keovisai, 2016; Trieu & Vang, 2015). Burmese refugees, specifically, are even less present in refugee mental health research despite being one of the largest groups to relocate in the past 20 years, and the largest to relocate to the United States in the past 10 years (Kim, 2018; Kumar, 2020; Ngo-Metzer et al., 2010). Adolescent mental health has also been relatively under-researched despite this being a common age of onset, the chronicity of disorders, and psychosocial impact of mental health disorders when left untreated (Baker et al., 2021; Kendall et al., 1989; Kendall & Peterman, 2015; Strauss et al., 1987). The overall lack of research of refugee and adolescent mental health is reflected in treatment outcome studies. To date, there is no treatment outcome study for adolescent Burmese refugees in a Western country. The effectiveness of cognitive-behavioral treatment for generalized anxiety disorder and major depressive disorder in an adolescent refugee was examined. The patient, an adolescent Burmese refugee, was selected from an integrated primary care clinic in a Midwestern city. The patient received cognitive-behavioral therapy (CBT) for a diagnosis of generalized anxiety and major depressive disorder. Effectiveness of treatment was measured by comparing pre- and post-treatment scores on the Patient Health Questionnaire-9 and Generalized Anxiety Disorder Scale-7. The data was analyzed for statistical and clinical significance using the reliable change index (RCI). The calculated RCI did not suggest a significant change in the patient's pre- and post-treatment scores. Treatment suggestions based on Chomden's treatment outcome and future research directions are presented.

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## **Introduction**

Single-subject case studies have played a key role in the development of theory of personality and behavior within clinical psychology (Widdowson, 2011). However, it was not until recently that they started to gain respect as a valuable research contribution, often being undervalued and overlooked as a true methodology (Perdices & Tate, 2009; Smith, 2012). Case studies were acknowledged for their heuristic value, but not for the ability to draw scientific inferences (Kazdin, 1981). This perception can be traced back to the lack of methodological rigor that impacted findings and ability to form valuable inferences. However, if methodological rigor is ensured, case studies may act as valuable contributions to research. The four criteria that are often used as a measure of rigor are reliability, construct validity, internal validity, and external validity (Crow, 2011; Gibbert et al., 2008; Kazdin, 1981; Schell, 1992; Tsang, 2013). Threats to validity and reliability within a case study will be discussed, and solutions posed by the literature to resolve these issues will be put forth.

### **Reliability**

Reliability refers to the replicability and consistency of a measure or study. A study is said to have high reliability if future clinicians perform the same study and obtain similar results repeatedly (Kirk & Miller 1986). When engaging in single-case study designs, researchers should create a case study protocol and database. A case study protocol is a report specifying exactly how the case study was conducted. A case study database includes notes, documents, and narratives collected during the case study (Gibbert et al., 2008). By utilizing these tools, it increases the accuracy in which future researchers can replicate the case study.

### **Construct Validity**

Construct validity refers to the quality of the conceptualization, or the operationalization, of the relevant concept (Gibbert et al., 2008). In the instance of research, construct validity refers to the study investigating what it claims to investigate and that the methods lead to an accurate portrayal of reality (Denzin & Lincoln, 1994). The use of subjective measures may drastically impact construct validity. In order to ensure construct validity, it is recommended that the researchers triangulate data, meaning they use different sources or types of data (Gibbert et al., 2008; Schell, 1992; Turner et al., 2017). For example, it is recommended to use multiple methods such as interviews, performance tasks, and rating scales, as well as multiple reporters, for example, client self-report, collateral reports of the client, or observer reports.

### **Internal Validity**

Internal validity is the ability to determine a clear, causal relationship between two variables while ruling out random error and influence from external variables (Patino & Ferreira, 2018). It is more difficult to establish internal validity within case studies because the researcher is less able to determine if the change is due to treatment or another variable, as they typically do not control for external variables as tightly as group-designs. Without being able to rule out threats to internal validity, a case study cannot be considered to produce scientific inferences. Kazdin (1981; 2019) provides recommendations to rule out threats to internal validity within non-experimental designs. First, the researcher should utilize consistent, objective assessment outcomes (e.g., the same self- or collateral-report measures, carefully documented behavioral observations), as opposed to relying on anecdotal information alone. It is near impossible to draw scientific inferences from anecdotal evidence, as it is often based on impressions, clinical judgement, or assessments with poor validity that increase the likelihood of operating from cognitive heuristics or biases (Kazdin, 2019). In fact, Kazdin (1981, p. 185) noted the

overreliance of anecdotal evidence as being “the problem” associated with case studies, rather than the use of a single subject. Second, outcome assessment should be continuous. Collecting only pre- and post-treatment data makes it more difficult to confidently say change was due to treatment and not an external variable. By collecting data continuously (e.g., daily or a few times per week), extrapolations for future behavior can be made and compared to the effects of treatment, and the data can be used to rule out alternative hypotheses. Lastly, the more immediate the therapeutic change as measured by symptom improvement, the higher the likelihood that it is due to treatment (Kazdin, 1981).

### **External Validity**

External validity, or generalizability, is the ability for theories to apply not only to the situation being studied, but also to the population at large (Tsang, 2013). Low levels of external validity have been noted as the most profound issue for case studies (Yin, 1999). The critique of low generalizability derived from case studies stems from the small-N problem (Gerring, 2007; Tsang, 2013). However, the small-N problem does not monopolize deficits in generalizability, as these deficits may be observed within group designs as well. For example, the improvement of each individual subject is not provided. Instead, the aggregate effect of the group is given and thus researchers must generalize from it (Perdices & Tate, 2009). Yin (1999) provides a conceptual solution to the issue of generalizability. He states that if one views a case study as a single unit, then it can be considered equivalent to an experiment, as a unit. Researchers may improve external validity by having multiple subjects, ideally three to four (Borckardt et al., 2002; Kazdin, 1981). In the case where multiple subjects cannot be used, the researcher can improve external validity by providing a clear rationale for the case study selection and details



on the case study context so the reader can fully understand the sampling choice (Gibbert et al., 2008).

The lack of methodological rigor is not inherent to case studies, but rather a side effect of the lack of research protocol development. When methodological rigor is ensured, single subject case studies can yield valuable scientific inferences (Schell, 1992). These contributions are specifically relevant for psychotherapy outcome research.

### **Value of Case Study to Evaluate Psychotherapy Effectiveness**

Case studies are a valuable tool when evaluating the effectiveness of psychotherapy and change over time. Psychotherapy effectiveness case studies, specifically, are the most represented in literature (Moeyaert, 2018; Morgan & Morgan, 2001; Shadish, 2014).

Psychotherapy effectiveness refers to questions regarding if the intervention is working when administered to a specific client under real world conditions (Singal et al., 2014). Case studies are better equipped to handle questions of effectiveness opposed to efficacy, the performance of an intervention under controlled conditions, which is better measured by group designs like RCTs (Borckardt et al., 2002; Singal et al., 2014). By looking at questions of effectiveness, case studies are able to say for who and how psychotherapy works (Borckardt et al., 2008). They yield valuable information relevant to psychotherapy outcomes because they retain real-life contextual factors, have flexibility, and provide specific benefits relevant to research. Each of these areas is described below.

#### ***Complex Contexts***

Case studies are well equipped to answer complex, psychotherapy outcome questions within their real-life context (Flyvbjerg, 2006; Gibbert et al., 2008; Schell, 1992; Yin, 1999). In contrast, group design studies often strip various contextual factors like comorbidities, diversity,

and treatment as usual delivery in order to increase internal validity (Tsang, 2013; Widdowson, 2011). While this is needed to determine correlations and causality, it rids the participant and the study of real-life contextual factors. In comparison, case studies retain these uncontrollable differences. Case studies are able to address broad, complex questions within their context, opposed to removing and isolating these questions in a controlled laboratory setting (Yin, 1999). For example, several mental health surveys found that 45-60% of patients with a diagnosable mental illness also met criteria for one or more additional mental illnesses (Bourdon et al., 1992; Kessler et al., 1997; Kessler et al., 2005). Upwards of half the patients surveyed had a comorbid mental illness yet many group design treatment efficacy studies state comorbid mental illnesses in their exclusion criteria (Halvorson & Humphreys, 2015). While this is needed to determine efficacy for treating a specific disorder with a specific intervention, it may make the results of less interest to clinicians in the community where comorbidities are common. In contrast, case studies are able to recognize and include comorbidities because they focus on the individual at hand. By not controlling for as many external variables, the treatment more accurately represents what treatment as usual looks like for clinicians in the community. This is especially beneficial for those clinicians as the case study would accurately reflect their experience, possibly making the findings more relevant and of greater interest to them (Perdices & Tate, 2009). By retaining these variables, case studies remain flexible while recognizing and embracing the uniqueness of each individual (Borckardt et al., 2002).

### ***Flexible Implementation***

Case studies have a level of flexibility that make them well equipped to evaluate treatment effectiveness (Tate et al., 2008). In a group design, the treatment is often rigidly manualized and there is little to no room for change throughout the course of treatment.

Additionally, statistical analyses of the outcomes are not performed until the end of the study. While case studies may adhere to a principle-based or detailed manual, the continuous assessment of treatment effectiveness in a single-case design provides the clinician with the ability to adapt and make changes to the treatment as needed if it is not yielding the desired change (Anderson & Kim, 2003; Tate et al., 2008). This makes case studies exceptionally well at coping with uncertainty that inevitably presents during treatment in a community setting (Crow, 2011).

### ***Research Benefits***

RCTs are the cornerstone of psychotherapy outcome research, and should be, however they should not overshadow the valuable contributions that well-designed single-subject research can bring to the field. RCTs provide powerful statistical procedures that allow researchers to confidently find aggregate effects. Single-subject designs should not replace RCTs in this regard, but rather advance the field beside them in the place of research they hold – evaluating effectiveness of treatments for an independent client.

By engaging in and promoting the use of well-performed case studies, clinicians can enhance the research of treatment effectiveness. They are a critical link in the chain of research, as they are the first step in testing a hypothesis (Crow, 2011). Once the hypothesis has been further explored with group-design studies, a case study uses these results to clarify findings and provide further guidance for other researchers (Borckardt et al., 2008). The applicability of case studies promotes clinicians in the community to function as scientist-practitioners, contributing to the body of research and further enriching the building knowledge of behavioral and psychological sciences (Anderson & Kim, 2003).

### **Case Study Methods**

There are various ways to measure and analyze client change within a case study. Three methods of measuring change within single-subject designs are time-series analysis, percentage of non-overlapping data, and reliable change index. While each of these methods provides both benefits and limitations, there has yet to be an agreement in the field of which is best to statistically summarize treatment effects (Beretvas & Chung, 2008). These methods, how they are conducted, and the pros and cons of each will be discussed.

### *Time-Series Analysis*

Time-series designs are often used in group designs (e.g., randomized controlled trial) and are now commonly used in single-subject case studies (Smith et al., 2013). Time-series designs measure a variable equally over time (Crabtree et al., 1989). By continuously tracking client outcomes throughout the duration of treatment and comparing this to a baseline, practitioners can yield valuable information about responses to psychotherapeutic interventions (Nash et al., 2011).

Single-case time-series designs answer two types of psychotherapy questions – questions of improvement and of process of change (Borckardt et al., 2008). Questions of improvement are generally interested in if there is meaningful change from the pre- to post-treatment phase, and if so, is the change statistically significant? For example, Mariotti et al. 2021 conducted a case study exploring the effectiveness of the Unified Protocol for Children (UP-C) in preadolescents with subthreshold emotional problems. In their case study they were able to monitor anxiety and depression and provide evidence that the UP-C was effective in treating subthreshold emotional disorders. In addition, patterns of response to an intervention can be detected (i.e., delayed, temporary, gradual, and cyclic effects; Crabtree et al., 1989). Questions of process of change are interested in how change occurs and can be either univariate or multivariate. Univariate process

change requires the tracking of a single variable (i.e., symptom). This question may be, when does the client start improving? Multivariate process questions of change simultaneously track two or more variables. These questions are capable of addressing mechanism of change or sequencing, the order in which improvement occurs. A case-study by Crane et al. (2003) used multivariate questioning to explore the symptom severity and bi-directional relationship between irritable bowel syndrome (IBS) and bipolar disorder. Their study was able to identify an unusual occurrence where an increase in self-reported depression was associated with less severe IBS symptoms.

One protocol for a single-case time-series was developed by the University of Tennessee Psychology Clinic's Practice-Research Integrative Project (Nash, 2005), and adopted by Borckardt et al. (2008). To begin, the clinician must first choose a research question and determine which symptom(s) will be tracked. These symptoms can be cognitive (e.g., concentration difficulties), emotional (e.g., depression), or behavioral (e.g., medication adherence). The client is then instructed to rate the chosen symptom on a Likert scale every day, during the baseline and treatment phase. Self-report questionnaires may also be utilized as a measure of symptom severity and change. The baseline phase should yield between seven and 14 data points and the treatment phase must yield a minimum of 35 data points. During analyses, clinical researches must account for autocorrelation inherent in repeated measures. Due to the strict requirements of minimal data collection, time-series does not provide much flexibility in this aspect.

In order to accurately gauge the change in outcome variables, observations must be evenly spaced (Borckardt et al., 2008). The intervals between measures must be the same throughout the entire study, either daily, weekly, etc. This is done to prevent statistical artefacts,

when the bias in the collection of data interferes with the results (Scott & Marshall, 2005). Collecting equally spaced data on a single-subject allows for valuable data to be collected without the cost associated with other group-designs (Crabtree et al., 1989).

Time-series analysis is an empirically grounded method to determine the effectiveness of an intervention. It allows the researcher to ask questions beyond simple intervention effectiveness and ask those of process change. While it proposes many scientific benefits, these are compounded with practical difficulties. When using time-series analysis it is necessary to collect data evenly throughout the treatment, and every day during the baseline phase. If a single day of rating is incomplete, time-series analysis can no longer be used.

### ***Percentage of Non-Overlapping Data***

Percentage of non-overlapping data (PND) is a method developed by Scruggs & Mastropieri (1987) used frequently in single-subject behavior research to measure meaningful change (Beretvas & Chung, 2008; Kazdin, 2006). PND provides a non-parametric (i.e., does not assume the data is normally distributed) descriptor of the data by analyzing the percentage of data in the treatment phase that falls below the lowest point in the baseline phase (if the intended direction of change is negative; Beretvas & Chung, 2008; Parker et al., 2011).

To calculate the PND, the clinician needs to identify the intended change and choose an appropriate method of collecting data to measure said change. Similar to time-series analysis, the variable of interest may be cognitive, emotional, or behavioral. The clinician may also opt to use specific brief outcome measures, like the Patient Health Questionnaire – 9. Once the data has been collected, the lowest data point within the baseline phase is identified if the intended direction of change is negative. A line is drawn from this point through the treatment phase and all data points below this line are counted. The PND is then calculated by dividing the number of

data points below the lowest point in the baseline phase by the total number of data points in the treatment phase (Beretvas & Chung, 2008). PND scores of 90% are regarded as very effective, 70 to 90% are regarded as effective, scores of 50 to 70 are questionable, and scores below 50% are regarded as ineffective. The PND visually displays this meaningful data about the treatment effectiveness (Scruggs & Mastriopieri, 1998).

The calculation's simplicity does not take away from the applicability and meaningfulness of measuring the effectiveness of treatment outcomes. Overlap between baseline and treatment phases have been noted as an essential measure in evaluating outcomes (Scruggs & Mastriopieri, 1998). When there is low overlap between the baseline and treatment phase, the effect is considered reliable (Kazdin, 1978). PND measures have been found to correlate with expert ratings of treatment effectiveness when the reliability of their ratings was also high (Mastriopieri & Scruggs, 1985-1986).

Using PND to calculate treatment effectiveness replicates benefits similar to time-series design. It requires the same level of planning prior to meeting the client but allows for slightly more flexibility. Compared to the time-series design, PND data points do not need to be collected daily, or in equal intervals, though a baseline does need to be established. This alleviates many of the practical constraints placed on the clinician. PND displays data in a way that allows researchers to readily interpret it (Olive & Franco, 2008). The ease of interpretation may allow for more clinicians in the community to act as researchers. Additionally, it is capable of handling small data sets, which is necessary when using single-subject case studies. However, PND is limited in the types of questions that can be answered, as it is only capable of analyzing treatment effectiveness. The analysis can also be heavily influenced by extreme data collection in

the baseline phase which can lead to type 2 errors, which is a potential issue with the approach (Lenz, 2013).

### ***Reliable Change Index***

Statistical comparison between mean changes is often utilized to measure treatment effects. Jacobson & Truax (1991) note two limitations with this method. First, information on the variability of response to treatment is lost. Second, the presence of treatment effects in the statistical sense has little to do with clinical significance of the effects. The simple presence of statistically significant change does not indicate if that change was clinically meaningful to the patient. The example of a weight loss study for obese patients is put forth. A net weight loss of 2 lbs may be statistically significant compared to a control group that lost no weight, however losing two lbs may not put the patient outside the obesity range. In this example, the post-treatment change does not present as meaningful for the patient, which statistical treatment effect does not capture. In contrast, clinical significance by definition captures this type of meaningful change. Clinically significant change occurs when the change is statistically significant (i.e., at least as likely the change did not occur by random error or chance) and the change moves the individual closer to the typical or normal population (Kendall et al., 1999). One method that captures both statistical and clinically significant change is the Reliable Change Index (RCI).

The first step in calculating the RCI is determining if the change that occurred between pre- and posttest scores is statistically significant (Lambert et al., 2008). The formula used to calculate statistical significance is  $RCI = x_2 - x_1 / S_{diff}$ , where  $x_2$  is the individual's posttest score,  $x_1$  is the individual's pre-test score, and  $S_{diff}$  is the standard error of difference between the two scores. To calculate the standard error of difference, the following formula is used  $S_{diff} = \sqrt{2S^2_E}$ . The standard error of difference is the spread of scores that would be expected if no change



occurred (Jacobson & Truax, 1991). Knowledge of the test-retest reliability of the measure being used and standard deviation of the test scores is necessary to calculate the standard error of difference (Unicomb et al., 2016). An RCI of  $\pm 1.96$  is indicative of statistically significant change at the 0.05 significance level, with the valence indicating the direction of change (Jacobson & Truax, 1991). The presence of a positive or negative RCI depends on the measure being used and the targeted change. For example, if the BDI-II was used as the measure, then a negative RCI would be expected, as a significant change would result in a lower posttest score compared to the pre-test score.

The final step is to determine if clinically significant change has occurred. To measure clinically significant change, a cutoff point needs to be set (Jacobson & Truax, 1991). The cutoff point refers to the point the client must cross at the post-treatment assessment to be classified as changed to a clinically significant degree. The cut-off point is determined by obtaining normative data for the disordered and normal populations (Unicomb et al., 2016). If the posttest score moves out of the range of the disordered population and into that of the normal population, then clinical change occurred.

There are several strengths associated with using RCI to measure treatment outcomes in terms of clinically significant improvement. The use of clinical significance to measure treatment outcomes operationalizes recovery in a relatively objective and unbiased way (Jacobson & Truax, 1991). The definition of recovery is not tied to any one diagnosis and can be used for a variety of different disorders. The wide applicability of the approach gives it the potential to grow within psychotherapy research which could yield comparisons between studies and additional information on variability in treatment outcomes (Jacobson & Truax, 1991). This method may also encourage more clinicians to engage in psychotherapy research due to the

emphasis it places on clinically significant change, which is of the utmost importance to working clinicians. Lastly, it is especially useful in small sample studies like a single-case study, as it allows an individual to be tracked across conditions and time (Zahra & Hedge, 2010).

Despite its strengths there are limitations to this method which are worth noting. First, it assumes that functional and dysfunctional distributions are normal, which may not always be the case. Second, the assumption that recovery indicates the return into normal functioning may not be accurate depending on the diagnosis. For example, recovery for autism or schizophrenia will look quite different compared to depression or anxiety due to the nature of the disorders (Jacobson & Truax, 1991). Third, because it compares only pre- and post-treatment data, it limits the types of questions that can be asked. This approach would not be able to accommodate process of change questions, only questions regarding if the therapy did or did not work. Lastly, without the use of a psychometrically reliable psychotherapy outcome measures you cannot perform the calculation.

### **Patient Descriptive Material**

The patient, who from this point forward will be referred to by the pseudonym Chomden, was a 17-year-old Chin female who was referred for therapy by her primary care physician after complaints of anxiety and depression. At her PCP appointment, her GAD-7 score was 8 out of 21 (mild) and PHQ-9 score was 13 out of 27 (moderate). After receiving the referral, the clinician met with Chomden and her father.

Chomden was born in Burma (Myanmar) to her mother and father and was the second oldest daughter of four. She has one older sister (19 years old) and two younger sisters (12 and 8 years old). When she was four years old, her family left Burma and moved to Malaysia due to the civil unrest particularly aimed at ethnic minorities including Chin. Her family stayed in

Malaysia for several years until relocating again to the United States at age eleven. She described not being able to speak any English when she first moved and that she experienced a lot of bullying in middle school. Her family had lived in the greater Indianapolis area from ages 11 and older. At the time of intake, she was living at home with her mother, father, and two younger sisters. Her older sister had moved out to go to college previously that year.

At the time of the intake Chomden was a junior in high school. She was very active in her academics and extracurricular activities, like art club. She described having a small group of friends with whom she was close. However, upon further investigation she explained that while she considers them very close, she is quite reserved around them and does not share much emotional content.

Chomden's medical history was positive for well-controlled exercise induced asthma and dysmenorrhea. At the time of intake she was prescribed Zoloft 50mg, which she started one month prior. She denied previous significant medical procedures, surgeries, traumatic brain injury, or seizures. She denied a family history of mental health disorders. Her developmental history was largely unremarkable. She achieved developmental milestones at her expected ages and never had a regression in development.

Chomden was asked questions that aligned with DSM-5 criteria of generalized anxiety disorder. She endorsed feeling restless or on edge, being easily fatigued, and difficulty concentrating or mind going blank. She denied experiencing racing thoughts, irritability, muscle tension, and difficulty falling or staying asleep. Although denying experiencing racing anxious thoughts, throughout the intake she described experiencing what would be racing thoughts. Chomden stated that she had experienced several panic attacks before. During these panic attacks she endorsed experiencing shortness of breath, light headedness, nausea, crying, and increased

heart rate. She stated that she worries about a variety of things including talking in class, being around a lot of people, failing in school, and pressure from setting high academic standards. She reported that she first started noticing symptoms of anxiety approximately a year prior and that it significantly impacts her socially and academically. She was asked about previous attempts to cope with anxiety, explaining she has tried walking outside to clear her mind which had been mostly successful.

She endorsed several symptoms that align with DSM-5 criteria of major depressive disorder including depressed mood most days, loss of interest in pleasure or activities, low energy, loss of appetite and weight loss, hypersomnia, psychomotor retardation, and passive suicidal ideation. She reported that she first started experiencing symptoms of depression when she was 12 years old and that she experiences these symptoms “kind of often.” She provided further insight into how her depressive symptoms impact her. She reported not being able to eat much because she lacks appetite and it has caused her to lose weight. She stated that when she does eat, she cannot eat much, and she often feels nauseas after. Additionally, she sleeps up to 12 hours a day including at night and daytime naps. She discussed feeling very frustrated by these two symptoms and the way they impact her. When asked about her goals for therapy she explained that she would like to nap less, eat more, talk more to people during class, and talk more to people in general.

### **Review of Psychological Literature**

Anxiety and depression are the most common mental health problems in children and adolescents today (Farrell and Barrett, 2007). These two mental health problems have been demonstrated to be associated with attention and concentration deficits, academic difficulties, poor peer relations and low self-esteem (Kendall et al., 1989; Strauss et al., 1987). Many

disorders emerge during teen years, indicating that this age group deserves special attention in treatment and outcome studies (Kendall & Peterman, 2015). This section will review the current literature on effective treatments for generalized anxiety disorder and major depressive disorder in adolescents. It will also address the current literature and findings on the impact and implications for treatment for refugees.

### **Generalized Anxiety Disorder**

Anxiety disorders are the most common psychiatric disorders in children and adolescents, with prevalence rates ranging from 6-20% (Baker et al., 2021; Costello et al., 2004; Creswell et al., 2020; Salkosky & Birmaher, 2008). Generalized anxiety disorder (GAD), specifically, is the most common disorder in adolescents (Imran et al., 2017). Adolescence is an essential time for intervention due to the negative impact anxiety disorders can have on psychosocial functioning including social interactions and school achievement (Van Ameringen et al., 2003). If left untreated, anxiety disorders tend to take a chronic course, persisting into adulthood (Hill et al., 2016). Despite the high prevalence rate and critical period of intervention, many studies do not address GAD specifically, but rather anxiety disorders in general or primary separation anxiety disorder (Creswell et al., 2020). The current review of treatment will reflect this issue and provide support based on treatment for anxiety disorders. The effectiveness of cognitive behavioral therapy and mindfulness-based therapies for the treatment of GAD in adolescents will be presented.

### ***Cognitive Behavioral Therapy***

Cognitive behavioral therapy (CBT) is a gold standard treatment for anxiety disorders, including GAD (David & Cristea, 2018). This extends to the treatment of adolescents with GAD. It is a well-established, treatment of choice for GAD in adolescents (Compton et al., 2004; Higa-

McMillan et al., 2016) given it is the most studied and has the most empirical support (Baker et al., 2021; Creswell et al., 2020; Salkosky & Birmaher, 2008). CBT for anxiety disorders, including GAD, has several key components: psychoeducation, relaxation training, cognitive restructuring, practicing problem-solving skills, and exposure to feared stimuli (Kendall & Peterman, 2015; Salkosky & Birmaher, 2008; Velting et al., 2004). It has demonstrated to be efficacious and effective in producing short- and long-term improvement in anxiety symptoms.

CBT produces effective short-term outcomes treating adolescent anxiety. It has been found to be superior to waitlist or non-treatment control conditions. In one study evaluating the effectiveness of CBT in anxiety disorders, both individual and group formats were superior to the waitlist control condition (Villabo et al., 2018). A separate study found large treatment effects in adolescents with anxiety disorders, however they noted heterogeneity in their findings (James et al., 2020).

Meta-analyses and reviews on the status of CBT provide excellent support for short-term outcomes. A 2008 meta-analysis reviewed over 20 RCTs evaluating the effectiveness of CBT for pediatric anxiety disorders and found substantial evidence for acute treatment (Salkosky & Birmaher, 2008). A 2015 review of 16 RCTs provided support for the efficacy and effectiveness of CBT for anxiety disorders in adolescents (Kendall & Peterman). In efficacy studies, clinical improvement rates were between 60-80%. For a more conservative rate of improvement, remission rates were between 50-70%. Brief CBT, specifically, yielded medium to large effect sizes posttreatment. Effectiveness studies were less impressive – while significant improvements in symptoms were found, the effect sizes were lower than efficacy trials. In sum, they concluded that approximately two-thirds of children and adolescents receiving CBT showed clinical improvement, in both laboratory and community settings. It is important to note that of studies

including mixed children and adolescent age groups, there were no significant differences in the outcomes between age groups.

CBT yields effects that persist long-term. In a study looking at the long-term effects of CBT in 139 youths (ages 11-21), they found significant reductions in all anxiety symptom measures and loss of primary anxiety diagnosis in 63% at a long-term follow-up of an average of 3.9 years posttreatment (Kodal et al., 2018). A meta-analysis of over 20 RCTs found long-term efficacy for CBT in treating anxiety (Salkosky & Birmaher, 2008). In the same 2015 review mentioned previously, they found that the medium to large effect sizes persist into the 6-month follow-up after brief CBT (Kendall & Peterman, 2015).

### ***Mindfulness-Based Therapy***

Mindfulness has become increasingly popular in treating mental health problems (Odgers et al., 2020). Mindfulness, a practice originating from the Buddhist religion, is the intentional acceptance and non-judgmental noticing of an individual's emotions, thoughts, and sensation in the present moment (Zgierska et al., 2009). Mindfulness-based therapies (MBTs) are widely used to treat anxiety (Virgili, 2015). MBTs have been demonstrated to be effective in treating anxiety in adolescent populations (Cheung et al., 2021). The limited data available demonstrates good to mixed results in using MBTs to treat adolescent anxiety (Wehry et al., 2015).

MBTs demonstrate efficacy and effectiveness in treating adolescent anxiety. Mindfulness-based stress reduction (MBSR) was found to be superior to control conditions in a 2020 meta-analysis of 14 RCTs evaluating the efficacy of mindfulness-based stress reduction (MBSR) in adolescents (Zhou et al., 2020). There was a significant reduction in anxiety symptoms compared to control conditions. However, the authors noted the significance may be affected by treatment duration with short-term interventions of 8-weeks or less showing less

significant outcomes. A separate quasi-experimental study from 2016 compared MBSR to no-treatment control group and found significant reductions in generalized anxiety symptomology, anxiety sensitivity, and intolerance of uncertainty (Alimehdi et al.). While these results are promising, limitations to note about the study are the small sample size ( $n = 30$ ), and that it took place in Iran therefore the results may not generalize to treatment in Western countries. Lastly, a 2020 meta-analysis observed the efficacy of mindfulness-based interventions (MBIs) in 20 studies (Odgers et al., 2020). While they found a small effect size on posttreatment anxiety compared to controls, this was limited to children and was not observed in adolescents.

Despite the high occurrence of GAD in the adolescent population, they have typically been underrepresented in treatment outcomes studies (Baker et al., 2021). Moreover, additional support is needed for more diverse populations (Creswell, 2020). While CBT is not the sole treatment for adolescent anxiety, RCTs on other modalities are quite limited and this review reflects that lack of literature (Creswell, 2020). Based on the current data available, while studies regarding MBIs are promising, CBT maintains the most substantial support for treating GAD in adolescents.

### **Major Depressive Disorder**

Depressive disorders are a common mental health problem in adolescents, with prevalence rates ranging from 2-12% (Stikkelbroek et al., 2013; Walter et al., 2021). While it is less common than adolescent anxiety, it is nonetheless a significantly debilitating and interfering condition (Crowe & McKay, 2017). Depressive disorders that present in adolescence take a chronic course, where risk of recurrence in clinical samples have been reported as high as 50-70% in a five-year span (Dunn & Goodyer, 2006). The debilitating nature and chronicity of the disorder lead to poor psychosocial functioning that can persist into adulthood (Avenevoli et al.,



2008; Maughan et al., 2013). These characteristics emphasize the need of effective intervention for adolescent depression (Weersing et al., 2016). This section will review the current literature on effective interventions in treating adolescent depression, specifically CBT, interpersonal psychotherapy (IPT), and attachment-based family therapy (ABFT).

### *Cognitive Behavioral Therapy*

CBT is a treatment of choice and the most widely researched treatment for depression in adolescents (Compton et al., 2004; Spirito et al., 2011). The key components are similar to that of anxiety treatment and include psychoeducation, coping skills, social problem solving, participation in pleasant activities, behavioral activation, cognitive restructuring (Kazdin & Weisz, 1998). CBT is an efficacious and effective treatment of depression in adolescents capable of producing short- and long-term benefits.

The efficacy of CBT for adolescent depression is well-established as evidenced by several meta-analyses and treatment reviews. In a 2016 meta-analysis, 14 RCTs observing the effects of individual CBT in depressed adolescents demonstrated to be a well-established treatment (Weersing et al., 2016). Seven of the RCTs demonstrated statistically significant effects against the control conditions. The authors note that many of these studies included more stringent control conditions like alternate psychosocial treatments. They did, however, find that the other seven studies included found that CBT failed to demonstrate statistical significance compared to control conditions. These trials also compared CBT to more stringent control conditions. However, none of these studies found a negative effect of CBT which is worth noting.

In a 2015 systematic review of 52 studies observing treatments for depressed children and adolescents, CBT was determined to be superior to most control conditions and other

psychosocial interventions including play therapy, psychodynamic therapy, and problem-solving therapy (Zhou et al., 2015). CBT did not retain this significance at the long-term follow-up. The authors concluded that CBT should be considered one of the best available psychotherapies for depression in children and adolescents.

Lastly, a 2004 evidenced-based review of 21 RCTs evaluating the effects of CBT on both anxiety and depression in children and adolescents found that CBT showed medium to large effects for symptom reduction in comparison to wait-list, inactive controls, and active controls (Compton et al., 2004). The authors concluded that CBT was the current treatment of choice for child and adolescent anxiety and depression.

Brief CBT is effective when administered in a collaborative, primary care setting. Richardson et al. (2014) examined the effects of brief CBT in depressed adolescents compared to pharmacotherapy, combined brief CBT and pharmacotherapy, or usual care. 101 adolescents were randomly selected for either the collaborative care condition (e.g., brief CBT, pharmacotherapy, or combined treatment) or usual care. Those in the collaborative care condition self-selected which treatment they received. 38% of the total 101 adolescents received CBT alone. At the 12-month follow-up the collaborative care condition had clinically and significantly higher response rates to treatment as defined by a 50% reduction in symptoms.

CBT retains its effectiveness when administered under routine care conditions. A 2021 observational study examined the effectiveness of usual-care CBT in adolescents ages 11-18 years with a depressive disorder (Walter et al.). These participants were compared to a historical control group that received treatment as usual from a previous study (Weisz et al., 2009). Their results showed highly significant reductions in depressive symptoms, with effect sizes ranging

from small to large across measures. The authors concluded that CBT is effective for adolescents with depressive disorders when administered until routine care conditions.

There is evidence to suggest that CBT is a durable treatment for adolescent depression, maintaining treatment effects long-term. A 2018 meta-analysis observing the effects of 101 studies examining the posttreatment and long-term effects of CBT for adolescent depression, anxiety, and posttraumatic stress found that CBT had durable treatment effects (Rith-Najarian et al.). They found large effect sizes at posttreatment, 1-month, 3-month, 6-month, 1-year, and 2+ years follow-up. While the meta-analysis included other presenting problems like anxiety and posttraumatic stress, the effect sizes did not differ significantly by diagnoses. The authors did note, however, that effect sizes diminished across later follow-up assessments and effect sizes were smaller when reported by caregiver or youth respondents compared to evaluator reported. These results provide initial support that CBT has durable effects, but more research in this area is needed.

### ***Interpersonal Psychotherapy***

Interpersonal psychotherapy (IPT) is a manualized psychotherapy that was initially used to treat depression in adults (Duffy et al., 2019). Since its development, it has been expanded to other disorders and populations, including adolescents. IPT for adolescents (IPT-A) is used to treat acute depression in youths between the ages of 12 and 18 over a period of 12-16 sessions. The focus of IPT-A is on relationship issues and how they relate to ongoing depression and its symptoms (Weissman et al., 2008). The goal of IPT-A treatment is to help the adolescents recognize their feelings, increase understanding as to how interpersonal relationships and conflicts affect their mood, and build adaptive interpersonal skills (Miller et al., 2016). IPT-A is an effective treatment for adolescent depression, often yielding treatment effects similar to CBT.

IPT-A is effective as evidenced by several meta-analyses, reviews, and RCTs. IPT-A is effective when compared to treatment as usual. A 2004 RCT compared IPT-A to treatment as usual in school-based mental health clinics in 63 depressed adolescents (Mufson et al., 2004). Compared to those who received treatment as usual, those who received IPT-A showed greater symptom reduction and improvement in functioning. The authors conclude that IPT-A is an effective treatment for adolescent depression.

In a 2019 meta-analysis of 20 studies examining the effects of IPT-A on depression, they found that overall participants experienced large improvements in depressive symptoms post-intervention and some evidence that these gains were maintained for up to a year (Duffy et al., 2009). When compared to other psychosocial interventions, IPT-A showed a medium significant effect compared to less-structured, active control conditions. When compared to CBT, there were no differences in postintervention depressive symptoms. These results are also demonstrated when observing remission rates. When compared to non-CBT active controls, IPT-A showed significantly higher remission rates. The authors conclude that IPT-A is an effective intervention for adolescent depression.

In the same 2015 systematic review by Zhou et al. previously mentioned, they found that IPT yielded similar results to CBT. IPT was also significantly more effective than control conditions and active control conditions including play therapy, psychodynamic therapy, and problem-solving therapy. Additionally, IPT was the only treatment that remained significant at the long-term follow-up. The authors concluded that along with CBT, IPT is one of the best available psychotherapeutic treatments for adolescent depression.

In the same 2016 review by Weersing et al. previously mentioned, the authors conclude that IPT is a well-established intervention for adolescent depression based on the evidence of

efficacy from multiple trials. They also note that there is a smaller size of IPT literature which may have impacted their findings.

### ***Attachment-Based Family Therapy***

Attachment-based family therapy (ABFT) is a process-oriented, structured therapy that uses theories from family therapy and attachment theory to understand adolescent depression and suicidality. The creators, Diamond et al. (2014), posit that poor attachment bonds, conflict, harsh criticism, and low affective attunement can lead to physical or emotional neglect, abuse, and abandonment. This negative family environment inhibits children and adolescent from developing internal and interpersonal coping skills needed to buffer against stresses, which can lead to or exacerbate depression (Rudolph et al., 2000). The process of change for this therapy is to then improve the insecure attachment that has formed between caregiver and child (Diamond et al., 2016). While there is some evidence to suggest that ABFT is an effective treatment for depressed adolescents, the results are overall mixed.

There are mixed results when comparing ABFT to treatment as usual. A 2010 study evaluated the effects of 14 weeks of ABFT compared to enhanced treatment as usual in 66 depressed, suicidal adolescents (Diamond et al.). The results showed that in comparison to enhanced treatment as usual, those in the ABFT group significantly improved as measured by decreased suicidal ideation during treatment. In a 2013 study observing the effectiveness of ABFT compared to treatment as usual, 20 adolescents were randomly assigned to 12 weeks of either condition (Israel & Diamond, 2013). The results showed significantly greater improvements on depressive outcome measures for the ABFT group. A more recent study compared ABFT to treatment as usual in 60 adolescents diagnosed with MDD (Waraan et al., 2021). While the participants in both groups reported reduced depressive symptoms, the majority

were still in a clinically significant range. ABFT was not superior to treatment as usual as evidenced by low remission and response rates for both groups.

There is evidence that ABFT is more effective than CBT, specifically when major depression is comorbid with a history of sexual trauma. In a 2012 study observing the effectiveness of ABFT with major depression in individuals with a history of sexual trauma, 66 adolescents were randomly assigned to either ABFT or enhanced care as usual (ECU; Diamond et al., 2012). The results demonstrated ABFT to be more effective than EUC in individuals with or without a history of sexual trauma. ABFT was then compared to CBT in the treatment of adolescents with depression and history of sexual trauma. Using data from the Treatment of Adolescents with Depression Study (TADS; 2004), Lewis et al. (2010) observed the impact that history of sexual trauma had on the treatment outcomes in the TADS study. When comparing the effect sizes from the Diamond et al. (2012) and Lewis et al., (2010) studies, Diamond et al. (2012) found that ABFT outperformed CBT in individuals with a history of sexual trauma.

### **Refugee Status**

The world is currently experiencing some of the highest rates of displaced individuals since The United Nations High Commissioner for Refugees (UNHCR) started keeping record in 1951 (Kim, 2018). Over 25 million people who are displaced can be categorized as a refugee, or someone who has fled war, violence, conflict, persecution for reasons of race, nationality, membership of a particular social group, or political opinion and have crossed international borders seeking safety in another country (UNHCR, 2001). This is the highest refugee population in the past 20 years (Kumar, 2020). The United States plays an essential role in the resettlement of approximately 70% of refugees annually (Kim, 2018). One of the largest groups of refugees that have resettled in the U.S. are Burmese refugees (Kumar, 2020).

Burmese refugees are the largest group to have resettled in the U.S., with over 160,000 coming in a ten-year span (Kim, 2018; Tan et al., 2014). Indiana is home to one of the largest Burmese populations within the U.S. (Asian Learning Center of Indiana, 2011). Approximately 35,000 Burmese people reside in Indiana, many of whom hold a refugee status. Indianapolis has the largest community – approximately 24,000, as of 2020 (Contreras, 2021). Many of these refugees belong to one of Burma’s major ethnic minorities – Karen, Karenni, or Chin, with Chin making up approximately 83% of the population in Indiana (Indiana State Department of Health, 2014).

Refugee status has numerous implications for an individual’s mental and physical health. Overall, they are at a higher risk for physical and psychological distress (George, 2010). Reasons for relocation may have directly caused trauma or instances of violence, both of which increase their risk of developing mental health disorders including anxiety, depression, and posttraumatic stress (Bolton et al., 2014). In fact, they experience depression at a higher rate than the general population at a rate of 30.8% (Steel et al., 2009). Apart from mental health problems due to violence and trauma, the relocation itself can lead to decreased mental health functioning from the drastic shift in culture (Noom & Vergara, 2011). This can cause culture shock and a rapid need for acculturation. The acculturative stress that Burmese adolescents, specifically, experience has been shown to lead to suicidal ideation and low self-esteem which was correlated with anxiety, hopelessness, and depression (Hovey & Magana, 2002; Noom & Vergara 2011; Sonderegger et al., 2004). One study found that isolation was a leading cause for an increase in psychological illness (Burnett & Gebremikael, 2005). This point is especially relevant now, with isolation at an all-time high from the COVID-19 pandemic and subsequent necessary lockdowns, quarantine, and social distancing (Hwang et al., 2020).

Female Burmese refugees are at an even greater disadvantage when it comes to declining mental health. In one study, being female was found to be significantly positively associated with symptoms of depression, anxiety, and PTSD (Kim, 2018). In a separate study, women who resettled in Western countries were found to have had a tenfold risk of developing PTSD compared to their same-aged female counterparts in the general population (Kirmayer et al., 2011). This provides additional insight into how the location after resettlement can influence mental health. While the literature shows that the refugee population can experience overall declines in mental health, knowledge on the mental health experiences of the group is significantly lacking (Kim & Keovisai, 2016; Trieu & Vang, 2015).

Burmese refugees are one of the most understudied minority groups with relatively few studies on their mental health and overall health status (Hickey, 2007; Ngo-Metzer et al., 2010). While there are few studies on overall mental health, there are even fewer that look at how to treat mental health concerns most effectively in this population. One study observed the effectiveness of Common Elements Treatment Approach (CETA) in Burmese refugees relocated in Thailand (Bolton et al., 2014). The elements of this treatment were engagement, psychoeducation, anxiety management (relaxation), behavioral activation, cognitive coping/restructuring, suicide risk assessment, and alcohol/substance use assessment/intervention. The results demonstrated that CETA was effective in reducing symptoms of depression, anxiety, and posttraumatic stress.

Part of what makes this group specifically so unique is the ethnic and religious diversity. This diversity poses additional need for a significantly greater understanding of their mental health. In one study, ethnicity was a main factor that was consistently associated with the majority of the behavioral health outcomes (Kim, 2018). Additionally, much of what is known of



this group is from refugees who relocated to Eastern countries, for example Thailand or Malaysia. While this remains an important contribution in the understanding of this group, it neglects the experience of those who have resettled in the U.S. The unique experience of Burmese refugees in the U.S. should be of interest given the role it has played during their resettlement and the implications it has on their mental health. In sum, there remains a significant need to treat behavioral health concerns with limited understanding or guidance on how to do so (Kim, 2018; O'Mahony & Donnelly, 2010).

### **Ethnic Burmese and Chin Culture**

Myanmar, formally Burma, is currently the center of the one of the largest refugee crises in the world (Lewis, 2019). For the purpose of this dissertation, the country will be referred to as Myanmar, while people who are from the country are referred to as Burmese, a distinction that is consistent in the literature (Steinberg, 2013). Note that Burmese is different from Burman, which is the ethnic majority in Myanmar.

Myanmar is one of the world's most ethnically diverse countries, with more than 130 different ethnic groups (Fike & Androff, 2016). While majority of the population is ethnically Burman and practices Buddhism, the ethnic minorities make up nearly 40% of the 50 million people who reside in Myanmar (Kramer, 2015). There are eight nationally recognized races in Myanmar – Burman (Bamar), Chin, Kachin, Kayah (Karenni), Kayin (Karen), Mon, Rkhine (Arakan), and Shan (Stokke, 2019). The country is divided into seven Burman regions in the center area of the country, with seven ethnic states along the border of the country (Stokke, 2019).

Along with ethnic diversity, Myanmar is also rich in religious and linguistic diversity. The main religions that are practiced include Buddhism, Christianity, Islam, and Hinduism.

Christianity is especially prevalent within the ethnic minorities, for example Chin (Stokke, 2019). The official language of the country is Burmese, however there are over 118 languages spoken throughout the country (Simons & Fennig, 2017).

The Chin state is a very independent, remote part of Myanmar (Lalhriatpuii & Shyamkishor, 2019). It has been politically, socially, and economically discriminated against and isolated from the rest of the country (Bawi, 2015). Chin culture emphasizes family and community. Family, ethnic identity, community, and religion are all vital to their values and identity (Bawi, 2015; Thein, 2015).

Myanmar's ethnic diversity is central to the refugee crisis that has persisted for decades. The refugee crisis in Myanmar can be traced back to the civil war and ethnic conflict that has afflicted the country since gaining independence in 1948. Many minorities, including religious, ethnic, and political, have been persecuted and displaced by the military regime leading to need to seek refuge (Alexander et al., 2017). The state of conflict worsened after the military coup in 1962 when the country changed from a democracy to military rule, and minorities were further minimized and oppressed (Kramer, 2015). Military seizure of power within the country has persisted, with the most recent coup occurring in February of 2021 (Thein-Lemelson, 2021). This conflict, which has given rise to ethnic and religious violence, can be traced back to numerous factors including trauma from colonialism, poverty, transition from a military government to a democratic state, and the global war on terror (Harvard Divinity School, 2018). Decades of civil war has contributed toward the breakdown of education and healthcare systems, militarization, food insecurity, discrimination, and human rights violations (Kramer, 2015). As a result, people of Myanmar started relocating in large numbers to the United States in 2008, however more than 3 million have relocated to the U.S. in the past 40 years (Ballard et al., 2020; Wang, 2022).

The decades of war, persecution, and violence has contributed toward violence, suffering, and trauma for ethnic minorities in Myanmar (Kim et al., 2021; Kramer, 2015). The traumatic experiences begin in their home country from persecution; however, they persist at refugee camps and even after resettlement (Kim et al., 2021). These experiences contribute toward a substantial need for mental health care, however there are many barriers that exists some of which are related to the perception of mental health in Burmese culture.

There are many cultural barriers that exist and prevent Burmese refugees from seeking treatment. Stigma of mental health has been identified as one of the largest barriers to accessing mental health treatment (Morris et al., 2009). Part of the stigmatization of mental health in Myanmar is due to language and lack of information of mental health (Kim et al., 2021; Saechao et al., 2012). Mental health is often a new concept for Burmese individuals who have relocated to the United States. In Myanmar, the construct of mental health is typically related to being “crazy,” or “is for crazy people” (Kim et al., 2021). There is no appropriate translation for the term “mental health” in languages that are spoken in Myanmar. Individuals are even further dissuaded from bringing mental health up, as it is highly taboo and shameful to discuss. By openly talking about mental health, they jeopardize their “face” or reputation (Kim et al., 2021). Because family is extremely important in Burmese cultures, and families have a collective face, the possibility of “losing face” for one’s family is avoided (Evason, 2017).

### **Clinical Research Question**

There is an evident lack of literature focusing on refugees and adolescents with mental health problems. In an attempt to narrow this gap, this case study will address the research question – will a female adolescent Burmese refugee with generalized anxiety disorder and major depressive disorder be better off after receiving CBT treatment in a primary care setting?

This will be assessed by examining the patient's pre- and posttreatment scores on validated assessments for statistical and clinical significance. In order to test this question, a reliable change index will be computed. This method of analysis permits addressing the primary question of study – improvement in treatment – while also focusing on validated measures that have been used in prior research of depression and anxiety (Delgadillo et al., 2017; Islam et al., 2020; Mewton et al., 2012; Richardson et al., 2009; Richardson et al., 2014)

## **Methods/Research Design**

### **Procedure**

This case study was conducted in an integrated primary care clinic located in the greater Indianapolis area. The patient was selected from a pool of referrals provided to the clinicians from the medical residents in the clinic. The selected patient was seen for weekly, in-person psychotherapy sessions, approximately 30 minutes each, for 13 sessions excluding the intake evaluation.

The clinician obtained consent from the patient's father at the intake. Both the patient and her father spoke fluent English therefore no interpreter was needed. He was debriefed on limits of confidentiality, expectations for possible audio/video recording, and possibility of patient materials being used for academic/research purposes. The patient was also informed of such information and the patient provided assent for this purpose.

### **Outcome Measures**

Brief outcome assessment measures were administered in-person pre- and posttreatment – at the beginning of the intake interview and termination session. The selected brief outcome measures are the Generalized Anxiety Disorder – 7 (GAD-7) and the Patient Health Questionnaire – 9 (PHQ-9). Both measures were developed to screen for generalized anxiety

disorder and major depression, respectively, in a primary care population (Arroll et al., 2010; Kroenke et al., 2001; Spitzer et al., 2006).

### ***Generalized Anxiety Disorder-7***

The GAD-7 is a 7-item self-report assessment measured designed to screen for and assess the severity of Generalized Anxiety Disorder in practice and research (Spitzer et al., 2006). Each item assesses the extent to which the individual has been bothered by a symptom of GAD in the past two weeks (e.g., trouble relaxing, feeling nervous, anxious, or on edge, etc.). Each of the seven items is scored on a scale ranging from 0 (not at all bothered) to 3 (bothered nearly every day), with a total score ranging from 0 to 21. The GAD-7 has cut-off scores that differentiate minimal (0-4), mild (5-9), moderate (10-14), and severe (15-21) generalized anxiety. The selected cut-off score of 10 has a sensitivity of 89% and specificity of 82%. The internal consistency of the GAD-7 is well over the acceptable range (Cronbach  $\alpha = 0.92$ ). The test-retest reliability was good (intraclass correlation = 0.83). To determine convergent validity the GAD-7 was compared to the Beck Anxiety Inventory and the anxiety subscale from the Symptom Checklist-90. Convergent validity was determined to be good based on its correlations with the two measures,  $r = 0.72$  and  $r = 0.74$ , respectively. The norms for the GAD-7 were calculated from a total of 965 patients in 15 primary care sites. The mean (SD) GAD-7 score was 14.4 (4.7) for those diagnosed with GAD ( $n = 73$ ) and 4.9 (4.8) for those without GAD ( $n = 892$ ). The GAD-7 was validated for adolescent populations in primary care. 40 adolescents ages 12-17 were administered the GAD-7 and scores of 11 or higher had a sensitivity of 97% and specificity of 100% at detecting moderate levels of generalized anxiety symptoms (Mossman et al., 2017). The authors concluded the GAD-7 is a measure that should be utilized by clinicians to quickly assess symptom severity in adolescents with GAD.

### ***Patient Health Questionnaire-9***

The Patient Health Questionnaire-9 (PHQ-9) is a self-report assessment measure designed to assess the severity of depression in the primary care setting (Kroenke et al., 2001). Each of the nine items corresponds to one of the nine DSM-5 criteria for depression. The individual is instructed to indicate how bothered they were by each symptom, ranging from 0 (not at all bothered) to 3 (bothered nearly every day), with a total score ranging from 0 to 27. The PHQ-9 has cut-off scores to distinguish minimal (0-4) mild (5-9), moderate (10-14), moderately severe (15-19) and severe (20-27) depression. A cut-off score of 10 has a sensitivity of 88% and specificity of 88% for major depression. Internal consistency of the PHQ-9 was acceptable (Cronbach's  $\alpha = 0.89$ ). The test-retest reliability was excellent between scores of the initial primary care visit and 48 hours later with a mental health professional ( $r = 0.84$ ). The norms were calculated from 580 patients interviewed by a mental health professional after completing the PHQ-9 at a primary care or obstetrician/gynecologic clinic. The mean (SD) of PHQ-9 score for patients ( $n = 41$ ) diagnosed with major depressive disorder was 17.1 (6.1), 10.4 (5.4) for the patients ( $n = 65$ ) diagnosed with other depressive disorder, and 3.3 (3.8) for the patients ( $n = 474$ ) with no depressive disorder. While the PHQ-9 was designed for adults it has been validated with adolescent populations. 442 adolescents ages 13-17 were administered the PHQ-9 and a score of 11 or higher had a sensitivity of 89.5% and specificity of 77.5% for detecting youth meeting DSM criteria for major depression (Richardson et al., 2010). The authors noted that while the optimal cut-off score was slightly higher, the PHQ-9 remained an excellent choice for screening depression among adolescents in primary care settings.

### Case Formulation

The case conceptualization was developed using the cognitive-behavioral model for generalized anxiety and depression. This model places emphasis on early learning and experiences which contribute to current problems, underlying rules and beliefs, ways in which they have coped with their dysfunctional beliefs (e.g., cognitive, affective, and behavioral mechanisms), and current stressors which contribute to their current problems or their ability to solve such problems. (Beck, 2020). Additionally, various distortions of anxiety are present including hypervigilance, false alarms, loss of objectivity, generalization of danger, and no tolerance for uncertainty (Beck et al., 1985; Beck, 2005). Special consideration was given to her experiences as a Burmese refugee including immigrant/refugee status, experiences as a minority, and level of acculturation. In addition, cultural factors were used as essential context throughout the entire conceptualization including increased mental health stigma and family dynamics.

Conceptualization of Chomden's anxiety was supplemented using the avoidance model of worry (AMW) and the metacognitive model of worry (MCM). The AMW was developed by Borkevec et al. (2004) which posits that worry functions as an ineffective problem-solving skill to minimize aversive emotional and somatic experiences. Worry becomes negatively reinforced as the avoidance of anxiety-inducing stimuli decreases negative emotional and somatic experiences. Furthermore, worry is reinforced by positive beliefs such as worry is helpful in problem-solving, motivating performance, and avoiding negative outcomes. (Behar et al., 2009).

The MCM of GAD developed by Wells (1995) posits that individuals experience two types of worry. The first is Type 1 worry which occurs when they are faced with an anxiety-inducing stimuli, coupled with the belief that worry will help them cope with the situation.

Individuals then begin to worry about their experience of type 1 worry, where they fear their worry is uncontrollable, also known as Type 2 worry.

### **Case Conceptualization**

Chomden's relationship with her parents and experiences as an immigrant/refugee played a significant role in the development of her negative core beliefs. She recalled her early life in Burma and feeling as though she was the only child who was not raised by her parents, as she was raised by her grandparents. She explained that her parents were consistently home when both her older and younger sister were young. She recalled feeling as though this was unfair, and that she was unable to develop a relationship with her parents the same way her sisters were. This led to her feeling as though there is something inherently wrong with her such that she was not worthy of a relationship with her parents, or that she did not deserve it.

Throughout her life, she reported not feeling loved by her parents, which further contributed to negative beliefs about herself and her inherent worth. She recalled experiencing a significant amount of praise when she was younger. This praise was often related to her performance in academics or extracurriculars. This praise even came from other family members, being told by others that she was "gifted." As she became older, the ample praise from her parents stopped. Additionally, she remembered being questioned by the same family members that previously called her gifted, who were now asking "what happened to her?" such that her achievements were no longer as impressive. This experience confirmed her current assessment of herself, such that she was previously worthy of love and praise but she "fell from grace" and was no longer worthy. She recalled experiencing her parents' praise and attention as love, but that since she was no longer receiving this praise, she no longer felt loved by them. This further confirmed her perception of having a "fall from grace" in which something about



herself inherently changed, ultimately changing her worth. These experiences also connected academic performance with overall worth and being deserving of love.

Chomden's early experiences in the United States contributed toward negative beliefs of herself and others. She recalled experiencing bullying in middle school for not knowing English, feeling very embarrassed as a result. This further confirmed previous negative beliefs about herself, in addition to beliefs that other people and social interactions are dangerous and rejection is likely to occur.

Lastly, Chomden experienced a significant amount of parentification, or when children assume adult roles and are expected to meet the needs of family members (Early & Cushway, 2002). She recalled learning English much quicker than her parents and is overall more proficient. This is especially relevant with her mother, who does not speak English. As a result, she often interpreted for her parents (i.e., language brokering), and translated and helped manage bills. Language brokering is a common occurrence when there is an acculturation gap between parent and child (Titzman, 2012). Brokering has been found to be associated with higher psychological distress and depression (Oznobishin & Kumar, 2009; Williams & Francis, 2010). Additionally, because her parents were not around very often when she was younger, she felt there were many times where she had to parent herself or help parent her younger sister. At the time of treatment, she felt the responsibility to parent herself. During older adolescence, she experienced emotional parentification from her mother. Her mother vented to her about her father, either complaining about him or saying she regretted marrying him. All of these experiences, in conjunction with the already established belief that she is not worthy or deserving, contributed toward a tendency to minimize or look past her own needs in favor of others, most significantly her parents.

The belief that she must minimize or ignore her own needs in favor of others' was reinforced culturally, as the Burmese culture highly emphasizes deep respect for elders and it is considered highly inappropriate to challenge or argue with someone of senior status (Evason, 2017). This would make it extremely difficult to question or challenge her parents' requests for help, as it goes against social norms. Additionally, it is very common in the Burmese culture to be constantly mindful of how one's actions could offend, embarrass, or inconvenience others. This is referred to as the concept of "ah-nar-de," or the feeling of not having the heart to say or do something that may affect another person's feelings (Evason, 2017). This contributes to a significant consideration for others' feelings, which Chomden demonstrated in relationship to her parents, in that she often placed their needs higher than hers. Additionally, the conflict of having her own needs increase related to her mental health, with feeling unworthy and placing others' needs above her own lead to her feeling as though she is a burden to others.

As a consequence of Chomden's early life experiences, she developed the following core beliefs: I am unlovable, I am a burden, I am unworthy, I will be rejected, I am worthless, I will embarrass myself around others, and others are dangerous. As a way to cope with these negative beliefs about herself and others, she developed the following assumptions and rules for living (i.e., intermediate beliefs): 1) if I succeed in school, then my parents will love me, 2) if I am perfect, then my parents will love me, 3) If I decline my parents' wants, then they will never love me, 4) if I share my own struggles, then I will scare others away or be rejected, 5) if I struggled when trying to succeed, then the outcome will be more impressive, 6) if I speak to others, then I will embarrass myself, and 7) if I worry, I will be motivated to do well.

Chomden's view of her worry aligns with the avoidance model of worry and metacognitive model of worry, as she had positive beliefs of her worry. Chomden explained

feeling as though her worry and subsequent negative self-talk motivate her to do well and are significantly responsible for her success. Therefore, she has the belief if she does not worry then she will not succeed. Because her parents' love was contingent on her academic success, losing her worry meant losing her parents love. This led to school being a significant cause of anxiety for Chomden.

Her early experiences of once being deemed “gifted” which changed to “falling from grace,” led to Chomden developing perfectionistic tendencies. She placed a significant amount of pressure to succeed and be the best. This is likely due to the emphasis on external validation and achievement during her childhood. Her increased motivation for success reinforced her positive belief related to worry, such that worry will help her to be perfect. Increased self-criticism plays a similar role in this situation. She believed criticism will act to increase her motivation, improving the outcome of events. The increase of self-criticism, in turn, reinforced depressive symptoms. Additionally, because such large emphasis was placed on her success and outcomes, she believed that if she was able to perform while being hindered by anxiety, the outcome is that much greater, or more impressive. This further reinforced her positive belief of worry, impacting her willingness to decrease worry.

Chomden's belief of being a burden and unworthy of love, in conjunction with sacrificing her own needs, negatively affected her ability to seek social support. She would often bottle-up her feelings which increased anxiety and decreased her mood. This behavior occurred with both parents and friends. With her parents, she acted as a martyr sacrificing her own needs. With her friends, she would not open up to them about her mental health or significant stressors, despite wanting to. Her lack of social support, internalization of feelings, and dismissal of personal needs increased depressive and anxiety symptoms.

Chomden's early experiences being bullied and feeling embarrassed in social situations led to her developing a fear of social interactions. She explained she did not fear social situations prior moving to the United States and experiencing bullying. While she did not report feeling this anxiety with her close friends, she reported significant anxiety talking to other people or raising her hand in class. She explained wanting to speak to other peers and teachers more often, but that her anxiety of the outcome and possible embarrassment or rejection interfered. In behavioral terms, her anxiety decreased when she avoided social situation, thus her avoidant behavior was negatively reinforced, and, thus, increased in frequency. Additionally, she viewed her perceived inability to talk to others as a personal flaw, acting as additional evidence for being unworthy or undeserving of love.

Chomden's intermediate beliefs influenced the automatic thoughts she had in response to triggering events. Triggering events that occurred frequently were parentification, stress from school, social interactions, and social comparison. The following is an example of how Chomden's core and intermediate beliefs influence her automatic thoughts and behavior: Chomden receives a 92% on an exam. She has the automatic thought, "you are an idiot and a failure." As a result, her depressed mood increases, and she begins to worry about her grade in the class. The following is another example: She enters the classroom and sees her teacher. She has the automatic thought, "if you say hello you will make a fool of and embarrass yourself," and "she is going to laugh at you." She then feels anxious and avoids initiating conversation with her teacher.

### **Treatment Plan**

Chomden's treatment plan was developed considering her diagnoses, personal goals for therapy, and sociocultural factors. Chomden's personal goals for therapy were to nap less, eat

more, talk to more people during class, and talk to more people in general. The clinician and Chomden collaboratively identified the following goals at the beginning stage of treatment: 1) decrease hypersomnia, 2) increase food consumption, 3) decrease overall social anxiety, 4) decrease perfectionistic tendencies and distorted thoughts related to unrealistic expectations for herself, and 5) increase ability to seek social support. In order to meet these goals, a CBT treatment plan was adapted utilizing the main components of CBT treatment including psychoeducation, behavioral activation, cognitive restructuring, and exposures (Leahy et al., 2011; Wehry et al., 2015).

First, psychoeducation was provided on anxiety, depression, sleep hygiene, and later, cognitive distortions. Because mental health is highly stigmatized in the Burmese culture and non-severe mental health is often less understood, additional time was spent on psychoeducation. This included providing education on the symptoms of anxiety and depression, how they reinforce each other, and prevalence to normalize her experience. As decreasing hypersomnia was a personal goal of Chomden, and likely worsened her depressive symptoms, psychoeducation on sleep hygiene was also given special attention. Specific relevant items included reducing daytime napping and not laying in bed except to sleep at night. Lastly, education on cognitive distortions was provided to enhance her ability to identify, and ultimately challenge, maladaptive thoughts.

In order to improve depressive symptoms which would positively contribute to goals one and two, which were both very important to Chomden, behavioral activation was used. Chomden identified going on walks as an adaptive coping skill she had used before. She was encouraged to continue to use it as a coping skill but also as behavioral activation to decrease depressive

symptoms. A specific behavioral intervention used to target goal two was to increase snacking throughout the day.

Cognitive restructuring and behavioral experiments were used to target Chomden's anxiety in social situations. This was achieved during and outside of sessions as homework. In session, Chomden was encouraged to identify and challenge maladaptive thoughts. Specific cognitive interventions used to achieve this were evidence for and against a thought, examining the logic of a thought, and best/worst/most realistic scenario. For example, a maladaptive thought may be, "If I say hello to my teacher, she is going to laugh at me." In order to challenge this thought, Chomden was encouraged to provide evidence for and against this thought. One piece of evidence against this thought is that the teacher has never laughed at a student for saying hello. A piece of evidence supporting the thought is that people have laughed at Chomden in the past. As homework, Chomden identified specific behavioral experiments to target and challenge this thought, for example, say hello to her teacher one day in a week.

Cognitive restructuring was used to challenge maladaptive thoughts and beliefs which reinforced her anxiety and depression. After psychoeducation was provided on the various cognitive distortions, Chomden was encouraged to practice identifying maladaptive thoughts outside of session as homework, which would then be discussed during session. During session, cognitive interventions were used to challenge her maladaptive thoughts and beliefs as well as encourage her to explore new perspectives. The most predominant type of maladaptive thoughts was related to her perfectionistic tendencies. An example of how her perfectionist tendencies manifested was harsh self-criticism due to not meeting extremely high standards set for herself. Her maladaptive perfectionistic thoughts often arose in response to school and academic achievement. Specific cognitive interventions that were used to challenge maladaptive thoughts

were evidence for and against a thought, role playing as the defense attorney, testing a double standard by applying it to a friend, examining the logic of thought, defining the terms, and vertical descent. Vertical descent was often used, specifically, to aid Chomden in identifying her core beliefs or other maladaptive beliefs she has about herself or others.

Lastly, cognitive restructuring and behavioral experiments were used to increase Chomden's ability to seek social support from her friends. Maladaptive thoughts, such as, "I am a burden," were challenged during sessions. Specific cognitive interventions used were evidence for and against a thought, testing a double standard by applying it to a friend, and testing predictions. Once Chomden's ability to recognize and challenge her maladaptive thoughts increased, she was encouraged to test her predictions as behavioral experiments for homework between sessions. An example of one self-identified behavioral experiment was seeking social support from her friends about her anxiety and depression.

Chomden's experience as a refugee as well as the Burmese culture were heavily considered throughout the treatment plan. For instance, the clinician checked in with Chomden's understanding more frequently since Chomden was less likely to speak up to the clinician due to the power imbalance. Similarly, the clinician offered the opportunity to disagree with the clinician when challenging maladaptive thoughts, again due to the stark power imbalance and subsequent decreased likelihood that Chomden would openly disagree with the therapist. The clinician often checked her understanding with Chomden to ensure the clinician had an appropriate understanding of how Burmese ideals were enforced specifically in Chomden's family. Lastly, in order to ensure traditional Western ideals were not being forced on Chomden by the clinician, supervision was frequently sought. On occasion, the clinician and Chomden would openly discuss and balance Chomden's personal needs and her culture. For example,

although it is normalized in Burmese culture not to share personal struggles as other people's feelings are highly considered, this was negatively impacting Chomden's anxiety and depression (Evason, 2017). The pros and cons of sharing her struggles with friends were discussed with Chomden, along with assessing her personal values. For example, Chomden stated that she valued her friends as social support and therefore wanted to increase her ability to confide and share personal information with them, despite it contradicting aspects of traditional Burmese culture. This is an example of how cultural considerations were made while also keeping the individual in mind.

### **Course of Treatment**

This section will describe each session of therapy and highlight important differences or deviations from the previously described treatment plan. Chomden had a total of 13 sessions and each will be described.

#### **Session 1**

Chomden and the clinician discussed her eating and sleeping habits. The clinician provided psychoeducation on depression and anxiety, and how both can affect sleep and appetite. The clinician collaborated with Chomden to problem-solve ways to increase food intake and decrease hypersomnia. Chomden's homework was to decrease daytime napping and increasing snacks throughout the day. The clinician noticed rapport with Chomden was very low and it was challenging for Chomden to offer insights unprompted.

#### **Session 2**

Chomden followed-up on homework, reporting she did not nap during the day and ate more snacks. This was a large improvement from previous napping habits, which was to take a three to four hour nap each day. Chomden began discussing her expectations of her academic



performance and how it negatively affected her. She also began to discuss her relationship with her friends, avoidance of emotional closeness with them, and the ways this impacts her. The clinician continued to provide psychoeducation on anxiety and began to introduce the different types of cognitive distortions. The clinician asked direct and open-ended questions to explore and discuss the importance Chomden placed on academic success and intelligence. For example, “why is it important to receive all A’s?” and “what would happen if you got a bad grade?” Chomden’s homework was to practice identifying maladaptive thoughts and cognitive distortions.

### **Session 3**

Chomden completed the homework and reported that identifying cognitive distortions was helpful. She discussed upcoming academic events that increased her anxiety. Chomden’s idealization of perfectionism was discussed, including how it is unachievable. The clinician continued to provide psychoeducation about cognitive distortions. The clinician aided Chomden in identifying and challenging her black-and-white thinking in regard to her perfectionistic expectations of her academic performance. Chomden’s homework was to continue identifying cognitive distortions but to add in a reframe/challenge of the negative thought. By the third session, rapport had significantly increased. The clinician noticed Chomden feeling more relaxed and less anxious during session, as well as the session feeling more collaborative.

### **Session 4**

Chomden discussed upcoming events that were increasing her anxiety. Throughout the discussion she was able to identify cognitive distortions with the aid of the clinician. Chomden continued to discuss her perfectionistic tendencies. She reported noticing how her perfectionism impacts other areas of life besides academics, as well as how it contributed to anxiety. The

clinician aided Chomden in identifying her cognitive distortions in session. Other cognitive techniques used were discussing the worst-case scenario, and evidence for and against a thought. Chomden's homework was to practice challenging negative thoughts on her own using the techniques practiced in session (i.e., evidence for and against, worst case scenario, etc.).

### **Session 5**

Chomden followed-up on her homework, providing examples where she effectively identified and challenged negative thoughts. She discussed improvements in her napping and appetite. She explained that her napping continued to improve because her parents no longer let her sleep during the day. Chomden also said she noticed having midnight cravings, which was an improvement because would often not feel hungry. Chomden discussed her social anxiety and specific situations that trigger it. The clinician asked questions to explore Chomden's anxiety in social situations. For example, "what is the worst possible outcome," "how would you ideally act in social situations," and "what prevents you from acting this way?" Homework for the next session was a behavioral experiment they collaboratively set – say good morning to her teacher one time within the next week to test her expectation that she would embarrass herself or be made fun of.

### **Session 6**

Chomden discussed her homework and the impact it had on her social anxiety. She discussed how she was able to say good morning to her teacher three times throughout the week instead of one, exceeding her goal. Chomden reported how her anxiety significantly decreased from the first time she said hello compared to the third time. She discussed how her social anxiety increased negative self-talk, for example, labeling herself as inadequate or a failure for feeling anxious in social situations. She was able to identify the purpose of the negative self-talk

as a way to motivate herself to improve. The clinician aided Chomden in identifying the purpose of negative self-talk by asking questions such as “what do you believe would happen if you didn’t talk to yourself that way?”. Chomden’s homework was another behavioral experiment of her choice targeted at decreasing social anxiety.

### **Session 7**

Chomden reported her homework, which she chose to initiate conversation with classmates more, was effective in decreasing anxiety. This was the first session where Chomden discussed her family dynamics. She explained her relationship with her mother and the ways in which her mother emotionally parentified Chomden. She reported not feeling as though she had a relationship with her father. The clinician introduced the idea of setting boundaries to decrease emotional parentification, to which there was significant resistance. In order to increase emotional connectedness and social support, Chomden’s homework was to confide to a friend about something small, but more than what she normally would.

### **Session 8**

The homework was discussed – Chomden confided to her friends that she was going to therapy for anxiety. She explained her friends were very understanding and supportive which made her happy that she told them. Chomden continued to open up about her family dynamics and how it contributed to her mental health. She provided other examples of parentification such as language brokering which made her feel burdened. She explained that she did not feel loved by her father and identified academic success as a way to receive acceptance and praise from her parents. The clinician aided Chomden in identifying core beliefs by using the downward arrow technique. When talking about automatic thoughts, the clinician would ask questions such as “what would that say about you if it were true?” and “what would that mean if it were true?” Her

homework was to write a compassionate letter to herself identifying her successes and as a way to provide internal validation and increase sense of acceptance.

### **Session 9**

Chomden discussed that although she completed the letter, she noticed it increased negative self-talk. Chomden did not discuss her family but rather focused on topics related to perfectionism. This included her reasoning for holding herself to a high standard and having high expectations. She discussed her perspective on achievements, explaining a single large achievement is better than accomplishing several realistic achievements, even when the outcome is the same. The clinician used the cognitive technique pros and cons to explore the cost and benefit of engaging in realistic standards. Chomden's homework was to role play as the defense attorney and provide sound reasoning why setting unrealistic goals are better than realistic goals. The clinician noticed a significant increase in resistance during this session compared to previous. Additionally, Chomden's insight into her anxiety and maladaptive thoughts had decreased significantly. The clinician hypothesized this was a reaction and subsequent regression of insight due to discussing the very sensitive topic of her family the previous sessions. This information was used by the clinician to aid her conceptualization of Chomden.

### **Session 10**

Chomden discussed her family, explaining there were no changes at home. Chomden continued to be hesitant in setting boundaries with her mother. Relevant cultural factors that impacted Chomden's ability to set boundaries were discussed. During the session, she identified and discussed her core belief of being unworthy of love. Chomden identified relevant history that contributed to the formation of the core belief – family members previously described her as gifted and then several years later talked negatively about her. Chomden identified other core

beliefs including “I am a disappointment,” and “I am a failure.” The clinician provided psychoeducation on core beliefs and the ways they impact beliefs and thoughts. The metaphor of minds doing mental gymnastics was introduced as a way to communicate the extent to which core beliefs can influence our thoughts.

### **Session 11**

Chomden reported a decrease in her overall mental health, as she had an argument with her parents since the last session and was not speaking to them. She discussed the argument, explaining it felt as though she had bottled-up her emotions for too long so she finally “exploded.” Chomden identified aspects of her relationship with her father that she was not happy with, and the ideal version of their relationship. Chomden and the clinician discussed differences in parental-child relationships within the Burmese culture. The clinician aided Chomden in identifying different options she had in order to have her emotional needs met. The clinician introduced acceptance as a way to cope with unfulfilling relationships with her family. As homework, Chomden was encouraged to use problem-solving strategies to create a plan of action to get her emotional needs met.

### **Session 12**

Chomden reported she was talking to her mother again but that she was no longer talking to her father. She discussed the different options she had to navigate her relationship with her parents, providing pros and cons of each course of action. Chomden discussed the ways negative treatment from others impacts her sense of self-worth. She reported wanting to be a good role model for her sisters, and that she feared they would “pick up” on her negative qualities. The clinician asked questions to aid Chomden’s exploration of her negative self-worth as a justification for how others treat her for example, “it is okay if they treat me badly because I am

a bad person.” Examples of questions the clinician asked are, “why do you not deserve to be treated with respect?” and “if all people deserve to be treated with respect, why are you different?” Chomden’s homework was to list positive attributes of herself that she would want her sisters to have.

### **Session 13**

During the termination session, Chomden read aloud the list of positive attributes she would want her sisters to have. While processing termination of the therapeutic relationship, Chomden reported wishing she had discussed her family sooner. The clinician prompted Chomden to identify progress she made in therapy, which she then discussed.

### **Summary**

At the time of referral, Chomden’s case presented as uncomplicated anxiety and depression. At the mid-point of therapy, Chomden disclosed dissatisfaction within her family, which changed the trajectory of the therapeutic focus. Chomden’s anxiety and depression appeared to be directly correlated with her family dynamics and feeling unloved by her parents in the way she would like. Chomden also directly expressed her feelings toward her familial relationship as being the “root of” her anxiety and depression. This was also reflected in her core beliefs, which related to her evaluation of her self-worth based on feeling unloved by her parents. While many aspects of the previously set treatment plan were implemented as intended, the clinician shifted the focus of treatment to Chomden’s relationship with her parents and the impact it had on her overall mental health.

### **Empirical Findings with Analysis**

The data was collected at two time points, the start and end of treatment. The reliable change index (RCI) was used to measure clinically and statistically significant change between

start and end of treatment. A RCI was calculated for both measures used, the PHQ-9 and GAD-7. The RCI was calculated using the calculation recommended by Jacobson and Truax (1991). Normative data of clinical and non-clinical populations, including test-retest reliability, for the PHQ-9 was used from Kroenke et al. (2001). For the GAD-7, normative data from Spitzer et al. (2006) was used.

The standard error of measurement ( $S_E$ ) and standard error of difference ( $S_{diff}$ ) were first computed.  $S_E$  was calculated using the following equation,  $S_E = SD(\sqrt{1-r})$ , where  $SD$  is the standard deviation of the non-clinical population and  $r$  is the test-retest reliability of the measure. To calculate  $S_{diff}$  the following equation was used,  $S_{diff} = \sqrt{2(SE)^2}$ . The RCI was then calculated using the following equation  $RC = (X_2 - X_1)/S_{diff}$ . According to Jacobson and Truax (1991), if the RCI is greater than or equal to  $\pm 1.96$  reliable change has occurred. An improvement on both the PHQ-9 and GAD-7 would produce a lower post-treatment score, leading to a RCI of  $-1.96$ . Using the data from Kroenke et al., (2001) and Spitzer et al., (2006) for the PHQ-9 and GAD-7, it was determined that the change in Chomden's scores at the end of treatment were not statistically significant (see Table 1).

**Table 1**

*Reliable Change Index Determination of PHQ-9 (Kroenke et al., 2001) and GAD-7 (Spitzer et al., 2006)*

Assessment	Pre-Test Score ( $X_1$ )	Post-Test Score ( $X_2$ )	Standard Deviation of non-clinical group	Test-Retest Reliability	$S_E$	$S_{diff}$	RCI	Reliable Change? ( $\geq 1.96$ )
PHQ-9	13	15	3.8	0.84	1.52	2.15	0.93	No
GAD-7	9	12	4.8	0.83	1.98	2.80	1.07	No

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To measure clinically significant change, a cut-off point was computed using the method determined by Jacobson and Truax (1991). The following equation was used: Cutoff score =  $(SD_{\text{nonclinical}} \times \bar{x}_{\text{clinical}}) \times (SD_{\text{clinical}} \times \bar{x}_{\text{nonclinical}}) / (SD_{\text{clinical}} + SD_{\text{nonclinical}})$ . Using the data from Kroenke et al. (2001) and Spitzer et al. (2006) for the PHQ-9 and GAD-7, it was determined that Chomden’s scores did not achieve the cutoff score by the end of treatment (see Table 2). This indicates that Chomden’s scores did not move closer to the mean of the nonclinical population than the clinical population.

The calculated RCI and cutoff score comparing Chomden’s scores before and after treatment were not statistically or clinically significant. This indicates that there was no meaningful change that occurred for her anxiety and depression after treatment. It is important to note that although the RCI is approaching 1.96, which would suggest approaching statistical significance, Chomden’s scores worsened after treatment. Improvement of her scores would produce a negative RCI due to the assessments used to measure change.

**Table 2**

*Cutoff Score Determination Using Normative Data for the PHQ-9 (Kroenke et al., 2001) and GAD-7 (Spitzer et al., 2006)*

Assessment	Mean of non-clinical population	Mean of clinical population	Standard deviation of nonclinical population	Standard deviation of clinical population	Cutoff score	Post-Test Score	Cutoff score achieved by patient?
PHQ-9	3.3	17.1	3.8	6.1	8.6	15	No
GAD-7	4.9	14.4	4.8	4.7	9.7	12	No



## Discussion

At the time of literature review, there were no studies that observed the effectiveness of mental health treatment for Burmese refugees who relocated to the United States. Due to the saliency of Burmese mental health treatment in the United States, understudied nature of this group, and known negative outcomes associated with refugee relocation, further research on mental health intervention is needed (George, 2010; Hickey, 2007; Kim & Keovisai, 2016; Ngo-Mentzer et al., 2004). Because of the increased stigma and minimal mental health psychoeducation within this population (Morris et al., 2009; Saechao et al., 2012), it may be particularly beneficial to observe treatment effects in primary care, as primary care physicians provide a significant proportion of mental health care (Jetty et al., 2021; Olfson, 2016). Additionally, racial and ethnic minorities are more likely to receive mental health services in primary care settings (Chapa, 2004; Henry et al., 2020).

This case study sought to determine if 13 sessions of CBT administered in a primary care setting would effectively treat Chomden's generalized anxiety and major depressive disorder, as determined by decreased PHQ-9 and GAD-7 scores. The treatment was not found to be effective, as the RCI calculation did not reach significance. Although her scores did not significantly change by the end of treatment, to indicate improvement or decline, it is important to note her scores were higher after treatment, in the direction of an increase in symptoms, relative to the beginning of treatment. Hypersomnia and lack of appetite were particularly distressing symptoms for Chomden; however, these symptoms did not significantly decrease as determined by items on the PHQ-9.

When considering why treatment was ineffective, it is important to consider the therapeutic alliance. The therapeutic alliance between the therapist and patient is one of the most

important common factors related to treatment outcomes, regardless of length of session or treatment modality (Gergov et al., 2021). Various factors could have hindered the development of the therapeutic alliance between Chomden and the clinician, including personality traits and attachment style. Perfectionism has been demonstrated to negatively impact the development of the therapeutic alliance (Lingiardi et al., 2005; Miller 2017). Additionally, in patients who are high in perfectionism, there are smaller increases in the therapeutic relationship over the course of treatment (Zuroff 2000). The effect perfectionism has on the therapeutic alliance is an important factor to consider when treating Burmese individuals, given that studies have shown that Asian Americans demonstrate perfectionistic tendencies (Peng & Wright, 1994). In fact, stress of meeting parental expectations of high academic achievement, as well as living up to the “model minority” stereotype has been shown to be a common source of stress for Asian Americans (Lee et al., 2009). This unique stress that Asian Americans experience may have negative consequences for the development of the therapeutic alliance, and ultimately treatment outcomes.

Long-term, as opposed to short-term CBT may produce more desirable outcomes when perfectionism is present. Studies have found that individuals high in perfectionism view their therapist as less empathetic and understanding early in therapy (Hewitt et al., 2008; Miller et al., 2017). It is possible the patient needs a longer time in therapy to develop trust in and create an emotional bond with the therapist (Miller et al., 2017). While this has not been observed specifically with CBT, long-term therapy has been more effective for other treatment modalities (Blatt, 1992; Blatt & Ford, 1994). Additionally, the therapist can help the patient develop self-compassion by creating a compassionate and accepting therapeutic environment which may then

be internalized (Gilbert, 2009). It is possible treatment was too short for Chomden to benefit given her perfectionism and that longer-term therapy would have been a better match for her.

Chomden's perfectionism may have made it difficult to engage in self-compassion. Self-criticism is highly associated with perfectionism (Gilbert et al., 2006). Chomden reported viewing her self-criticism as a motivating tool that enabled her to perform to her perfectionistic standards. This aligns with the AMW where worry, or in this case self-criticism, is viewed positively by the patient as a motivating tool (Behar et al., 2009). Self-compassion may have been particularly difficult for Chomden, as she may have feared that self-compassion would lower her standards and decrease her motivation. Studies suggest this negative view of self-compassion is a common barrier (Kelly et al., 2021). This perspective is particularly relevant with perfectionistic individuals, such that they fear self-compassion (Gilbert & Procter, 2006). One definition of self-compassion is noticing one's suffering, then responding in an accepting and non-judgmental way with motivation to decrease one's suffering, all while tolerating difficult emotions (Gilbert, 2010). Self-compassion is not accepting yourself as you currently are with no desire to change or improve. In fact, there is evidence that self-compassion increases motivation following failure and promotes adjustment after failure to achieve a goal, which contradicts the perfectionistic fear of self-compassion (Breines & Chen, 2012; Miyagawa et al., 2018). In Chomden's treatment, providing more psychoeducation on self-compassion, and explaining it as an approach of non-judgement and curiosity may have been more tolerable and thus improved her willingness to let go of self-criticism and increase self-compassion (Gilbert, 2010).

Attachment style, or the way in which a person relates to others as formed by early childhood experiences and relationships, can impact the development of the therapeutic alliance

(Bowlby, 1988). Specifically, insecure attachment styles have been shown to be negatively associated with the development of the therapeutic alliance (Bachelor et al., 2010). Some theorize that the patient's attachment style is then projected onto the therapist-patient relationship, which ultimately impacts the development and formation of the alliance (Bowlby, 1988; Smith et al., 2009). An insecure attachment style can delay the formation of the therapeutic alliance and can contribute to an overall less positive therapeutic alliance (Smith et al., 2009).

Burmese refugees may be more vulnerable to this issue through direct pathways, such as the inherently traumatic experience of being displaced, and through indirect pathways, like intergenerational trauma. Some studies have found a link between adverse childhood experiences and attachment style, such that those with childhood traumas were more likely to have an insecure attachment style (Özcan et al., 2016). Traumas related to refugee experiences, specifically, have also shown an association with insecure attachment styles (Morina et al., 2016). Within refugee families, parental trauma has been shown to contribute to insecure attachment and diminished parental emotional ability (Flanagan et al., 2020). Other studies have found maternal traumatic experiences and attachment style impact their child's attachment style, suggesting intergenerational transfer (Cooke et al., 2019; Özcan et al., 2016).

Although Chomden's attachment style was not assessed during treatment, the clinician reflected after treatment and speculated that Chomden likely demonstrated an avoidant attachment type. Those with an avoidant attachment type may suppress and deactivate emotions when caregivers are unable to meet their needs, leading to long-term consequences of becoming overwhelmed by emotions and repressing or dissociating for difficult emotions (Mikulincer et al., 2003). Chomden longed for close relationships with others but feared rejection. This is demonstrated in her relationship with her friends, where she was close with them but greatly

feared confiding in them about intimate details of her life and experience. While she considered them close, emotionally they were kept at a distance. This relational pattern aligns with the avoidant attachment style (Akhtar, 2012). Chomden's experiences of rejection in childhood bolster the clinicians hypothesis of Chomden's avoidant attachment style. Chomden experienced repeated rejection from her parents, for example being the only sibling to be parented by her grandmother and having a "fall from grace" where she no longer received praise. Chomden was also rejected in middle childhood, where she was bullied and made fun of in middle school when first moving to the US. Additionally, she perceived her parents as less warm and reported not feeling loved by them. Repeated rejections and lack of warmth from parents are both core features of an avoidant attachment style (Akhtar, 2012).

Chomden's avoidant attachment style may have hindered the development of the therapeutic alliance. As previously stated, it is expected that a person's attachment style is projected onto the patient-therapist relationship (Bowlby, 1988; Smith et al., 2009). In treatment, Chomden's avoidant attachment style may have manifested as a lack of trust of the clinician, difficulty forming trust in the clinician, or a fear of rejection from the clinician, as mistrust and fear of rejection are core features of avoidant attachment (Akhtar, 2012).

In order to minimize the negative effects an insecure attachment has on the therapeutic relationship, some suggest assessing for attachment style prior to treatment (Shorey & Snyder, 2006). Self-report measures are often used in clinical settings, as narrative measures take much longer to complete (Smith et al., 2009). A self-report inventory such as the Adult Attachment Inventory (Simpson et al., 1992) may be used to quickly, in conjunction with information gathered during the intake interview, assess attachment style. If the therapist is aware of the patient's attachment style, and potential problems that may arise in therapy as a result, the

therapist can be more attentive to the development of such issues (Smith, 2009). Additionally, the therapist may benefit from monitoring the therapeutic alliance for signs of distance or discontent, and preemptively repair the alliance as needed (Diener & Monroe, 2011). These recommendations have been made for treatment modalities where relational processes are not the main focus, for example, CBT (Taylor et al., 2015). For the present patient, no assessment of attachment style was done. It is possible that doing so may have improved the course of treatment by incorporating this information, therefore benefiting Chomden.

The duty to “save face” for the collective family may negatively impact therapeutic outcomes (Covelman & Covelman, 1993). Family is extremely important in Burmese culture. As such, so is the collective reputation or “face” of the family. Because families have a collective “face” or reputation, the act of an individual in the family can impact the perception of the family unit as a whole (Evason, 2017). This, in conjunction with mental illness remaining highly stigmatized, results in hiding feelings of anger, shame, or other negative emotions that may undermine their “face” (Chung, 2016). As part of saving face, there is a strong boundary within the family structure to not share family issues with outsiders (Epstein et al., 2012). Sharing such details with a clinician may be seen as increasing the probability of losing face (Anderson et al., 2012). To share personal details to a therapist that could lose face may be very stressful and lead to difficulty opening up in therapy (Liu et al., 2014). Chomden disclosed in session she had wanted to talk about her family dynamics sooner, but that she was hesitant to speak about it, which may be interpreted as an attempt to save face for the family. If the fear of losing face was not present, her family conflict may have been discussed sooner, potentially leading to more desirable outcomes.

To combat the fear of losing face and increase sharing in session, it is essential to build trust early in the therapeutic relationship. One way to build this trust is to clearly communicate privacy and confidentiality limits, and openly address any concerns the patient may have (Anderson et al., 2012; Yeung & Ng, 2011). This helps to ensure their understanding that personal information will not be shared outside of the therapeutic settings. Others have found that therapist self-disclosure of personal information helps to build trust and can be important in the development of the therapeutic alliance when working with Asian American patients (Epstein et al., 2013; Jim & Pistrang, 2007). Therapeutically appropriate self-disclosure may build trust and the therapeutic alliance, as the sharing of personal information is an important symbol of trust (Epstein et al., 2013). Although self-disclosure in therapy is controversial amongst clinicians, research further suggests it has the potential to increase positive outcomes (Hill & Knox, 2002). Studies have found it to have an immediate, positive effect such that patients rate their therapist as more helpful (Hill et al., 2001). Other studies have found it to be effective in lowering levels of symptoms distress and improved therapeutic relationship such that those patients liked their therapist more (Barrett & Berman, 2001). Additionally, the use of metaphor, both patient and therapist, may improve the patients ability to discuss family conflicts. Communicating through metaphor allows the patient to communicate this information in an indirect and safe way, increasing their willingness to share (Liu et al., 2014). While the limits to confidentiality and privacy were discussed with both Chomden and her father, it is possible that taking additional time to discuss such limits and emphasizing that information shared with the therapist would not be shared to outside sources would have improved the trust with the therapist. Additionally, the clinician did not strategically use self-disclosure to build trust, which if done in a therapeutically appropriate manner, may have also increased trust and ultimately

Chomden's comfort to share information. Lastly, metaphors were occasionally used in session to convey complex ideas in a simplified way, however Chomden was not encouraged to also use metaphors. If the use of metaphor was more frequent and Chomden was also encouraged to use metaphor, she may have felt more comfortable to share information related to family conflict sooner in therapy.

One possibility, considering the number of the issues described above, is that family-based interventions, as opposed to individual, may have produced more positive outcomes for Chomden. Although there is a shortage of literature focusing on family interventions for refugees, the research that does exist suggests positive outcomes. Given the impact of trauma exposure and intergenerational transmission of trauma, there is a great need for family support (Slobodin & de Jong, 2015). In addition to trauma exposure, relocation and acculturative stress add additional difficulties to parenting and family relations which may contribute to parent-child conflict or parental withdrawal (Ballard et al., 2020; Lewig et al., 2010). There is preliminary evidence to suggest parent training interventions produce positive outcomes while considering the complex experiences of refugees (Ballard et al., 2018). Culturally relevant parent training interventions for Karen Burmese refugees decreased mental health concerns for parents and children ages 5-13, while positively changing parenting practices. This shift in parenting practices may have enabled parents to support better emotional health. Chomden's experience of feeling unloved, emotionally unsupported, and possible parental emotional withdrawal suggest parent training interventions may have produced more positive outcomes.

In addition to directly improving parent-child relationships, parent training may also improve perfectionism. In Asian American families, an increase in parental support and decrease in parental criticism, particularly as it relates to academic achievement, may also serve to



decrease perfectionism (Greenberger et al., 2000; Yoon & Lau, 2008). This indicates that parent training interventions may directly improve adolescent mental health, while indirectly improving it via decreases in perfectionism. Additionally, decreases in perfectionism would also improve the therapeutic relationship in individual therapy.

It is important to discuss the differences between patient and therapist characteristics and the possible impact it had on treatment outcomes. Chomden was a Burmese, Christian, heterosexual female. The clinician identified as a white, heterosexual female. Patient preferences in regard to therapist characteristics are especially important to consider when working with individuals who have experienced marginalization and other disparities, which Chomden had reported (Jackson, 2015). Some studies have found that Asian Americans are more likely to utilize mental health services when clinicians are the same ethnicity or race (Wu & Windle, 1980). Asian Americans who do show preferences for same-race therapist are more likely to have additional vulnerability factors such as being female, foreign-born, or low acculturation (Jang et al., 2021). Additionally, Asian Americans who adhere highly to Asian cultural values have been found to view Asian American therapists as being more credible and approachable, compared to their white counterparts (Atkinson et al., 1978; Kim & Atkinson, 2002). Despite showing preferences for same-race or ethnicity clinicians, there is not consistent evidence to suggest it significantly impacts treatment outcomes (Ilagan & Heatherington, 2022). Although treatment outcomes may not significantly differ, it is possible that therapy engagement, therapeutic alliance, and retention significantly improves with race/ethnicity-matching for Asian Americans (Smith & Trimble, 2016).

In terms of gender matching, female patients show higher preferences for and report greater comfort self-disclosing to female clinicians (Kuusisto & Artkoski, 2013; Landes et al.,

2013). Similar to race-matching, gender-matching demonstrates inconsistent findings in regard to improving treatment outcomes (Ilgan & Heatherington, 2022). This suggests that while Chomden having a female clinician may have improved self-disclosure and sharing, it is unlikely to have significantly affected overall treatment outcomes. Additionally, having a clinician who was also Asian American may have improved other therapeutic factors such as engagement and alliance; however, the literature suggests that it is unlikely it would have directly, significantly improved treatment outcomes for Chomden. However, due to the possibility that the alliance was weakened by other factors, like perfectionism and insecure attachment, a same-race therapist may have improved the alliance enough to improve treatment outcomes.

Limitations to this case study include low generalizability, given it is a single-case subject research design (Tsang, 2014). While conclusions can be formed for the effectiveness of treatment for this specific patient, no such conclusions can be formed for Burmese refugees as a whole (Janosky, 2005). Other limitations include that only pre- and post-treatment data was collected, which is less desirable compared to continuous daily or weekly ratings which allow for additional inferences to be formed (Kazdin, 2019).

Future studies, both group and case studies, should focus on treatment outcomes for Burmese refugees given the lack of literature that exists for this group. Refugee status and the complex experiences associated with it, such as relocation, acculturative stress, and traumatic experiences, all contribute toward the mental health of these individuals. When considering the state of civil unrest, with the most recent event being the Myanmar (Burma) coup in early 2021, it is likely that these experiences, and need for treatment, will continue (Thein-Lemelson, 2021). As mental health research continues to be pushed to expand and focus on diverse and

marginalized populations, the Burmese population deserves special attention within this initiative (Bibbins-Domingo et al., 2022).

### References

- Akhtar, Z. (2012). Attachment styles of adolescents: Characteristics and contributing factors. *Academic Research International*, 2(2), 613.
- Alimehdi, M., Ehteshamzadeh, P., Naderi, F., Eftekharsaadi, Z., & Pasha, R. (2016). The effectiveness of mindfulness-based stress reduction on intolerance of uncertainty and anxiety sensitivity among individuals with generalized anxiety disorder. *Asian Social Science*, 12(4), 179-87.
- Anderson, A. M., & Kim, C. (2003). Evaluating Treatment Efficacy with Single-Case Designs. In Michael C. Roberts & Stephen S. Iardi (Eds.), *Handbook of Research Methods in Clinical Psychology*. (pp. 72-91). Blackwell Publishing Ltd.  
<https://doi.org/10.1002/9780470756980>
- Anderson, J. R., Aducci, C. J., Adams, R. D., Johnson, M. D., Liu, W., Zheng, F., & Ratcliffe, G. C. (2012). Marital therapy in Mainland China: A qualitative study of young adults' knowledge, attitudes, and beliefs. *Journal of Family Psychotherapy*, 23(3), 238-254.
- Arroll, B., Goodyear-Smith, F., Crengle, S., Gunn, J., Kerse, N., Fishman, T., Falloon, K., & Hatcher, S. (2010). Validation of PHQ-2 and PHQ-9 to screen for major depression in the primary care population. *The annals of family medicine*, 8(4), 348-353.
- Asian Learning Center of Indiana (2011). Burmese resources and tools. Retrieved from  
<https://asianlearningcenter.org/burmese-sp.php>
- Atkinson, D. R., Maruyama, M., & Matsui, S. (1978). Effects of counselor race and counseling approach on Asian Americans' perceptions of counselor credibility and utility. *Journal of Counseling Psychology*, 25(1), 76.

- Avenevoli, S., Knight, E., Kessler, R. C., & Merikangas, K. R. (2008). Epidemiology of depression in children and adolescents. In J. R. Z. Abela & B. L. Hankin (Eds.), *Handbook of depression in children and adolescents* (pp. 6–32). *The Guilford Press*.
- Bachelor, A., Meunier, G., Laverdière, O., & Gamache, D. (2010). Client attachment to therapist: Relation to client personality and symptomatology, and their contributions to the therapeutic alliance. *Psychotherapy: Theory, Research, Practice, Training*, 47(4), 454.
- Baker, H. J., Lawrence, P. J., Karalus, J., Creswell, C., & Waite, P. (2021). The effectiveness of psychological therapies for anxiety disorders in adolescents: a meta-analysis. *Clinical child and family psychology review*, 24(4), 765-782.
- Ballard, J., Wieling, E., & Dwanyen, L. (2020). Parenting Practices in the Karen Refugee Community. *Contemporary Family Therapy*, 42, 95-107.
- Ballard, J., Wieling, E., & Forgatch, M. (2018). Feasibility of implementation of a parenting intervention with Karen refugees resettled from Burma. *Journal of marital and family therapy*, 44(2), 220-234.
- Barrett, M. S., & Berman, J. S. (2001). Is psychotherapy more effective when therapists disclose information about themselves? *Journal of Consulting and Clinical Psychology*, 69(4), 597–603.
- Bawi, S. V. (2015). Chin Ethnic Identity and Chin Politic in Myanmar. Unpublished paper presented in Asia Pacific Sociological Association Conference held in.
- Beck, A. T., Emery, G., & Greenberg, R. L. (2005). *Anxiety disorders and phobias: A cognitive perspective*. Basic books.

- Beck, J. S. (2005). *Cognitive therapy for challenging problems: What to do when the basics don't work*. New York: Guilford Press.
- Beck, J. S. (2020). *Cognitive behavior therapy: Basics and beyond*. Guilford Publications.
- Behar, E., DiMarco, I. D., Hekler, E. B., Mohlman, J., & Staples, A. M. (2009). Current theoretical models of generalized anxiety disorder (GAD): Conceptual review and treatment implications. *Journal of anxiety disorders*, 23(8), 1011-1023.
- Beretvas, S. N., & Chung, H. (2008). A review of meta-analyses of single-subject experimental designs: Methodological issues and practice. *Evidence-Based Communication Assessment and Intervention*, 2(3), 129-141.
- Bibbins-Domingo, K., Helman, A., & Dzau, V. J. (2022). The imperative for diversity and inclusion in clinical trials and health research participation. *JAMA*, 327(23), 2283-2284.
- Blatt, S.J. (1992). The differential effect of psychotherapy and psychoanalysis on anaclitic and introjective patients: the Menninger Psychotherapy Research Project revisited. *Journal of the American Psychoanalytic Association*, 40, 691-724.
- Blatt, S.J., & Ford, R.Q. (1994). *Therapeutic change: an object relation perspective*. New York: Plenum Press.
- Bolton, P., Lee, C., Haroz, E. E., Murray, L., Dorsey, S., Robinson, C., Ugueto, A. M., & Bass, J. (2014). A transdiagnostic community-based mental health treatment for comorbid disorders: development and outcomes of a randomized controlled trial among Burmese refugees in Thailand. *PLoS medicine*, 11(11), e1001757.
- Borckardt, J. J., Nash, M. R., Greenman, R., Simon, V., & Cardeña, E. (2002). How practitioners (and others) can make scientifically viable contributions to clinical-outcome research using the single-case time-series design. *International Journal of Clinical and Experimental*

*Hypnosis*, 50(2), 114–148. <https://doi.org/10.1080/00207140208410095>

Borckardt, J. J., Nash, M. R., Murphy, M. D., Moore, M., Shaw, D., & O’Neil, P. (2008).

Clinical Practice as Natural Laboratory for Psychotherapy Research: A Guide to Case-Based Time-Series Analysis. *American Psychologist*, 63(2), 77–95.

<https://doi.org/10.1037/0003-066X.63.2.77>

Borkovec, T. D., Alcaine, O. M., & Behar, E. (2004). Avoidance theory of worry and generalized anxiety disorder. In: R. Heimberg, C. Turk, & D. Mennin (Eds.), *Generalized anxiety disorder: advances in research and practice* (pp. 77–108). New York, NY, US: Guilford Press.

Bourdon, K. H., Rae, D. S., Locke, B. Z., Narrow, W. E., & Regier, D. A. (1992). Estimating the prevalence of mental disorders in US adults from the Epidemiologic Catchment Area Survey. *Public health reports*, 107(6), 663.

Bowlby, J. (1988). Developmental psychiatry comes of age. *The American journal of psychiatry*.

Breines, J. G., & Chen, S. (2012). Self-compassion increases self-improvement motivation.

*Personality and Social Psychology Bulletin*, 38(9), 1133–1143.

Burnett, A. and Gebremikael, L. (2005). Expanding the Primary Mental Health Team for Refugees and Asylum Seekers. *Primary Care Mental Health* 3:77–81.

Chapa, T. (2004). Mental health services in primary care settings for racial and ethnic minority populations. Rockville, MD: US Department of Health and Human Services, Office of Minority Health, 1-30.

Cheung, P. T., Curren, L. C., Coyne, L. W., Pincus, D. B., & Tompson, M. C. (2021). Treating Pediatric Generalized Anxiety Disorder with Mindfulness: A Case Series. *Evidence-Based Practice in Child and Adolescent Mental Health*, 6(2), 191-210.

Chung, A. Y. (2016). *Saving face: The emotional costs of the Asian immigrant family myth*. Rutgers University Press.

Compton, S. N., March, J. S., Brent, D., Albano, A. M., Weersing, V. R., & Curry, J. (2004). Cognitive-behavioral psychotherapy for anxiety and depressive disorders in children and adolescents: an evidence-based medicine review. *Journal of the American Academy of Child & Adolescent Psychiatry*, 43(8), 930-959.

Contreras, N. (2021, April 13). How Indiana's Burmese community is leading a movement for democracy. *Indianapolis Star*.

<https://www.indystar.com/story/news/local/indianapolis/2021/04/13/myanmar-coup-indiana-burmese-community-leads-efforts-help/4803320001/>

Cooke, J. E., Racine, N., Plamondon, A., Tough, S., & Madigan, S. (2019). Maternal adverse childhood experiences, attachment style, and mental health: pathways of transmission to child behavior problems. *Child abuse & neglect*, 93, 27-37.

Costello, E. J., Mustillo, S., Erkanli, A., Keeler, G., & Angold, A. (2003). Prevalence and development of psychiatric disorders in childhood and adolescence. *Archives of general psychiatry*, 60(8), 837-844. K. New York, Oxford University Press, 2004, pp 111–128

Covelman, K. W., & Covelman, S. (1993). Saving face: A neglected dynamic in couples and family therapy. *The Family Journal*, 1(4), 331-336.

Crane, C., Martin, M., Johnston, D., & Goodwin, G. M. (2003). Does depression influence symptom severity in irritable bowel syndrome? Case study of a patient with irritable bowel syndrome and bipolar disorder. *Psychosomatic medicine*, 65(5), 919-923.

Creswell, C., Waite, P., & Hudson, J. (2020). Practitioner Review: Anxiety disorders in children and young people—assessment and treatment. *Journal of Child Psychology and Psychiatry*,



61(6), 628-643.

Crowe, S., Cresswell, K., Robertson, A., Huby, G., Avery, A., & Sheikh, A. (2011). The case study approach. *BMC Medical Research Methodology*, *11*. [https://doi.org/10.1186/1471-](https://doi.org/10.1186/1471-2288-11-100)

2288-11-100

Crowe, K., & McKay, D. (2017). Efficacy of cognitive-behavioral therapy for childhood anxiety and depression. *Journal of Anxiety Disorders*, *49*, 76-87.

David, D., & Cristea, I. (2018). The new great psychotherapy debate: Scientific integrated psychotherapy vs. plurality. Why cognitive-behavior therapy is the gold standard in psychotherapy and a platform for scientific integrated psychotherapy. *Journal of Evidence-Based Psychotherapies*, *18*(2), 1.

Delgadillo, J., Dawson, A., Gilbody, S., & Böhnke, J. R. (2017). Impact of long-term medical conditions on the outcomes of psychological therapy for depression and anxiety. *The British Journal of Psychiatry*, *210*(1), 47-53.

Denzin, N. K., & Lincoln, Y. S. (1994). *Handbook of qualitative research*. Thousand Oaks, CA: SAGE.

Diamond, G. M. (2014). Attachment-based family therapy interventions. *Psychotherapy*, *51*(1), 15–19. doi:10.1037/a0032689.

Diamond, G., Creed, T., Gillham, J., Gallop, R., & Hamilton, J. L. (2012). Sexual trauma history does not moderate treatment outcome in Attachment-Based Family Therapy (ABFT) for adolescents with suicide ideation. *Journal of Family Psychology*, *26*(4), 595.

Diamond, G., Russon, J., & Levy, S. (2016). Attachment-based family therapy: A review of the empirical support. *Family Process*, *55*(3), 595-610.

- Diamond, G. S., Wintersteen, M. B., Brown, G. K., Diamond, G. M., Gallop, R., Shelef, K. et al. (2010). Attachment-based family therapy for adolescents with suicidal ideation: A randomized controlled trial. *Journal of the American Academy of Child & Adolescent Psychiatry*, 49(2), 122–131. doi:10.1016/j.jaac.2009.11.002.
- Diener, M. J., & Monroe, J. M. (2011). The relationship between adult attachment style and therapeutic alliance in individual psychotherapy: a meta-analytic review. *Psychotherapy*, 48(3), 237.
- Duffy, F., Sharpe, H., & Schwannauer, M. (2019). The effectiveness of interpersonal psychotherapy for adolescents with depression—a systematic review and meta-analysis. *Child and adolescent mental health*, 24(4), 307-317.
- Dunn, V., & Goodyer, I. M. (2006). Longitudinal investigation into childhood-and adolescence-onset depression: psychiatric outcome in early adulthood. *The British Journal of Psychiatry*, 188(3), 216-222.
- Earley, L., & Cushway, D. (2002). The parentified child. *Clinical child psychology and psychiatry*, 7(2), 163-178.
- Epstein, N. B., Berger, A. T., Fang, J. J., Messina, L. A., Smith, J. R., Lloyd, T. D., ... & Liu, Q. X. (2012). Applying Western-developed family therapy models in China. *Journal of Family Psychotherapy*, 23(3), 217-237.
- Evason, N. (2017). *Myanmar (Burmese) Culture: Core Concepts*. Cultural Atlas. <https://culturalatlas.sbs.com.au/myanmar-burmese-culture/burmese-myanmar-culture-core-concepts#>

- Farrell, L. J., & Barrett, P. M. (2007). Prevention of childhood emotional disorders: Reducing the burden of suffering associated with anxiety and depression. *Child and Adolescent Mental Health*, 12, 58–65.
- Fike, D. C., & Androff, D. K. (2016). “The pain of exile”: What social workers need to know about Burmese refugees. *Social work*, 61(2), 127-135.
- Flanagan, N., Travers, A., Vallières, F., Hansen, M., Halpin, R., Sheaf, G., ... & Johnsen, A. T. (2020). Crossing borders: a systematic review identifying potential mechanisms of intergenerational trauma transmission in asylum-seeking and refugee families. *European journal of psychotraumatology*, 11(1), 1790283.
- Flyvbjerg, B. (2006). Five misunderstandings about case-study research. *Qualitative Inquiry*, 12(2), 219–245. <https://doi.org/10.1177/1077800405284363>
- George, M. (2010). A theoretical understanding of refugee trauma. *Clinical Social Work Journal*, 38, 379–387. <http://dx.doi.org/10.1007/s10615-009-0252-y>
- Gergov, V., Marttunen, M., Lindberg, N., Lipsanen, J., & Lahti, J. (2021). Therapeutic alliance: A comparison study between adolescent patients and their therapists. *International Journal of Environmental Research and Public Health*, 18(21), 11238.
- Gerring, J. (2007). The case study: what it is and what it does. In Boix, C. and Stokes, S.C. (eds), *Oxford Handbook of Comparative Politics*. New York, NY: Oxford University Press, pp. 90–122.
- Gibbert, M., Ruigrok, W., & Wicki, B. (2008). What passes as a rigorous case study? *Strategic Management Journal*, 29(13), 1465–1474. <https://doi.org/10.1002/smj.722>
- Gilbert, P. (2009). Introducing compassion-focused therapy. *Advances in psychiatric treatment*, 15(3), 199-208.

- Gilbert, P. (2010). An introduction to compassion focused therapy in cognitive behavior therapy. *International Journal of Cognitive Therapy, 3*(2), 97–112.
- Gilbert, P. (2010). *Compassion focused therapy: Distinctive features*. Routledge.
- Gilbert, P., & Procter, S. (2006). Compassionate mind training for people with high shame and self-criticism: Overview and pilot study of a group therapy approach. *Clinical Psychology and Psychotherapy, 13*(6), 353–379.
- Greenberger, E., Chen, C., Tally, S. R., & Dong, Q. (2000). Family, peer, and individual correlates of depressive symptomatology among U.S. and Chinese adolescents. *Journal of Consulting and Clinical Psychology, 68*, 209–219.
- Halvorson, M. A., & Humphreys, K. (2015) A Review of the Nature and Impact of Exclusion Criteria in Depression Treatment Outcome Research. *Annals of Depression and Anxiety, 2*(5): 1058.
- Harvard Divinity School. (2018). Religious Literacy Project.
- Henry, T. L., Jetty, A., Petterson, S., Jaffree, H., Ramsay, A., Heiman, E., & Bazemore, A. (2020). Taking a closer look at mental health treatment differences: Effectiveness of mental health treatment by provider type in racial and ethnic minorities. *Journal of primary care & community health, 11*, 2150132720966403.
- Hewitt, P.L., Habke, A.M., Lee-Baggley, D.L., Sherry, S.B., Flett, G.L. (2008). The impact of perfectionistic self-presentation on the cognitive, affective, and physiological experience of a clinical interview. *Psychiatry: Interpersonal and Biological Processes, 71*, 93-122.
- Hickey, M. G. (2007). Burmese refugees' narratives of cultural change. *Asian American education: Acculturation, literacy development, and learning, 25-53*.

- Higa-McMillan, C. K., Francis, S. E., Rith-Najarian, L., & Chorpita, B. F. (2016). Evidence base update: 50 years of research on treatment for child and adolescent anxiety. *Journal of Clinical Child & Adolescent Psychology*, 45(2), 91-113.
- Hill, C. E., Helms, J. E., Tichenor, V., Spiegel, S. B., O'Grady, K. E., & Perry, E. S. (2001). Effects of therapist response modes in brief psychotherapy. In C. E. Hill (Ed.), *Helping skills: The empirical foundation* (pp. 61–86). American Psychological Association.
- Hill, C. E., & Knox, S. (2001). Self-disclosure. *Psychotherapy: Theory, Research, Practice, Training*, 38(4), 413.
- Hill, C., Waite, P., & Creswell, C. (2016). Anxiety disorders in children and adolescents. *Paediatrics and Child Health*, 26(12), 548-553.
- Hovey, J. D., & Magana, C. G. (2002). Exploring the mental health of Mexican migrant farm workers in the Midwest: Psychosocial predictors of Psychological distress and suggestions for prevention and treatment. *Journal of Psychology: Interdisciplinary and Applied*, 136, 493-513.
- Hwang, T. J., Rabheru, K., Peisah, C., Reichman, W., & Ikeda, M. (2020). Loneliness and social isolation during the COVID-19 pandemic. *International psychogeriatrics*, 32(10), 1217–1220. <https://doi.org/10.1017/S1041610220000988>
- Ilagan, G. S., & Heatherington, L. (2022). Advancing the understanding of factors that influence client preferences for race and gender matching in psychotherapy. *Counselling Psychology Quarterly*, 35(3), 694-717.
- Imran, N., Haider, I. I., & Azeem, M. W. (2017). Generalized anxiety disorder in children and adolescents: An update. *Psychiatric Annals*, 47(10), 497-501.
- Indiana State Department of Health. (2014). Refugee report federal fiscal year 2014. Retrieved

from [http://www.in.gov/isdh/files/Refugee\\_Report\\_Final\\_2015.pdf](http://www.in.gov/isdh/files/Refugee_Report_Final_2015.pdf)

- Islam, M. S., Ferdous, M. Z., & Potenza, M. N. (2020). Panic and generalized anxiety during the COVID-19 pandemic among Bangladeshi people: An online pilot survey early in the outbreak. *Journal of affective disorders*, 276, 30-37.
- Israel, P., & Diamond, G. S. (2013). Feasibility of attachment based family therapy for depressed clinic-referred Norwegian adolescents. *Clinical child psychology and psychiatry*, 18(3), 334-350.
- Jackson, V. H. (2015). Practitioner characteristics and organizational contexts as essential elements in the evidence-based practice versus cultural competence debate. *Transcultural Psychiatry*, 52(2), 150–173, p. 2.
- Jacobson, N. S., Follette, W C, & Revenstorf, D. (1984). Psychotherapy outcome research: Methods for reporting variability and evaluating clinical significance. *Behavior Therapy*, 15, 336-352.
- Jacobson, N. S., & Truax, P. (1991). Clinical significance: A statistical approach to defining meaningful change in psychotherapy research. *Journal of Consulting and Clinical Psychology*, 59(1), 12–19. <https://doi.org/10.1037/0022-006X.59.1.12>
- James, A. C., Reardon, T., Soler, A., James, G., & Creswell, C. (2020). Cognitive behavioural therapy for anxiety disorders in children and adolescents. *Cochrane Database of Systematic Reviews*. <https://doi.org/10.1002/14651858.CD013162.pub2>
- Jang, Y., Yoon, H., Kim, M. T., Park, N. S., & Chiriboga, D. A. (2021). Preference for patient–provider ethnic concordance in Asian Americans. *Ethnicity & health*, 26(3), 448-459.
- Janosky, J. E. (2005). Use of the single subject design for practice based primary care research. *Postgraduate medical journal*, 81(959), 549-551.

- Jetty, A., Petterson, S., Westfall, J. M., & Jabbarpour, Y. (2021). Assessing primary care contributions to behavioral health: a cross-sectional study using medical expenditure panel survey. *Journal of Primary Care & Community Health*, 12, 21501327211023871.
- Jim, J., & Pistrang, N. (2007). Culture and the therapeutic relationship: Perspectives from Chinese clients. *Psychotherapy Research*, 17(4), 461-473.
- Kazdin, A. E. (1978). Methodological and interpretive problems of single-case experimental designs. *Journal of Consulting and Clinical Psychology*, 46(4), 629–642. <https://doi.org/10.1037/0022-006X.46.4.629>
- Kazdin, A. E. (1981). Drawing Valid Inferences From Case Studies. In *Journal of Consulting and Clinical Psychology* (Vol. 49, Issue 2).
- Kazdin, A. E. (1992). *Research design in clinical psychology* (2nd ed.). Boston: Allyn & Bacon.
- Kazdin, A. E. (2006) Arbitrary metrics: implications for identifying evidence-based treatments. *Am Psychol*. Jan;61(1):42-9; discussion 62-71. doi: 10.1037/0003-066X.61.1.42. PMID: 16435975.
- Kazdin, A. E. (2011). *Single-case research designs: Methods for clinical and applied settings* (2nd ed.). Oxford University Press.
- Kazdin, A. E. (2019). Single-case experimental designs. Evaluating interventions in research and clinical practice. *Behaviour research and therapy*, 117, 3-17.
- Kazdin, A. E., Weisz, J. R. Identifying and developing empirically supported child and adolescent treatments. *J Consult Clin Psychol*. 1998 Feb;66(1):19-36. doi: 10.1037//0022-006x.66.1.19. PMID: 9489260.
- Kelly, A., Katan, A., Sosa Hernandez, L., Nightingale, B., & Geller, J. (2021). Why would I want to be more self-compassionate? A qualitative study of the pros and cons to

- cultivating self-compassion in individuals with anorexia nervosa. *British Journal of Clinical Psychology*, 60(1), 99–115.
- Kendall, P. C., Cantwell, D. P., & Kazdin, A. E. (1989). Depression in children and adolescents: Assessment issues and recommendations. *Cognitive Therapy and Research*, 13(2), 109–146.
- Kendall, P. C., Marrs-Garcia, A., Nath, S. R., & Sheldrick, R. C. (1999). Normative comparisons for the evaluation of clinical significance. *Journal of Consulting and Clinical Psychology*, 67(3), 285–299. <https://doi.org/10.1037/0022-006X.67.3.285>
- Kendall, P. C., & Peterman, J. S. (2015). CBT for adolescents with anxiety: Mature yet still developing. *American Journal of Psychiatry*, 172(6), 519–530.
- Kessler, R. C., Chiu, W. T., Demler, O., Merikangas, K. R., & Walters, E. E. (2005). Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of general psychiatry*, 62(6), 617–627. <https://doi.org/10.1001/archpsyc.62.6.617>
- Kessler, R. C., Wai, T. C., Demler, O., & Walters, E. E. (2005). Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry*, 62(6), 617–627. <https://doi.org/10.1001/archpsyc.62.6.617>
- Kim, I. (2018). Behavioral health symptoms among refugees from Burma: Examination of sociodemographic and migration-related factors. *Asian American Journal of Psychology*, 9(3), 179.
- Kim, B. S., & Atkinson, D. R. (2002). Asian American client adherence to Asian cultural values, counselor expression of cultural values, counselor ethnicity, and career counseling process.



*Journal of Counseling Psychology*, 49(1), 3.

- Kim, I., & Keovisai, M. (2016). Burmese Community Behavioral Health Survey final report: Overview of the study findings (Brief Report No. 2016–2). Buffalo, New York: Immigrant and Refugee Research Institute, School of Social Work, University at Buffalo. Retrieved from <https://socialwork.buffalo.edu/content/dam/socialwork/social-research/IRRI/BCBHS-2016-Final-Report-Overview.pdf>
- Kim, W., Yalim, A. C., & Kim, I. (2021). “Mental Health Is for Crazy People”: Perceptions and Barriers to Mental Health Service Use among Refugees from Burma. *Community mental health journal*, 57, 965-972.
- Kirk, J., & Miller, M. L. (1986). Reliability and validity in qualitative research. Beverly Hills: Sage Publications.
- Kirmayer, L., Narasiah, L., Munoz, M., Rashid, M., Ryder, A., Guzder, J., & Pottie, K. (2011). Common mental health problems in immigrants and refugees: General approach in primary care. *Canadian Medical Association Journal*, 183, E959–E967. doi:10.1503/cmaj.090292
- Kodal, A., Fjermestad, K., Bjelland, I., Gjestad, R., Öst, L. G., Bjaastad, J. F., Haugland, B.S., Havik, O.E., Heiervang, E., & Wergeland, G. J. (2018). Long-term effectiveness of cognitive behavioral therapy for youth with anxiety disorders. *Journal of anxiety disorders*, 53, 58-67.
- Kroenke, K., Spitzer, R. L., & Williams, J. B. (2001). The PHQ-9: validity of a brief depression severity measure. *Journal of general internal medicine*, 16(9), 606-613.
- Kumar, R. (2021). Refugee articulations of health: A culture-centered exploration of Burmese refugees’ resettlement in the United States. *Health communication*, 36(6), 682-692.
- Kuusisto, K., & Artkoski, T. (2013). The female therapist and the client’s gender. *Clinical*

*Nursing Studies*, 1(3), 39–56.

Lalhriatpuii, F., & Shyamkishor, A. (2019). Understanding the Local Government in Myanmar with Special Reference to Chin State. *Mizoram University Journal of Humanities & Social Sciences*, 5(1), 2395-7352.

Lambert, M. J., Hansen, N. B., & Bauer, S. (2008). Assessing the clinical significance of outcome results. In A. M. Nezu & C. M. Nezu (Eds.), *Evidence-based outcome research: A practical guide to conducting randomized controlled trials for psychosocial interventions* (pp. 359-378). New York, NY: Oxford University Press.

Landes, S. J., Burton, J. R., King, K. M., & Sullivan, B. F. (2013). Women's preference of therapist based on sex of therapist and presenting problem: An analog study. *Counselling Psychology Quarterly*, 26 (3–4), 330–342.

Leahy, R. L., Holland, S. J., & McGinn, L. K. (2011). Treatment plans and interventions for depression and anxiety disorders. Guilford press.

Lee, S., Juon, H. S., Martinez, G., Hsu, C. E., Robinson, E. S., Bawa, J., & Ma, G. X. (2009). Model minority at risk: Expressed needs of mental health by Asian American young adults. *Journal of community health*, 34, 144-152.

Lewig, K., Arney, F., & Salverson, M. (2010). Challenges to parent- ing in a new culture: Implications for child and family welfare. *Evaluation Program Planning*.  
<https://doi.org/10.1016/j.evalprogplan.2009.05.002>.

Lewis, C. C., Simons, A. D., Nguyen, L. J., Muakami, J. L., Reid, M. W., Silva, S. G., & March, J. S. (2010). Impact of childhood trauma on treatment outcome in the Treatment for Adolescents with Depression Study (TADS). *Journal of the American Academy of Child Adolescent Psychiatry*, 49, 132–140. doi:10.1097/00004583-201002000-00007'

- Lewis, D. (2019). Humanitarianism, civil society and the Rohingya refugee crisis in Bangladesh. *Third World Quarterly*, 40(10), 1884-1902.
- Lenz, A. S. (2013). Calculating effect size in single-case research: A comparison of nonoverlap methods. *Measurement and Evaluation in Counseling and Development*, 46(1), 64-73.
- Lingiardi, V., Filippucci, L., & Baiocco, R. (2005). Therapeutic alliance evaluation in personality disorders psychotherapy. *Psychotherapy Research Special Issue: The Therapeutic Relationship*, 15, 45-53.
- Liu, L., Zhao, X., & Miller, J. K. (2014). Use of metaphors in Chinese family therapy: a qualitative study. *Journal of Family Therapy*, 36, 65-85.
- Mariotti, E. C., Bolden, J., & Finn, M. (2020). Unifying treatment for mild anxiety and depression in preadolescence. *Psychotherapy*.
- Mastropieri, M. A., & Scruggs, T. E. (1985-1986). Early intervention for socially withdrawn children. *The Journal of Special Education*, 19(4), 429-441. <https://doi.org/10.1177/002246698501900407>
- Maughan, B., Collishaw, S., & Stringaris, A. (2013). Depression in childhood and adolescence. *Journal of the Canadian Academy of Child and Adolescent Psychiatry*, 22(1), 35-40.
- Mewton, L., Wong, N., & Andrews, G. (2012). The effectiveness of internet cognitive behavioural therapy for generalized anxiety disorder in clinical practice. *Depression and Anxiety*, 29(10), 843-849.
- Mikulincer, M., Shaver, P. R., & Pereg, D. (2003). Attachment theory and affect regulation: The dynamics, development, and cognitive consequences of attachment-related strategies. *Motivation and emotion*, 27, 77-102.

- Miyagawa, Y., Taniguchi, J., & Niiya, Y. (2018). Can self-compassion help people regulate unattained goals and emotional reactions toward setbacks? *Personality and Individual Differences, 134*, 239–244.
- Miller, L., Hlastala, S. A., Mufson, L., Leibenluft, E., & Riddle, M. (2016). Interpersonal Psychotherapy for Adolescents With Mood and Behavior Dysregulation: Evidence-Based Case Study. *Evidence-based practice in child and adolescent mental health, 1*(4), 159–175. <https://doi.org/10.1080/23794925.2016.1247679>
- Morgan, D. L., Morgan, R. K. (2001). Single-participant research design: Bringing science to managed care. *Am Psychol.* 2001 Feb;56(2):119-27. PMID: 11279805.
- Morina, N., Schnyder, U., Schick, M., Nickerson, A., & Bryant, R. A. (2016). Attachment style and interpersonal trauma in refugees. *Australian & New Zealand Journal of Psychiatry, 50*(12), 1161-1168.
- Morris, M. D., Popper, S. T., Rodwell, T. C., Brodine, S. K., & Brouwer, K. C. (2009). Healthcare barriers of refugees post-resettlement. *Journal of Community Health, 34*(6), 529–538. <https://doi.org/10.1093/bjsw/bcw076>.
- Mossman, S. A., Luft, M. J., Schroeder, H. K., Varney, S. T., Fleck, D. E., Barzman, D. H., ... & Strawn, J. R. (2017). The Generalized Anxiety Disorder 7-item (GAD-7) scale in adolescents with generalized anxiety disorder: signal detection and validation. *Journal of the American Academy of Clinical Psychiatrists, 29*(4), 227.
- Mufson, L., Dorta, K. P., Wickramaratne, P., Nomura, Y., Olfson, M., & Weissman, M. M. (2004). A randomized effectiveness trial of interpersonal psychotherapy for depressed adolescents. *Archives of general psychiatry, 61*(6), 577-584.

- Nash, M. R. (2005). Practice-Research Integrative Project. Unpublished manuscript, University of Tennessee, Knoxville, Tennessee.
- Nash, M. R., Borckardt, J. J., Abbasa, A., & Gray, E. (2011). How to conduct and statistically analyze case-based time series studies, one patient at a time. *Journal of Experimental Psychopathology*, 2(2), 139-169.
- Ngo-Metzger, Q., Legedza, A. T., & Phillips, R. S. (2004). Asian Americans' reports of their health care experiences. Results of a national survey. *Journal of general internal medicine*, 19(2), 111–119. <https://doi.org/10.1111/j.1525-1497.2004.30143.x>
- Noom, S. H., & Vergara, M. B. (2011). Acculturative stress, self-esteem, and coping among Burmese female migrant workers. *3<sup>rd</sup> International Conference on Humanities and Social Sciences*. Prince of Songkla University.
- Odgers, K., Dargue, N., Creswell, C., Jones, M. P., & Hudson, J. L. (2020). The limited effect of mindfulness-based interventions on anxiety in children and adolescents: A meta-analysis. *Clinical child and family psychology review*, 23(3), 407-426.
- Olfson, M. (2016). The rise of primary care physicians in the provision of US mental health care. *Journal of Health Politics, Policy and Law*, 41(4), 559-583.
- Olive, M. L., & Franco, J. H. (2008). (Effect) size matters: And so does the calculation. *The Behavior Analyst Today*, 9(1), 5.
- O'Mahony, J., & Donnelly, T. (2010). Immigrant and refugee women's post-partum depression and help-seeking experiences and access to care: A review and analysis of the literature. *Journal of Psychiatric and Mental Health Nursing*, 17, 917–928. doi:10.1111/j.1365-2850.2010 .01625.x

- Özcan, N. K., Boyacıoğlu, N. E., Enginkaya, S., Bilgin, H., & Tomruk, N. B. (2016). The relationship between attachment styles and childhood trauma: a transgenerational perspective—a controlled study of patients with psychiatric disorders. *Journal of Clinical Nursing, 25*(15-16), 2357-2366.
- Oznobishin, O., & Kurman, J. (2009). Parent-child role reversal and psychological adjustment among immigrant youth in Israel. *Journal of Family Psychology, 23*(3), 405–415.  
doi:10.1037/a0015811.
- Parker, R. I., Vannest, K. J., & Davis, J. L. (2011). Effect size in single-case research: A review of nine nonoverlap techniques. *Behavior Modification, 35*(4), 303-322.
- Patino, C. M., & Ferreira, J. C. (2018). Internal and external validity: can you apply research study results to your patients? *Brazilian Journal of Pulmonology, 44*(3), 183.  
<https://doi.org/10.1590/S1806-37562018000000164>
- Perdices, M., & Tate, R. L. (2009). Single-subject designs as a tool for evidence-based clinical practice: Are they unrecognized and undervalued?. *Neuropsychological rehabilitation, 19*(6), 904-927.
- Peng, S. S., & Wright, D. (1994). Explanation of academic achievement of Asian American students. *Journal of Educational Research, 87*, 346– 352.
- Richardson, L. P., Ludman, E., McCauley, E., Lindenbaum, J., Larison, C., Zhou, C., ... & Katon, W. (2014). Collaborative care for adolescents with depression in primary care: a randomized clinical trial. *Jama, 312*(8), 809-816.
- Richardson, L. P., McCauley, E., Grossman, D. C., McCarty, C. A., Richards, J., Russo, J. E., ... & Katon, W. (2010). Evaluation of the Patient Health Questionnaire-9 Item for detecting major depression among adolescents. *Pediatrics, 126*(6), 1117-1123.

- Richardson, L., McCauley, E., & Katon, W. (2009). Collaborative care for adolescent depression: a pilot study. *General Hospital Psychiatry*, 31(1), 36-45.
- Rith-Najarian, L. R., Mesri, B., Park, A. L., Sun, M., Chavira, D. A., & Chorpita, B. F. (2019). Durability of cognitive behavioral therapy effects for youth and adolescents with anxiety, depression, or traumatic stress: A meta-analysis on long-term follow-ups. *Behavior Therapy*, 50(1), 225-240.
- Rudolph, K. D., Constance, H., Burge, D., Lindbert, N., Herzberg, D., Dalie, S. E. (2000). Toward an interpersonal life-stress model of depression: the developmental context of stress generation. *Developmental Psychopathology* 12:215–234
- Saechao, F., Sharrock, S., Reicherter, D., Livingston, J. D., Aylward, A., Whisnant, J., et al. (2012). Stressors and barriers to using mental health services among diverse groups of first-generation immigrants to the United States. *Community Mental Health Journal*, 48(1), 98–106. <https://doi.org/10.1007/s10597-011-9419-4>.
- Sakolsky, D., & Birmaher, B. (2008). Pediatric anxiety disorders: management in primary care. *Current opinion in Pediatrics*, 20(5), 538-543.
- Schell, C. (1992). The Value of a Case Study as a Research Strategy.
- Scott, J., & Marshall, G. (2005). *A dictionary of sociology*. Oxford: Oxford University Press.
- Scruggs, T. E., & Mastropieri, M. A. (1998). Summarizing single-subject research. Issues and applications. *Behavior Modification*, 22(3), 221–242.  
<https://doi.org/10.1177/01454455980223001>
- Simons, G. R. & Fennig, C. (Eds.). (2017). *Ethnologue: Languages of the world*. (20th ed.). Dallas, TX: SIL International. Online version: <http://www.ethnologue.com>
- Simpson, J. A., Rholes, W. S., & Nelligan, J. S. (1992). Support seeking and support giving

within couples in an anxiety-provoking situation: The role of attachment styles. *Journal of Personality and Social Psychology*, 62(3), 434–446.

Singal, A. G., Higgins, P. D., & Waljee, A. K. (2014). A primer on effectiveness and efficacy trials. *Clinical and translational gastroenterology*, 5(1), e45.

<https://doi.org/10.1038/ctg.2013.13>

Slobodin, O., & de Jong, J. T. (2015). Family interventions in traumatized immigrants and refugees: a systematic review. *Transcultural Psychiatry*, 52(6), 723-742.

Smith, A. E., Msetfi, R. M., & Golding, L. (2010). Client self rated adult attachment patterns and the therapeutic alliance: A systematic review. *Clinical psychology review*, 30(3), 326-337.

Smith, J. D. (2012). Single-case experimental designs: A systematic review of published research and current standards. *Psychological Methods*, 17(4), 510–550.

<https://doi.org/10.1037/a0029312>

Smith, T. B., & Trimble, J. E. (2016). *Foundations of multicultural psychology: Research to inform effective practice*. Washington, DC: American Psychological Association.

Sonderegger, R., Barrett, P. M., & Creed, P. A. (2004). Models of cultural adjustment for child and adolescent migrants to Australia: Internal process and situational factors. *Journal of Child and Family Studies*, 13, 357-371.

Spirito, A., Esposito-Smythers, C., Wolff, J., & Uhl, K. (2011). Cognitive-behavioral therapy for adolescent depression and suicidality. *Child and Adolescent Psychiatric Clinics*, 20(2), 191-204.

Spitzer, R. L., Kroenke, K., Williams, J. B., & Löwe, B. (2006). A brief measure for assessing generalized anxiety disorder: the GAD-7. *Archives of internal medicine*, 166(10), 1092-



1097.

Steel, Z., Chey, T., Silove, D., Marnane, C., Bryant, R. A., & van Ommeren, M. (2009).

Association of torture and other potentially traumatic events with mental health outcomes among populations exposed to mass conflict and displacement: A systematic review and meta-analysis. *Journal of the American Medical Association*, 302, 537–549. <http://dx.doi.org/10.1001/jama.2009.1132>

Steinberg, D. (2013). *Burma/Myanmar: What everyone needs to know*®. Oxford University Press.

Stikkelbroek, Y., Boddien, D. H., Deković, M., & van Baar, A. L. (2013). Effectiveness and cost effectiveness of cognitive behavioral therapy (CBT) in clinically depressed adolescents: individual CBT versus treatment as usual (TAU). *BMC psychiatry*, 13(1), 1-10.

Strauss, C. C., Frame, C. L., & Forehand, R. (1987). Psychosocial impairment associated with anxiety in children. *Journal of clinical child psychology*, 16(3), 235-239.

Tan, V., McClellan, M., & Dobbs, L. R. (2014). US wraps up group resettlement for Myanmar refugees in Thailand. UNHCR. Retrieved from <http://www.unhcr.org/en-us/news/latest/2014/1/52e90f8f6/wraps-group-resettlement-myanmar-refugees-thailand.html>

Tate, R. L., McDonald, S., Perdices, M., Togher, L., Schultz, R., & Savage, S. (2008). Rating the methodological quality of single-subject designs and n-of-1 trials: Introducing the single-case experimental design (SCED) scale. *Neuropsychological Rehabilitation*, 18(4), 385–401. <https://doi.org/10.1080/09602010802009201>

Taylor, P. J., Rietzschel, J., Danquah, A., & Berry, K. (2015). The role of attachment style, attachment to therapist, and working alliance in response to psychological therapy.

- Psychology and Psychotherapy: Theory, research and practice*, 88(3), 240-253.
- Thein, P. T. (2015, July). Gender equality and cultural norms in Myanmar. In INT'L CONFERENCE ON BURMA/MYANMAR STUDIES (Jul. 2015).
- Thein-Lemelson, S. M. (2021). 'Politicide' and the Myanmar coup. *Anthropology Today*, 37(2), 3-5.
- Titzmann, P. F. (2012). Growing up too soon? Parentification among immigrant and native adolescents in Germany. *Journal of Youth and Adolescence*, 41, 880-893.
- Treatment for Adolescents with Depression Study (TADS) Team. (2004). Fluoxetine, cognitive-behavioral therapy, and their combination for adolescents with depression: Treatment for Adolescents with Depression Study (TADS) randomized controlled trial. *Jama*, 292(7), 807-820.
- Trieu, M. M., & Vang, C. Y. (2015). A portrait of refugees from Burma/ Myanmar and Bhutan in the United States. *Journal of Asian American Studies*, 18, 347–369.  
<http://dx.doi.org/10.1353/jaas.2015.0029>
- Tsang, E. W. K. (2014). Generalizing from research findings: The merits of case studies. *International Journal of Management Reviews*, 16(4), 369–383.  
<https://doi.org/10.1111/ijmr.12024>
- Turner, S. F., Cardinal, L. B., & Burton, R. M. (2017). Research Design for Mixed Methods: A Triangulation-based Framework and Roadmap. *Organizational Research Methods*, 20(2), 243–267. <https://doi.org/10.1177/1094428115610808>
- United Nations High Commissioner for Refugees UNHCR. (2001). International Organizations. [Web Archive] Retrieved from the Library of Congress
- Van Ameringen, M., Mancini, C., & Farvolden, P. (2003). The impact of anxiety disorders on

- educational achievement. *Journal of Anxiety Disorders*, 17(5), 561–571.
- Velting, O.N., Setzer, N.J., Albano, A. M. (2004). Update and advances in assessment and cognitive-behavioral treatment of anxiety disorders in children and adolescents. *Professional Psychology: Research and Practice*, 35:42–54.
- Villabø, M. A., Narayanan, M., Compton, S. N., Kendall, P. C., & Neumer, S. P. (2018). Cognitive–behavioral therapy for youth anxiety: An effectiveness evaluation in community practice. *Journal of consulting and clinical psychology*, 86(9), 751.
- Virgili, M. (2015). Mindfulness-based interventions reduce psychological distress in working adults: a meta-analysis of intervention studies. *Mindfulness*, 6(2), 326-337.
- Walter, D., Buschsieweke, J., Dachs, L., Goletz, H., Goertz-Dorten, A., Kinnen, C., ... & Doepfner, M. (2021). Effectiveness of usual-care cognitive-behavioral therapy for adolescents with depressive disorders rated by parents and patients—an observational study. *BMC psychiatry*, 21(1), 1-15.
- Waraan, L., Rognli, E. W., Czajkowski, N. O., Aalberg, M., & Mehlum, L. (2021). Effectiveness of attachment-based family therapy compared to treatment as usual for depressed adolescents in community mental health clinics. *Child and adolescent psychiatry and mental health*, 15(1), 1-14.
- Wehry, A. M., Beesdo-Baum, K., Hennelly, M. M., Connolly, S. D., & Strawn, J. R. (2015). Assessment and treatment of anxiety disorders in children and adolescents. *Current psychiatry reports*, 17(7), 1-11.
- Weissman, M. M., Markowitz, J. C., & Klerman, G. (2008). Comprehensive guide to interpersonal psychotherapy. Basic Books.
- Weisz J, Southam-Gerow M, Godis E, Connor-Smith J, Chu B, Langer D, et al.

- Cognitive-behavioral therapy versus usual clinical care for youth depression: an initial test of transportability to community clinics and clinicians. *J Consult Clin Psychol*. 2009;77(3):383–96. <https://doi.org/10.1037/a0013877>.
- Wells, A. (1995). Meta-cognition and worry: a cognitive model of generalized anxiety disorder. *Behavioural and Cognitive Psychotherapy*, 23, 301–320.
- Widdowson, M. D. J. (2011). Case study research methodology. *International Journal of Transactional Analysis Research*, 2(1), 25-34.
- Williams, K., & Francis, S. (2010). Parentification and psychological adjustment: Locus of control as a moderating variable. *Contemporary Family Therapy*, 32(3), 231–237. doi:10.1007/s10591-010-9123-5.
- Wu, I. H., & Windle, C. (1980). Ethnic specificity in the relative minority use and staffing of community mental health centers. *Community Mental Health Journal*, 16(2), 156–168.
- Yeung, Y. W. E., & Ng, S. M. (2011). Engaging service users and carers in health and social care education: Challenges and opportunities in the Chinese community. *Social Work Education*, 30(03), 281-298.
- Yin, R. K. (1999). Enhancing the quality of case studies in health services research. *Health services research*, 34(5 Pt 2), 1209.
- Yoon, J., & Lau, A. S. (2008). Maladaptive perfectionism and depressive symptoms among Asian American college students: contributions of interdependence and parental relations. *Cultural Diversity and Ethnic Minority Psychology*, 14(2), 92.
- Zahra, D., & Hedge, C. (2010). The reliable change index: Why isn't it more popular in academic psychology. *Psychology Postgraduate Affairs Group Quarterly*, 76(76), 14-19.

Zgierska, A., Rabago, D., Chawla, N., Kushner, K., Koehler, R., & Marlatt, A. Mindfulness meditation for substance use disorders: a systematic review. *Subst Abus.* 2009;

30(4):266–94. [PubMed: 19904664]

Zhou, X., Hetrick, S. E., Cuijpers, P., Qin, B., Barth, J., Whittington, C. J., ... & Xie, P. (2015).

Comparative efficacy and acceptability of psychotherapies for depression in children and adolescents: A systematic review and network meta-analysis. *World psychiatry*, 14(2),

207-222.