EVALUATION OF PSYCHOTHERAPY PROCEDURES USED BY VIETNAMESE THERAPISTS

By

NGOC-QUYNH N. WELLS

Dissertation

Submitted to the Faculty of

Graduate School of Vanderbilt University

in partial fulfillment of the requirements

for the degree of

DOCTOR OF PHILOSOPHY

In

PSYCHOLOGY

December, 2014

Nashville, Tennessee

Approved:

Bahr Weiss, PhD

Steven Hollon, PhD

F. Joseph McLaughlin, PhD

Ruth Rogaski, PhD

To Justin, my rock, my love, my all

ACKNOWLEDGEMENTS

This dissertation was made possible by the support of many people both in the United States and Vietnam. Firstly, I would like to thank my advisor, Bahr Weiss, for his immense support and generosity with his time, encouragement, expertise, and motivation for this area of research and this study in particular. His passion and relentless work ethic are infectious and provide a model for being a professional, researcher, and educator. I would like to also thank Dr. Lam Tu Trung for his invaluable insight, guidance, and input over the last seven years. He has helped to shape this project, the recruitment efforts of both participants and research assistants, and coding and interpreting the interviews. There are also many people to thank in Vietnam for their assistance in facilitating this study. Thanks to Drs. Dang Hoang-Minh, Cong Tran, and Nam Tran who dedicated an enormous amount of their time on this project and were instrumental in carrying out this study. I am extremely grateful to all the research assistants for their help in the interviews and data entry. Thank you to the hospitals, directors, administrators, and staff for their involvement and assistance with this project.

I would also like to thank Drs. F. Joseph McLaughlin and Steven Hollon for their clinical perspective and invaluable feedback on treatments. Your instruction and group supervision classes had a significant influence on the conceptualization and analysis of this project. My sincere thanks to Dr. Ruth Rogaski for her feedback on my dissertation proposal which helped to focus this project. I also want to thank the many supervisors I have had over the years who have helped to shape and develop my clinical skills.

Finally, I would like to thank my family. First, my parents, Hoa and Linda Nguyen, for their endless support and love. My in-laws, Greg and Tammy Wells, who were my cheerleaders and always ready with a hug or a phone call. Lastly, my husband, Justin, for his ability to make me laugh, his support and encouragement, cantaloupe sorbet, and taking care of our Boston Terriers, Jeb and Boomer.

TABLE OF CONTENTS

Page

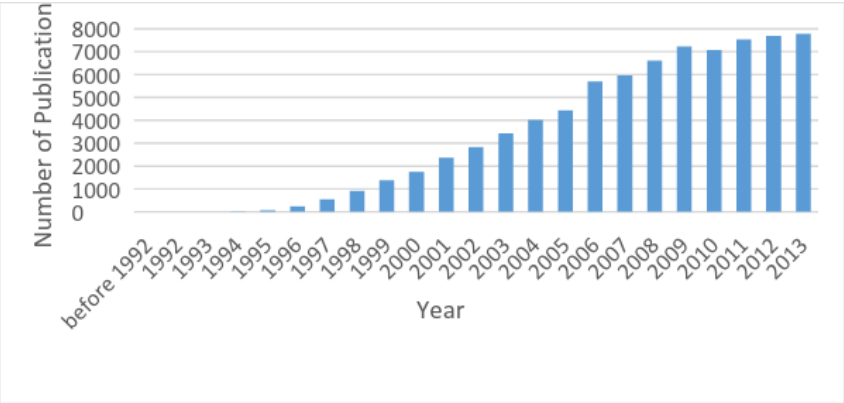
LIST OF TABLES

LIST OF FIGURES

CHAPTER I
EVIDENCE-BASED PRACTICE

Evidence-based practice (EBP) is a core value of virtually all health care professions since it was first introduced into medical education as *Evidence-Based Medicine* in 1992 (Guyatt et al., 1992) and an important component of professional training in psychology (APA, 2006). EBP is one of the fastest growing movements in healthcare today. Searches in Scopus for "Evidence-Based Medicine OR Evidence-Based Practice" revealed only 11 total publications prior to 1992. Figure 1 shows that starting in 1992, the number of publications increased rapidly each year, with over 81,624 total publications as of 07/22/2014 (scopus.com).

Figure 1. Publications of Evidence-Based Medicine OR Evidence-Based Practice By Year



EBP are the integration of the best research evidence combined with clinical expertise, directed by respect for patient values (Institute of Medicine, 2001). The aim of EBP is to structure professionals' activities so that they base their practice on the best possible grounds, typically on the results of research, thus improving effectiveness and enhancing public health. The American Psychological Association (APA) has been developing and updating guidelines for best practices in psychology since 1995 (APA, 1995). They also use the "three legged stool" approach of scientific evidence, clinical expertise, and patient values to define EBP in psychology (Spring, 2007). The APA defines evidence-based practice in psychology (EBPP) as "the integration of the best available research with clinical expertise in the context of patient characteristics, culture, and preferences (APA, 2006). Although some psychologists contend that all three parts of the EBP should be equally weighted in clinical decision making (Levant, 2004; Thyer & Pignotti, 2011), the American Psychological Association make it clear that research evidence should be given more weight unless there is a clear-cut reason to prioritize clinical expertise or client preferences and values (APA, 2006). For example,

child-onset schizophrenia (COS) is an extremely rare disorder, occurring in less than 1 in 10,000 children (Remschmidt & Theisen, 2005) and less than 1% of patients with schizophrenia receive this diagnosis in childhood (Remschmidt, 2002). Although clinical expertise may be useful to identify COS as a possible diagnosis, a heuristic approach that fails to account for the base rate of COS may misdiagnose children. Autism spectrum disorders, speech-language disorders, mood disorders, or Chiari Malformation are just a few other disorders with overlapping symptomatology with COS for both positive (i.e. hallucinations, delusions, disorganized speech) and negative symptoms (i.e. flat affect, catatonia). That is not to say that clinical expertise is not valuable. Clinical expertise is most useful when there is a lack of empirical data for a particular approach or treatment. The APA Task Force suggested 8 components of clinical expertise: (a) assessment and treatment planning, (b) delivery, (c) interpersonal skills, (d) self-reflection, (e) scientific skills in evaluating research, (f) aware of individual and social factors, (g) ability to seek additional resources where necessary, and (h) having a convincing rationale for treatment strategies (APA Presidential Task Force on Evidence-Based Practice, 2006). For example, in working with a patient with posttraumatic stress disorder, a trauma narrative is often useful as an exposure and processing intervention so that the patient becomes desensitized to trauma reminders (Rivera, 2012). Awareness of individual and social factors, interpersonal skills, and delivery of the trauma narrative and knowing when to push the patient and when not to push in order to not disrupt the therapy process or relationship and harm the patient. Additionally, patient values should also be considered as they may affect symptom presentation, treatment adherence, and more. For example, parenting in some African-American or Asian families rely more on discipline (i.e. authoritarian) rather than positive reinforcement. Telling those families to increase positive reinforcement and praise to decrease negative behaviors may result in loss of therapeutic alliance and, if inconsistently implemented, actually lead to increases in the frequency, severity, or intensity of negative behaviors. Rather, it may be better to initially teach the importance of ignoring minor behavior problems and positively stating their rules and demands (i.e. “Hands to self” rather than “Don’t hit”). Therefore, while scientific evidence should be given priority, clinical expertise and client preferences are also important factors in evidence-based practice in psychology, medicine, and any other health professions.

Evidence-Based Treatments

Psychotherapy was first recognized as a distinct activity over 150 years ago, when it was referred to as “the helpful influence of a healer’s mind upon that of a sufferer” (Dendy, 1853; cited in Jackson, 1999). Psychotherapy, as it is recognized currently, has been in use for over a century and in the more highly economically developed countries of the world is well established. In these countries psychotherapy has come to involve (a) a professional interaction between a therapist and a client that is focused on the mind, that (b) often but not always involves application of psychological principles from psychological theory and research (c)

with the goal of affecting and modifying the client's thoughts, feelings, or behavior in order to (d) help the client overcome psychological dysfunction, reduce emotional and personal distress, resolve problems in living, and / or develop personally as an individual (Fabrikant, 1984; Prince, 1980).

In most Western countries, psychotherapy is seen as professional service provided to the public, and is thus regulated by governments in order to ensure the safety of the public. As a component of the healthcare system, the training and certification or licensure required to provide psychotherapy services also are relatively well-developed and rigorous (although some might find this assertion at least somewhat questionable). Specific laws regarding training and certification or licensure vary from country to country, and from state to state within the U.S., but requirements generally include several years of (a) formal training and (b) supervised practice as well as (c) passing a national exam (Reaves, 2006; Rehm & DeMers, 2006). Ongoing coursework, often referred to as continuing education, is typically required to maintain licensure.

Given that psychotherapy has become a part of the health care system, establishing its efficacy is essential. Although there are many complexities in application, the usual procedure for establishing the efficacy of psychotherapy has been the randomized clinical trial (RCT). RCT's involve random assignment of patients to one of two or more groups that are compared (Timulak, 2008). These groups may include a control or "placebo" condition, or when testing an intervention with established efficacy, variations of the same treatment, or between-treatment comparisons.

For a psychotherapy to be considered efficacious (Chambless & Hollon, 1998), (a) it must have been evaluated in a randomized controlled trial in which the treatment of interest was statistically superior to a no-treatment control, placebo, or alternative treatment, or the treatment of interest was shown to be equivalent to an alternative treatment accepted as efficacious, (b) positive results must have been produced by at least two independent teams, and (c) the outcome evaluation studies must have included the use of treatment manuals, specific diagnostic groups, valid assessment procedures, and appropriate data analysis. If the positive results have not been replicated by an independent research group, a treatment can be considered "possibly efficacious." If the results have only been found to be effective for specific mental health problems or disorders, it can be considered "efficacious and specific for a mental disorder" (Chambless & Hollon, 1998).

Although there are more than 400 identified distinct systems of psychotherapy (Corsini & Wedding, 2008), most have not been rigorously tested or proven effective. Studies reviewed previously have shown that some psychotherapies are effective when compared to placebo, but that other therapies appear to be no more effective than placebo treatments. The most actively researched systems of psychotherapy have been the behavioral and cognitive therapies, which have shown them to be superior to no treatment, placebo, humanistic, and analytical therapies, and often as good as or superior to pharmacotherapy. Sixty to eighty percent of evidence-based treatments in psychotherapy are cognitive-behavioral treatments (O'Donohue, Buchanan, &

Fisher, 2000). This likely is due in large part to the fact that cognitive and behavior therapies are based on the empirical research and change to incorporate new empirical findings (Prochaska & Norcross, 2010). They adopt new techniques and these therapies have gone through several waves.

Currently, the majority of psychotherapists in the United States report using a cognitive, behavioral, or eclectic / integrative therapeutic approach, although a small but still sizable number of psychotherapists report using psychodynamic / psychoanalytic approaches (Bechtoldt et al, 2001; Norcross, Karpiak, & Santoro, 2005; Norcross, Strausser-Kirtland, & Missar, 1988). The results of a recent Delphi poll assessing senior mental health professionals suggest that cognitive, cognitive-behavioral, and eclectic approaches will become even more widely used over the next ten years (Prochaska & Norcross, 2010). As more newly trained psychotherapists enter the field under the influence of the current focus on evidence-based treatments, it is expected the new therapists will focus on cognitive and behavioral EBT treatments; in contrast classical psychoanalysis and humanistic therapies will see declines in their use as older psychotherapists retire (Prochaska & Norcross, 2010).

Evidence base for major forms of psychotherapy

In one of the first formal studies of the efficacy of psychotherapy, Eysenck (1952) reviewed 24 studies in which people undergoing psychotherapy were contrasted to people not receiving psychotherapy. He found that the rate of improvement for clients who received psychotherapy was not substantially different from the spontaneous remission rate for individuals who did not receive psychotherapy. He concluded that there was little evidence to support the efficacy of psychotherapy. Since then, however, different forms of psychotherapy have been developed that are based on theories of human functioning that have a stronger empirical basis, and more rigorous outcome studies using random assignment have been conducted. Overall, the results indicate that certain forms of psychotherapy can be effective (Spiegel, 1999; Shadish et al., 1997). Research on the effectiveness and efficacy of several commonly used psychotherapeutic approaches is reviewed below.

Psychoanalytic and psychodynamic therapy. Sigmund Freud, the founder of psychoanalytic therapy, did not believe that it was necessary to scientifically study with empirical methods psychoanalytic suppositions and treatments. When Saul Rosenzweig approached Freud suggesting that they conduct experimental studies to test the validity of basic psychoanalytic propositions, Freud saw little value in this. He believed that psychoanalytic assertions were “independent of experimental verification” (Shakow & Rapaport, 1964).

One of the earliest survey studies of psychoanalysis was conducted in Berlin, London, Topeka, and Chicago, and found that half of patients receiving psychoanalysis were reported as cured or much improved, which was taken as support for the efficacy of psychoanalysis (Knight, 1941). These outcome evaluations, however, were based solely on the analysts’ own judgment of whether their patients were “apparently cured,”

much improved, improved, unchanged, or worse at the time analysis was terminated. Similar subsequent surveys found similar results (e.g. Bachrach, Galatzer-Levy, Skolnikoff, & Waldron, 1991; Galatzer, Bachrach, Skolnikoff, & Waldron, et al., 2000, Fonagy & Target, 1996). The surveys have reported improvement rates similar to those reported by Knight (1941) for both adult and adolescent patients, and in both inpatient and outpatient treatment settings (Barber, 2007; Borckardt, et al., 2008; Fraser & Solovey, 2007). The surveys have been conducted with patients with severe psychosis, with personality disorders, and with depression or phobias (Gottdiener, 2006; Levy, et al., 2006; Nnamdi & Jones, 1998, Andrusyna, Luborsky, Pham, & Tang, 2006; Blatt & Zuroff, 2005).

Similar studies have investigated how psychodynamic therapy may achieve these "positive" results. These studies suggested that psychodynamic therapy may have its effects by: (a) the facilitating patients' emotional experiencing and verbalization of affect (Diner, Hilsenroth, & Weinberger, 2007), (b) encouraging patients to engage in introspection and self-observation (Friedman, Garrison, Bucci, & Gorman, 2005), and (c) providing transference interpretations, particularly ones that patients have perceived as strengthening the therapeutic alliance (Levy, et al., 2006; Andrusyna et al., 2006; Hammond & Nichols, 2008).

However, these studies have a number of methodological limitations that are as serious as they are obvious. Most importantly, outcomes were assessed by the therapists themselves, and the studies may have systematically selected patients that are likely to improve and without a randomized control group, rates of improvement among therapy patients have no implications for the efficacy of the treatment. In randomly controlled studies, psychodynamic therapy has not been found to reduce symptom distress relative to control (Fonagy, 2010), and when applying strict and rigorous methodology, psychodynamic therapy has failed to show efficacy (Chambless & Hollon, 1998). In fact, using Chambless and Hollon's (1998) criteria for efficacy, there are no studies that have shown that psychodynamic therapy is efficacious, or efficacious for specific for mental disorders (Chambless & Hollon, 1998; DeRubeis & Crits-Christoph, 1998; Fonagy, Roth, & Higgitt, 2005; Leichsenring, 2001).

Other psychodynamic therapies such as Adlerian Therapy have not been rigorously empirically studied. An early major review (Smith, Glass, & Miller, 1980) found only four studies of Adlerian therapy. The average functioning of patients in treatment was only slight better than those receiving placebo therapy. To date, there have been no well-designed controlled studies with either adults or children that have produced positive results (Grawe, Donati, & Bernauer, 1998; Weisz, Hawly, & Doss, 2004).

Client-Centered Therapy. In contrast to Freud, the initial developer of Client-Centered Therapy, Carl Rogers, was very interested in research. Early outcome research found an average effect size of .63 in an aggregate of about 60 studies (Smith & Glass, 1977; Smith, Glass, & Miller, 1980). However, the average effect size for placebo treatments was .56 (compared to no treatment); thus, Client-Centered Therapy was only slightly

if at all more effective than placebo. In other comparisons, client-centered therapy was found to be comparable in efficacy to psychodynamic and other insight-oriented therapies, but less effective than cognitive-behavioral therapies (Shapiro & Shapiro, 1982; Reicherts, 1998). Similar results have been found for the treatment of children and adolescents with client centered therapies, with positive effect sizes when compared to no treatment control groups but with negative effect sizes when compared to behavioral, cognitive, and parent-training interventions (Weisz, Donenberg, Hans, & Weiss, 1995).

Gestalt Therapy. There has been relatively little systematic research on the outcomes of Gestalt therapy, and Gestalt therapy research has largely focused on its enhancement of functioning, not its effects on mental health symptoms. Across 18 studies testing the efficacy of Gestalt therapy, the average effect size was .64, a moderate-size effect (Smith, et al., 1980). However, as with client-centered therapy, given that placebo had an average effect size of .56 (compared to no treatment), Gestalt therapy appears only marginally more effective than placebo (Smith, et al., 1980). In children and adolescents, Gestalt therapy has not been sufficiently researched in order to draw conclusions (Weisz et al, 1995; 2004).

Cognitive-behavior therapies. Of all forms of psychotherapy, behavioral and cognitive-behavioral therapies have been the most studied. About two-thirds of all outcome studies on psychotherapy with children and adolescents have been conducted on behavioral treatments (Kazdin, 1991; Weisz et al., 2004), and it makes up the majority of adult outcome studies (Grawe, Donati, & Bernauer, 1998; Wampold, 2001). In children, Weisz and colleagues (2004) looked at 236 published randomized trials on treatment for youth (3-18 years) and found that the average treated child was functioning better than about 80% of those children who did not receive treatment.

Research findings on Rational-Emotive Behavior Therapy (REBT), one particular variant of cognitive-behavioral therapy, have both supported REBT (e.g. DiGiuseppe, Miller, & Trexler,1977; McGovern, & Silverman, 1984; David, Szentagotai, Eva, & Macavei, 2005) and questioned the efficacy of REBT (e.g. Haaga & Davison, 1989;1991; Gossette & O'Brien, 1992;1993). In Smith & Glass' (1977) meta-analysis, of the ten major forms of psychotherapy studied they found that REBT yielded the second highest average effect size. However, the number of REBT outcome studies included in this early review was small. In 1991, Lyons and Woods (1991) looked at 70 studies of REBT compared to baseline, control groups, behavior therapy, and other forms of psychotherapy. They found an overall effect size for REBT of .95, which translates to 83% of the treated clients demonstrating greater clinical improvement over those not receiving REBT (Lyons & Woods, 1991). In Engels, Gamefski, and Diekstra(1993) meta-analysis of 28 REBT studies found that REBT was more effective than placebo and no treatment, and equally efficacious to other types of cognitive and behavioral treatments (Engels, Gamefski, & Diekstra, 1993); the efficacy of REBT in children and adolescents has been found to be slightly lower (Gonzalez et al., 2004).

Behavioral methods such as operant conditioning, desensitization/relaxation training, modeling, social skills training and others all have been found to produce relatively large positive effect sizes in outcome studies with adults (Grawe, Donati, & Bernauer, 1998; Shapiro & Shapiro, 1982). Meta-analytic reviews have indicated that behavior therapy is typically more effective than alternative treatments such as play therapy and insight-oriented therapy (Weisz et al., 1987, 1995, 2004). For instance, desensitization, or systematic desensitization and its various permutations such as flooding and eye movement desensitization and reprocessing (EMDR) have all been shown to have relatively large positive effects (Deacon & Abramowitz, 2004; Hersen & Rosqvist, 2005, Van Etten & Taylor, 1998). Studies on the effectiveness of behavioral social skills training (SST) are not as universally strong (Forness, 2005; Maag, 2005; Quinn, Kavae, Mathur, Rutherford, & Forness, 1999; Smith & Travis, 2001) although recent reviews suggest that SST is capable of producing successful outcomes in roughly two thirds of students as compared to improvement in one third of students in control groups (Gresham, Cook, Crews, & Kern, 2004; Cook, et al., 2008).

Beck's cognitive-behavior therapy (CBT: Beck, Rush, Shaw, & Emery, 1979), which is also called cognitive therapy (CT), is a short-term, directive therapy designed to change the client's negative view of the self, world, and future. In general, meta-analyses have demonstrated that CBT is effective for a wide range of presenting problems (Butler & Beck, 2001; Butler, Chapman, Forman, & Beck, 2006; Deacon & Abramowitz, 2004). Many studies have found CBT to be effective for treating depression, even in comparison to tricyclic antidepressants with relapse rates of 26% (for cognitive therapy) versus 64% (for pharmacotherapy) (Hollon, et al., 1992). A 1989 meta-analysis found large effect sizes for CBT on depression: the average cognitive therapy client did better than 98% of untreated, control subjects, and other meta-analyses have produced similar conclusions (e.g., Gaffan, Tsaousis, & Kemp-Wheeler, 1995).

CBT has produced similar results in the treatment of depression in adolescents, with effect sizes of 1.02 and 1.27 (Lewinsohn & Clarke, 1999; Reinecke, Ryan, & DuBois, 1998). Michael and Crowley (2002) found CBT to be more effective than no treatment, active placebo, and even antidepressant medications in treating depressed adolescents. CBT also has been found effective for many types of anxiety disorders (Roth & Fonagy, 1996). For example, in the treatment panic disorder, CBT was found to be equal or superior to the efficacy of psychotropic medications (American Psychiatric Association, 1998).

Evidence-Based Treatments For Common Psychopathology Domains

There are many types of treatments for psychopathology, however, only a few meet Chambless & Hollon's (1998) criteria for efficacy. Treatments for depression, anxiety, somatic symptoms and disorders, and externalizing behavior problems have been studied extensively and several have been found to be efficacious. A representative selection of these evidence-based treatments are discussed below.

Evidence-Based Psychotherapy for Depression

When compared with other diseases and injuries, major depression accounted for 8.2% (5.9%-10.8%) of global YLDs (years lived with a disability) in 2010, making it world's second leading cause of disability (Ferrari, et al., 2010). It is a common, often recurrent, and impairing condition that predicts interpersonal problems, unemployment, substance abuse, suicide attempts, and more (Kessler & Walters, 1998). The cost of depression (absenteeism from work, lost productivity, and medical expenses) is $83 billion each year in the US which exceeds the costs of the war in Afghanistan (Greenberg, et. al., 2003). In order to diagnose Major Depressive Disorder, the DSM-5 (American Psychiatric Association, 2013) requires the presence of five (or more) of the following nine symptoms most of the day, nearly every day, for the past 2 weeks:

1. Depressed mood most of the day, nearly every day.
2. Markedly diminished interest or pleasure in almost all activities (anhedonia).
3. Significant weight loss/gain or decrease/increase in appetite.
4. Insomnia or hypersomnia.
5. Psychomotor retardation or agitation.
6. Fatigue or loss of energy.
7. Feelings of worthlessness (or excessive or inappropriate guilt).
8. Diminished ability to concentrate or make decisions.
9. Recurrent thoughts of death

One of the nine symptoms must be either depressed mood or anhedonia, and these symptoms should also represent a significant change from previous functioning (DSM-5; American Psychiatric Association, 2013). Treatment of depression often involve both pharmacological and psychotherapy treatments. Interpersonal psychotherapy (IPT), Cognitive-Behavior Therapy (CBT), and Behavior Therapy (BT) are three treatments that have been found to be efficacious in the psychological treatment of depression (e.g. Hollon, Thase & Markowitz, 2002; Hollon & Ponniah, 2010; Gloaguen, Cottraux, Cucherat, & Blackburn, 1998; Cuijpers, et al., 2011).

Interpersonal Psychotherapy. IPT is a structured psychotherapy which typically lasts 12 to 16 weeks. IPT targets social relationships to relieve depressive symptoms (Weissman, 2007). IPT relies heavily on attachment theory which posits that attachment is a biological drive and the capacity to form flexible attachment is a principal feature of mental health (Bowlby, 1977). It focuses on modifying disrupted relationships or expectations about those relationships. To alleviate depressive symptoms, IPT helps patients identify current triggers for the depressive episode, facilitate mourning in the case of bereavement, promote recognition of related affects, resolve role disputes and transitions, and build social skills to improve relationships and social support (Weissman, Markowitz, & Klerman, 2000).

Cognitive-Behavior Therapy. CBT is also a structured psychotherapy. The main component of CBT is cognitive restructuring to address and change dysfunctional thinking patterns and subsequent dysfunctional behaviors, which are characteristic of depressed patients (Beck, 1979). Beck asserts that depressed people have negative views about the self, the world, and the future, known as the Negative Cognitive Triad (Beck, Rush, Shaw, & Emery, 1979). Additionally, they may selectively attend to failures and setbacks and fail to pay attention to successes and accomplishments. These biases often lead to depression (Newman & Beck, 2009). CBT teaches the patients to understand the relationships between affect, thought, and behavior and is based on the A-B-C model which assumes that an activating event (A) triggers beliefs (B) which can be rational or irrational that leads to the consequences (C) which include emotions, behaviors, and other thoughts (Beck, 1979). The focus is to help the person recognize negative irrational thoughts and replace them with thoughts that reflect reality. CBT also includes behavioral activation, social skills training, and assertiveness training which are discussed in Behavior Therapy below.

Behavior Therapy. BT is a component of CBT but can also be a stand-alone. BT uses learning theory such as operant conditioning to change behaviors. Most behavior therapies, such as behavioral activation, social skills training, and assertiveness training shape and change behaviors through positive reinforcement, which is any consequence that, when introduced following a specific behavior, makes that behavior more likely to occur in the future (Kanter, Bowe, Baruch, & Busch, 2011). Peter Lewinsohn (1974) believed that depression is caused by a combination of stressors in a person's environment which can cause a person to receive a low rate of positive reinforcement. People become depressed when they are unable to cope with the loss of positive reinforcement of previous behaviors. For example, a college freshman who leaves home may not have the necessary social skills to easily make new friends and become depressed. Over time, depressed people start to withdraw from others and thus get even less positive reinforcement than before. Lewinsohn and colleagues found a strong relation between engagement in pleasant activities and mood, and generated interventions that focused on increasing pleasant activities (Lewinsohn & Lebit, 1972; Lewinsohn & Graf, 1973; Lewinsohn, Biglan, & Zeiss, 1976; Zeiss, Lewinsohn, & Munoz, 1979). Behavioral activation helps depressed people by having them take action and engage in activities that will provide positive reinforcement. Patients are encouraged to go from an avoidance pattern of behaviors, which may have functioned as a preventative measure against unpleasant emotional responses, to a pattern of healthy alternative coping strategies (Jacobson, et al., 1996; Martell, Addis, & Jacobson, 2001). Social skills training is theorized to help with depression because depressed people may have less skills in eliciting positive reinforcement in social situations (Lewinsohn, 1974). Social skills training involve teaching basic "friendly skills," such as how to meet people, have conversations, and give and receive feedback (Kanter, Bowe, Baruch, & Busch, 2011). One major component of social skills training is giving patients plenty of opportunities to practice in and out of session. Depressed people may also

have difficulties with appropriate assertiveness in that they are either overly passive and do not express their preferences or ask to have their needs met, or may be too aggressive and push others away and wind up disconnected and alone, both of which leads to depression (Klosko & Sanderson, 1999). Assertiveness training teaches patients the skills to balance the need for self-respect and respecting others.

Evidence-Based Psychotherapy For Anxiety

The APA (2010) defines anxiety as a psychological condition characterized symptoms of extreme fear and worries that do not subside. Additionally, it is often accompanied by physiological symptoms. The spectrum of anxiety disorders in 3 broad categories in the DSM-5 are: (a) anxiety disorders (i.e. generalized anxiety disorder, social anxiety, and specific phobia), (b) obsessive-compulsive and related disorders (i.e. obsessive-compulsive disorder, body dysmorphic disorder, and trichotillomania), and (c) trauma- and stressor-related disorders (i.e. posttraumatic stress disorder, reactive attachment disorder) (American Psychiatric Association, 2013). There are often many contributing factors to developing an anxiety disorder including genetics, family environment (i.e. modeling), and conditioning from traumatic experiences (Hope, Heimberg, & Turk, 2010). Mowrer (1939; 1947; 1960) posits that most anxiety disorders develop and are maintained through conditioning. That is, harmless and neutral objects, situations, thoughts, or images initially occur with an event that naturally produces anxiety. This pairing allows for the harmless and neutral object, situation, thought, or image to begin automatically produce anxiety on its own. Then, the anxiety is maintained because the individual engages in avoidant behaviors that allows them to experience relief from the anxiety. This further increases the likelihood of engaging in the avoidant behaviors in the future when anxious (negative reinforcement).

Anxiety is very common disorder, with a lifetime prevalence of 31.6% (SE of 0.7) of U.S. adolescents and adults and is the sixth leading cause of disability, in terms of years of life lived with disability (YLDS) (Kessler, Petukhova, Sampson, Zaslavsky, & Wittchen, 2012; Baxter, Vos, Scott, Ferrari, & Whiteford, 2014). Anxiety has a very high cost, with estimates about $42-47 billion per year in the U.S. in the 1990's, (DuPont et al., 1996; Rice & Miller, 1998; Greenberg et al., 1999). In addition, these estimates fail to account for long-term opportunity costs (i.e. excess unemployment and underemployment) which may be has high as $100 million per year (Kessler & Greenberg, 2002). Furthermore, anxiety disorders strongly affect health-related quality of life of patients (Olatunji, Cisler, & Tolin, 2007). The two most common anxiety disorders are specific phobia (15.6% lifetime prevalence) and social anxiety (10.7% lifetime prevalence) (Kessler, et al., 2012).

There are several components of an anxiety response: (a) physiological arousal such as sweating, palpitation, increase breathing, and dizziness; (b) misappraisal of threat or negative cognitions of anticipation such as "Everyone is going to laugh at me"; (c) motivation to avoid the situation as quickly as possible, (d) subjective feelings of fear or terror, and (e) behavioral suffering such as inhibited speaking or thinking (Beck,

Emery, & Greenberg, 2005). Psychological treatments of anxiety generally often target these components. Cognitive-behavior therapy and behavior therapy, particularly exposure therapy, are two evidence-based treatments for anxiety (National Institute of Mental Health, 2014; National Institute for Health and Clinical Excellence, 2014).

Cognitive-Behavior Therapy. The CBT procedures for treating anxiety is very similar to treating depression. CBT posits that anxious individuals have a heightened sense of vulnerability that leads to faulty appraisals of threat (Clark & Beck, 2011). They exaggerate the probability and severity of threat, minimize their ability to cope, and fail to recognize aspects of safety (Rachman, 2006). These appraisals mediate the relationship between the triggering situation and anxious feelings. CBT seeks to correct maladaptive appraisals and beliefs that contribute to anxiety. Similar to treating depression, CBT use cognitive restructuring to target anxious thoughts, appraisals, and beliefs.

Behavior Therapies. Again, BT is a component of CBT but can also be stand-alone. Two major BT treatments of anxiety are somatic management skills training and exposure. Somatic management skills training includes self-monitoring and relaxation training such as diaphragmatic breathing, progressive muscle relaxation, or meditation. These are coping strategies to alleviate the physiological symptoms of anxiety. Anxious individuals often engage in rapid shallow breathing and have muscle tension. Retraining these individuals to breathe with a slower more paced diaphragmatic breathing and intentional and focused releasing of unwanted muscle contraction or tension leads to deep relaxation which interrupts the anxiety process. For many years, relaxation training was a large component of treating anxiety as it was considered critical for inhibiting conditioned anxiety responses (i.e. Wolpe & Lazarus, 1966). There have been some contention regarding the effectiveness of relaxation as a stand-alone treatment of anxiety. Some contend that relaxation may actually be contraindicated for anxiety, particularly as a stand-alone treatment (Steketee, 1993; White & Barlow, 2002). These researchers see relaxation as an avoidance strategy that if implemented can hinder progress towards deactivation of fear schemas. Clark & Beck (2011) recommends that relaxation be used briefly and as an adjunctive intervention if the patient's anxiety level is so extreme that he/she refuses to tolerate any anxiety or refuses exposure therapy. However, several recent meta-analyses have continued to find relaxation to have equivalent or superior outcomes compared to cognitive or cognitive-behavior therapy (Grawe, Donati, & Bernauer, 2001; Conrad & Roth, 2007; Jorm, et al., 2004).

Exposure therapy is the single most effective intervention for anxiety disorders (Barlow, 2002; Clark & Beck, 2011). It targets fear memory structures and develops new nonfearful associations with a target stimulus (Moscovitch, Antony, & Swinson, 2009). Exposure therapy seeks to reduce anxiety by helping a patient to engage in repeated and prolonged contact with a feared stimulus while resisting avoiding or escaping from it, thus allowing extinction processes to work (Abramowitz, Deacon, & Whiteside, 2012). Exposure often begins

by confronting moderately distressing stimuli and then gradually working up to more difficult situations. Patients can be asked to imagine the feared stimulus, encounter a virtual presentation of the stimulus, or confront the actual stimulus. Generally, each level of exposure is mastered, that is anxiety becomes mild, before moving onto something more salient. One notable exposure-based therapy that does not follow a gradual or systematic fashion is flooding, where the patient is rapidly confronted with the most feared stimuli and their ability to escape from the fear-provoking context is minimized (i.e. response prevention). Response prevention helps patients to voluntarily refrain from maladaptive safety-seeking behaviors or coping strategies (i.e. a compulsion) that alleviates anxiety or discomfort (Clark, 2004). Maladaptive responses that prematurely reduce anxiety may help in the short-term; however, it does not alleviate the anxiety associated with the feared stimuli in the long run (Clark & Beck, 2011). During exposure therapy, patients are encouraged to engage in "blocking" strategies that can be used to suppress avoidance or escape behaviors or maladaptive coping behaviors.

Evidence-Based Psychotherapy For Somatic Symptoms

Somatic symptoms include headaches, joint pain, stomachaches, chronic fatigue, and other physical ailments and complaints that cannnot be medically explained. Somatization disorder was historically labeled hysteria. Early psychological theory of somatization was based on psychodynamic theories. Freud and Breuer (1895/1957) believed that intrapsychic activities leads to somatic symptoms, a process known as "conversion" where the physical symptoms were an unconscious form of communication for securing secondary gain or avoiding emotional pain. Over time, criteria for somatization included physical symptoms that occur in the absence of an identifiable bodily mechanism (Woolfolk & Allen, 2014). Somatization was often a diagnosis of exclusion, meaning that other disorders must be ruled out as the cause of the symptoms prior to a diagnosis of somatization. Due to the lack of clarity regarding criteria and boundaries of diagnosis for somatoform disorders in the DSM-IV-TR, the new diagnostic class, somatic symptoms and related disorders in the DSM-5, emphasizes the prominence of somatic symptoms associated with significant distress and impairment (American Psychiatric Association, 2000; 2013). The major diagnosis, somatic symptoms disorder in the DSM-5, focuses on the positive distressing somatic symptoms as well as their related abnormal thoughts, feelings, and behaviors in response to these symptoms (American Psychiatric Association, 2013). The etiology of somatic symptoms has been somewhat difficult to ascertain. One biological theory is that the neural structures that are activated by pain are also involved in processing affective states (Kozlowska, 2008). Psychological stress activates glial cells, and in combination with nociceptive pain input, over time can lead to pain sensitization and long-term structural changes in pain-processing regions of the brain (Kozlowska, et al., 2008; Borkum, 2010). Some studies have also found decrease analgesic neurotransmitters such as endorphin and serotonin in chronic pain patients (Cloninger, 1994). Additionally, differences in information-processing such as increase

distractibility, difficulty distinguishing target and nontarget stimuli, and impaired verbal communication have been found for individuals with somatization (Cloninger, 1994). There are several psychological theories in the etiology of somatic complaints. There is evidence to suggest both attachment and social learning in the development of somatic symptoms. Many studies have found patients with somatic complaints typically have higher insecure attachment patterns (Meredith et al., 2008). Insecurely attached individuals have very negative representations of themselves (Bartholomew & Horowitz, 1991), have lower pain self-efficacy (Meredith, Ownsworth & Strong, 2008), less perceived coping abilities (Meredith, Strong & Feeney, 2006; Mikulincer & Florian, 1998) and higher levels of pain-related stress, anxiety, depression, and catastrophizing (Meredith, Strong, & Feeney, 2006; 2007; Ciechanowski, Sullivan, Jensen, Romano, & Summers, 2003). There is also a lot of evidence to support social learning, such as social reinforcement and modeling, in somatization. Children with somatic complaints (such as functional abdominal pain) often have family members who frequently complain about similar physical symptoms; this phenomena is often referred to as "symptom model" (Silber, 2011). Similar to the development of anxiety disorder, somatic complaints can be learned and reinforced through classical and operant conditioning (Ibeziako & DeMaso, 2012). In some households, somatizing children may first observe another family member get attention and sympathy for their somatic symptoms. Their household may also frown on the expression of feelings, particularly negative emotions. Through this initial "symptom model" a child may develop and maintain physical symptoms when in emotional distress in order to be more easily noticed, get more attention, get more sympathy, and have less responsibilities (Silber, 2011). It is difficult to tease apart the components genetics and family environment plays in somatization; however, a study examining the contribution of genetic and social learning in the development of irritable bowel syndrome (IBS) in monozygotic and dizygotic twins found that social learning has an equal or greater contribution than heredity (Levy, et al., 2001).

"Medically unexplained" physical complaints make up 25-33% of primary care visits (Gureje, Simon, Ustun, & Goldberg, 1997; Khan, et al., 2000). Somatizing individuals incur, on average, 9 times the US per capita health care cost and are also more likely to overuse health-care services, derive little benefit from treatment, and experience protracted long-term impairment (Smith, Monson, & Ray, 1986a). Somatic symptoms disorders go by many different name, ranging from somatization, medically unexplained physical symptoms, neurasthenia (in the ICD-10), and more (Woolfolk & Allen, 2014). This has made it difficult to study treatment efficacy or effectiveness because of varying research diagnostic criteria for inclusion in a research study. Additionally, many studies generally look at treatments for specific somatic complaints, such as irritable bowel syndrome or fibromyalgia. There has been some evidence regarding the effectiveness of exercising, hypnosis, biofeedback, CT, CBT, operant behavior therapy, family psychoeducation, systems intervention, and relaxation training; however, the research is not consistent in terms of participant somatic symptom inclusion criteria and

misleading treatment labeling ("psychodynamic" but actually have relaxation as part of the therapy) so much more research is needed (Allen & Woolfolk, 2012). There is even less data on the mechanism of how psychosocial treatments work in somatic symptoms. CBT has been empirically supported in many somatic symptoms disorders such as somatization, back pain, chest pain, and hypochondriasis (Allen & Woolfolk, 2012); however, only CBT for subthreshold somatization, CBT for irritable bowel syndrome (IBS), and CBT for chronic fatigue syndrome (CFS) meet Chambless & Hollon (1998) criteria for empirically supported treatments (Allen & Woolfolk, 2012). Given the social learning component of somatic syndromes, Ibeziako & DeMaso (2012) also recommends psycho-education (advice, guidance, and behavioral recommendations) for physicians, parents and families, and schools.

Cognitive-Behavior Therapy. Similar to CBT for anxiety, CBT for somatic complaints focus on and try to alter maladaptive thinking patterns associated with somatic symptoms. In addition, the focus of CBT is also to help patients develop and implement increasingly more effective ways of coping with their physical symptoms in order to improve quality of life. For IBS patients, CBT often also includes relaxation as a method to relieve pain and uncomfortable symptoms (Heymann-Monnikes, et al., 2000; Lynch & Gamble, 1989; Neff & Blanchard, 1987; Van Dulmen, Fennis, Bleijenberg, 1996). For CFS, a key component of CBT includes behavioral pacing and increasing activities such as exercise (Deale, Chalder, Marks, & Wessely, 1997; Prins, et al., 2001; Sharpe et al., 1996).

Psychoeducation. Psychoeducation is an important part of CBT in helping patients, doctors, families, and others to help them move on from searching for an underlying medical cause to focusing on coping and rehabilitation (Griffin & Christie, 2008). Encouraging physicians and other medical providers to: (a) schedule appointments on a schedule (every 4 to 6 weeks) rather than as needed / urgent care, (b) conduct a physical examination of the area of complaint, (c) avoid procedures unless clearly indicated by underlying pathology, and (d) avoid making disparaging statements (i.e. say "we have good news; we have ruled out a number of serious illness" rather than "we couldn't find anything; your symptoms are all in your head") increases better health outcomes such as increase physical functioning, fewer health-care visits, and lower cost of medical care (Smith, Monson, & Ray, 1986b; Rost Kashner, & Smith, 1994; Dickson et al., 2003; Rief, et al., 2006).

Family psychoeducation is based on operant behavior therapy and targets family interactions and relationships to change maladaptive behaviors or patterns. Families are taught to ignore the somatic complaints and reward the patient for engaging in well behaviors (i.e. school or work) despite these complaints (Fordyce, 1976; Thieme, Gromnica-Ihle, & Flor, 2003).

Evidence-Based Psychotherapy for Externalizing Disorders

Common childhood externalizing behaviors include rule violations (e.g., stealing; substance abuse;

lying), aggression (e.g., physical, verbal), temper tantrums, noncompliance/oppositionality, inattention, and hyperactivity / impulsivity. Externalizing problems often are a major problem for families and are linked with poorer psychosocial functioning in adulthood. They are associated with enormous costs to society via criminal behavior, substance use, etc. (Fergusson, Horwood, & Ridder, 2005; Krueger, Markon, Patrick, & Iacono, 2005; Loeber, Burke, Lahey, Winters, & Zera, 2000; Zigler, Taussig, & Black, 1992). For some adolescents, externalizing behaviors can be a transitory normal stage of development. However, for a subset of individuals externalizing symptoms can be chronic and stable (Kerr, Lopez, Olson, & Sameroff, 2004; Lynam, Loeber, & Stouthamer-Loeber, 2008; Loeber, 1991; Loeber & Hay, 1997).

Genes and environment together influence the development and continuance of externalizing disorders (Moffitt, 2005; Plomin, 2005). There is moderate heritability for externalizing problems; however, heritability was found to be weaker for cases where the antisocial behavior decreases with age; which may suggest that in those cases, environment plays a larger role (Rhee, 2002; Rutter, et al., 1990; Schmitz, Fulker, & Mrazek, 1995). Other risk factors include stress, poverty, traumatic events, and parental mental illness and substance abuse (Shaw, Gilliom, Ingoldsby, & Nagin, 2003; Aguilar, Sroufe, Egeland, & Carlson, 2000). The interaction of genes and environment play out in parents, who not only contribute genetically to the individual factors such as temperament but to environmental conditions such as establishing a safe environment, routines, and structures, and disciplinary methods (Forgatch & Patterson, 2010). Parenting practices play a significant role in the development and maintenance of externalizing problems. After a problem behavior emerges, they can be shaped and maintained by parents, sometimes unintentionally (i.e. “timeout” because a child refuses to do homework; but actually gets the child out of doing the homework; so this reinforces the noncompliance in the future). One model posits a coercive interaction cycle of negative reinforcement for behavior problems (Patterson, 1982). In the parent-child dyad, either the parent or child first engages in an aversive behavior (i.e. harsh parenting from the parent; temper tantrum from the child). The other responds in a negative way and over time eventually adapt and use aversive behaviors as well to try and control or change the other’s behavior. This coercive cycle maintains problem behaviors in children and harsh parenting by parents. Children who have learned aversive behaviors get them what they want may fail to develop prosocial skills. Additionally, parents have significant control over the amount time their children interact with others outside the home which can impact their social development. So when they enter school, their aggression, noncompliance, and disruptive behaviors can result in disciplinary action from the school, thus leading to academic failure, and rejection by peers who prefer to avoid a child who lacks appropriate social skills (i.e. play cooperatively, share, take turns, show good sportsmanship, etc.). Eventually, as the children with behavior problems become adolescents and spend more time away from home, rejection from prosocial peers pushes them to seek out deviant peers who more readily accept them (Forgatch & Patterson, 2010). The majority of empirically based interventions for

externalizing behaviors try to break the coercive cycle through behavior management training; which include behavior modification (Webster-Stratton & Hammond, 1997; Kazdin, 1997; McMahon & Forehand, 2005; Barkley, 2013). Additionally, problem-solving skills training, social skills training, and anger management training provide useful tools for reduction of behavior problems and improve social relationships with parents and peers (Weisz & Kazdin, 2010).

Behavior modification. Behavior modification rely on classical conditioning, operant conditioning, and observational learning to shape learning and behaviors (Kazdin, 2012). The relationship between behaviors and the environmental events that influence behaviors is called contingencies of reinforcement based on antecedents (A), behaviors (B), and consequences (C). Antecedents are stimuli, settings, and contexts that occur before and influence behaviors (i.e. told to take out the trash). Behaviors are the actual observable behaviors (or lack of behavior) themselves (i.e. refusal, temper tantrum). Consequences refers to events that follow behavior and may include influences that increase, decrease, or have no impact on what the individual does later (i.e. mom gives in and takes out the trash). In the example, the individual learns that if he has a temper tantrum, he can avoid doing a nonpreferred activity (taking out the trash). This makes it much more likely that a temper tantrum will occur when he does not want to do something. Therapy often includes a functional behavior assessment to determine what may be maintaining the behavior, and an A-B-C log to track frequency, severity, and intensity of behaviors and whether manipulations of antecedents (i.e. preventative strategies) or consequences (reinforcements or punishment) have decreased negative behaviors (or increased positive behaviors). Behavior modification often begins with helping parents and teachers understand the basic functions of behaviors (i.e. to get attention, to get something they want, to escape or avoid a demand, a skill deficit, and/or self-stimulatory behaviors) and identifying reinforcers (i.e. praise, food, toys, etc.) that would motivate the child. Parents and teachers are taught both preventative and reactive strategies to implement depending on the function of the behavior (i.e. praise for positive attention-seeking behaviors or ignore for negative attention-seeking behaviors). Monitoring of the behaviors, through ABC logs, reward charts, and task analyses (where steps to activities are broken down to determine skill deficits), are often included in behavior plans (Kazdin, 2010; Forgatch & Patterson, 2010).

Problem-solving skills training. Children with externalizing problems often have distortions and deficiencies in how they perceive, code, and experience the world (Kazdin, 2010). Problem-solving skills training for children with externalizing problems targets these deficits in information processing and provide intensive training to encourage a child to use a step-by-step approach with self-talk to achieve effective prosocial solutions (McMahon, Wells, & Kotler, 2005; Fonagy & Kurtz, 2002; Kazdin, 2010). The problem-solving steps generally involve: (a) figuring out there's a problem, (b) coming up with solutions and possible consequences for each solution, (c) enact a solution, and (d) review the outcome of the solution. These steps are

taught through modeling, role playing, in vivo practice, and feedback. To help deter impulsive responding, reinforcement systems and response cost contingencies are used to encourage use of the problem-solving steps.

Social skills training. Many children with externalizing problems have significant difficulties with interpersonal relationships. Social skills training target social skills acquisition problems (child has never acquired a particular social skill or does not understand when it is or is not appropriate to use the behavior) and social performance deficits (child fails to execute the skill fluently or engages in maladaptive behaviors such as aggression or social withdrawal) (Gresham, Sugai, & Horner, 2001). Social skills training teach children more effective communication skills, friendship skills, conflict resolution skills, anger control, and empathy (Webster-Stratton & Hammond, 1997). Many social skills training can be administered individually or in group settings and involve social stories, modeling, role-playing, in vivo practice, and feedback (similar to problem-solving skills training).

Anger management training. Therapies that target anger and aggression rely on the social-cognitive theory on the development of aggression (Boxer et al., 2005). This theory posits that aggression is maintained by crystallized cognitive structures (i.e. attitudes, beliefs) and online information processing skills (i.e. attention control, problem-solving). In order to improve behaviors, these therapies often employ cognitive-behavioral strategies such as self-control training, reframing, perspective-taking, and attribution retraining (Lochman, 1992; Lochman, Boxmeyer, Powell, Barry, & Pardini, 2010; Hudley & Graham, 1993; Thornton, Craft, Dahlberg, Lynch, & Baer, 2000).

The Dodo bird's verdict – evidence-based nonspecific "common" factors

Although there are many different models of therapy, many are effective in treating psychological problems (i.e. IPT and CBT are effective for depression). Lambert and Bergin (1994) suggested three possible explanations: (a) different therapies can achieve similar goals through different processes; (b) different outcomes do occur but are not detected by past research strategies; and (c) different therapies embody common factors that are curative although not emphasized by the theory of change central to each model. There is a scene in Alice in Wonderland (Carroll, 1865) where characters are wet. To dry, the Dodo bird suggested they race, any way they want, and after a while, he ended the race. One of the characters asked who won the race, and the Dodo bird stated "Everybody has won, and all must have prizes" (Carroll, 1865). In the book, regardless of how the characters raced, they all eventually dried (and thus "won"). Rosenzweig (1936) was the first to believe that if therapies are equally effective, there must be a common mechanism among the therapies He identified several common features of psychotherapies: therapeutic relationship, catharsis, aspects of the therapist's personality, and consistency with which the therapist adheres to the method employed. Early psychotherapists agreed that support, interpretation, insight, behavior change, and good relationship, and other

certain therapist characteristics were common attributes underlying successful psychotherapy (Watson, 1940). Since then, some have examined the validity of the Dodo Bird's verdict and have concurred with Rosenzweig that the specific and theoretical differences of modalities are of less importance (Luborsky, Singer, & Luborksy, 1975; Ahn & Wampold, 2001; Budd & Hughes, 2009) and others have found that when comparing head to head for specific disorders, one treatment often pulls ahead (DeRubeis, Brotman, & Gibbons, 2005; DeRubeis & Crits-Christoph, 1998). In a meta-analysis study, Wampold (2001) estimated that specific factors account for 8% of the psychotherapy outcome variance whereas common factors account for 70% of the variance (and 22% unexplained). These results were criticized given that the study averaged the effect sizes across outcome measures, high number of CBT included in the study, and inclusion of a large number of studies focusing on convenience samples with mild symptoms. Despite the debate, most would agree that common factors play a significant role in determining treatment outcome.

Researchers do not have a consensus on what the common elements are (Prochaska & Norcross, 2013). Different authors focus on different domains in psychotherapy. Some argue that there is only one factor: client factors (Bromber, 1962) or therapeutic relationship (Hynan, 1981). Truax and Carkhuff (1967) found 3 commonalities across psychotherapies, all related to the psychotherapist: therapist empathy, warmth, and genuineness. Jerome Frank (1971) found 4 common factors included (a) emotionally charged confiding relationship with a helping person, (b) a healing context, (c) a rationale for the problems and how to resolve them, and (d) a procedure that involves active participation of patients. Grencavage & Norcross (1990) looked at 50 studies that proposed therapeutic common factors and found that the number of factors ranged from 1 to 20, with 89 different commonalities proposed in all. The authors found that common elements fall into several categories (a) the therapeutic alliance, (b) patient characteristics (i.e. patient's positive expectancies), (c) therapist qualities (i.e. empathic understanding), (d) change process (i.e. acquisition and pratice of new behaviors), and (e) treatment structure (i.e. adherence to theory).

Therapeutic alliance. Although there are a variety of common factors, the therapeutic alliance has the most support (Grencavage & Norcross, 1990). The therapeutic relationship is formed between therapist and patient and is developed over time (Norcross, 2010). The components of the therapeutic alliance generally include (a) an agreement on goals, (b) a collaborative effort in the designation of therapy tasks, and (c) the development of bonds, such as trust and attachment (Bordin, 1979; 1983). These components are based on Carl Rogers' (1957; 1959) posited conditions necessary and sufficient to the process of therapeutic change: (a) existence of a psychological interaction between people; (b) the patient is incongruent, being vulnerable or anxious; (c) the therapist is congruent, genuine, and integrated in the relationship; (d) the therapist has unconditional positive regard for the patient; (e) the therapist has empathic understanding; and (f) the patient perceives, to a minimal degree, the therapist's empathy and unconditional positive regard. Studies have found

positive influences of the therapeutic alliance in therapy, particularly techniques that involve reflecting, listening, interpreting, questioning, and advising (Ackerman & Hilsenroth, 2003; Maione & Chenail, 1999). Research has shown that the therapeutic alliance is predictive of outcome and treatment retention (i.e. Sharf, Primavera, & Diener, 2010; Norcross & Wampold, 2011; Martin, Garske, & Davis, 2000). Across psychotherapies, at least 12% of the variance in outcome can be attributed to the therapeutic relationship (Norcross, 2011).

Case Conceptualization

A primary task of therapists is to make informed decisions concerning the selection of appropriate and efficacious interventions that will enable the patient to overcome or manage psychological problems. A case conceptualization, which identifies the core problems and difficulties of their patients and their causes, is a bridge between assessment and intervention (Prieto & Scheel, 2002; Meier, 2003). It is a core psychotherapy skill and vital component of evidence-based practice in psychotherapy (Eells, 1997; Eells, Lombart, Kendjelic, Turner, & Lucas, 2005; Sperry, 2011). Early figures in abnormal psychology such as Sigmund Freud and Morton Prince recognized the importance of understanding a patient's history and developed their own approaches to case conceptualization in order to better understand patient's symptoms (Prince, 1905; Freud, 1900; 1953). Freud tried to present plausible accounts of why and how the patient's symptoms developed and were treated because he believed a "*detailed description of mental processes … enables me, with the use of a few psychological formulas, to obtain at least some kind of insight into the course of that affliction*" (Freud 1900; 1953). Freud then used these "detailed descriptions of mental processes" in order to search for the most effective treatment methods (e.g., hypnosis versus hydrotherapy). Rapaport and Gill (1959) were the first to recognize the need for multiple perspectives in a case conceptualization: dynamic (i.e. wishes and defenses against those wishes), structural (i.e. id vs. superego), genetic (historical and developmental etiology of symptoms and conflicts), adaptive (i.e. defensive and coping strategies), topographic (conscious vs. unconscious), and economic "consequences" of the factors listed previously.

Numerous definitions of what exactly should be included in a case conceptualization have been put forth. However, overall case conceptualization involves "descriptive, prescriptive, and predictive aspects of the case" (Sim et al., 2005). An early definition by Lazare (1976) of case conceptualization is "a conceptual scheme that organizes, explains, or makes sense of large amounts of data and influences the treatment decisions." Sperry et al. (1992) sees case conceptualization as a "process" that links data into a coherent pattern that "helps to establish diagnosis, provides for explanation and prepares the clinician for therapeutic work and prediction." Other authors describe case conceptualization as a "hypothesis" that summarizes etiology, diagnosis, treatment, and prognosis (Wolpe & Turkat, 1985; Eells, 2007). A comprehensive case conceptualization includes a

description of the problems, relevant developmental history, distal and proximal causal factors, maintaining factors, strengths, weaknesses, and guides for intervention (Bieling & Kuyken, 2003).

There are several components to good case conceptualization. First, a good case conceptualization utilizes and summarizes core information, rather than using all available information, to allow the clinician to focus on the important issues related to each individual patient (Sims et. al., 2005; Weerasekera, 1993; Risenberg-Malcolm, 1994; Stevens & Morris, 1995). Second, a good case conceptualization uses factual information to find themes and patterns to make inferences. The inferential explanation is a framework to discern interactions between factors such as vulnerabilities, development, maintenance, and resolution of the patient's problems (Summers, 2003 Eells, Kendjelic, & Lucas, 1998). Third, a good case conceptualization is an outline for treatment and provides a baseline for comparison of future case conceptualizations as new information regarding the patient, the therapeutic alliance, and therapy outcome is obtained over time (Horowitz, et. al., 1989; Eells, 1997). Additionally, it can protect and connect ongoing treatment to the core issues rather than constantly adjusting treatment when patients come in with transient moods or problems (Summers, 2003; Eells, 1997). Fourth, a good case conceptualization is case-specific and allows for the therapist to experience greater empathy for the patient and to anticipate potential threats to the therapeutic alliance, resistance, and other obstacles to therapy (Stevens & Morris, 1995; Summers, 2003; Eells, 1997; Samstag, Muran, & Safran, 2004). Finally, generally a good case conceptualization is not static. In the course of therapy, the therapist is continuously revising their conceptualization incrementally as they interact with and learn more about their patient (Persons & Tompkins, 1997; Dozois, Covin, & Brinker, 2003). A conceptualization generates hypotheses that are then tested through the application of treatment (Tarrier, 2006). Case conceptualizations are therefore both a product and process of psychotherapy. Good conceptualization does not guarantee effective treatment outcomes nor is there any evidence that poor conceptualization predict poor psychotherapy outcome (Eells, Kendjelic, & Lucas, 1998). However, without a conceptualization of the patient's problems, the therapist cannot make rational plans or interventions.

It is important to also note that a good case conceptualization is largely based on the clinician's perspective and professional judgment rather than the patient's. Recently, more emphasis has begun to be placed on the role patients have in collaborating with the therapist to developing the conceptualization. Not only does this allow the patients to provide their views confirming or disconfirming the therapist's view, but it can also help patients develop objectivity about their experiences (Milne, Claydon, Blackburn, James, & Sheikh, 2001).

Approaches to Case Conceptualization

There are a number of approaches to case conceptualization. Overall, these can be placed into three broad categories: symptom-focused, theory-focused, and pattern-focused (Sperry, 2005; Sperry, 2011).

Symptom-focused conceptualizations. Models of human behavior form the basis of this approach. The conceptualization centers on symptoms and functional impairment and develops treatment goals and interventions to reduce symptoms and increase functioning. This approach can be attractive because it gives a sense of accountability and positive treatment goals and outcomes are easier to measure and monitor. Little attention is paid to the "why" of the problem. Managed care organizations and other insurance payers favor this model because it "emphasizes measurable objectives that are stated in behavioral terms" (Sperry, 2005). Consequently, many clinics and programs require this type of case conceptualization and utilize psychotherapy treatment planners that break down symptoms and their treatments (i.e. Jongsma, Peterson, & Bruce, 2014; Jongsma, Peterson, McInnis, & Bruce, 2014).

Theory-focused conceptualization. Another approach to case conceptualization is the theory-based approach, which builds on the symptom-focused approach by including a clear explanations for the development of symptoms and impaired functioning. This approach emphasizes the "why" of the problem, by applying theoretical models that explain a patient's mental health problems. The theoretical orientation also serves as the basis for treatment goal setting and implementation. Thus, it can reflect a dynamically oriented, existential-humanistic oriented, cognitively oriented, systematic oriented, or one of many other approaches to therapy. The specific theory is "fit" to a patient or patient system (family members and/or significant others). For example, a cognitively oriented conceptualization would focus on information about how a client develops schemas and core beliefs, how a client learns behaviors, and how the client develops emotional regulation skills (Person & Tompkins, 2007), whereas a psychoanalysis approach would focus on information about personality attributes such as ego functions, affects, drives, or defenses (Messer & Wolitzky, 2007). Theory-focused conceptualization is valuable for training and is often used in graduate training (Osborn, Dean, & Petruzzi, 2004). However, it is difficult to compare the effectiveness of different case conceptualizations since each theory has different assumptions about causes of psychological problems or change mechanisms (Eells, Kendjelic, & Lucas, 1998; Baer, 2004).

There are over 15 specific theory-based case conceptualization methods. The Core Conflictual Relationship Theme (CCRT) method developed by Luborksy in 1977 was among the first, and was able to increase the reliability and validity of psychotherapy case formulations. The vast majority of psychodynamic and interpersonal theoretical methods draw from or build upon CCRT as the plan formulation method (Curtis, Silberschatz, Sampson, Weiss, & Rosenberg, 1988; Curtis & Silberschatz, 1992). Other theory-based methods are grounded in behavioral, cognitive-behavioral, interpersonal, and eclectic/integrative. These include the

Interpersonal Process Approach (Teyber, 2004), Cognitive-Behavioral Case Formulation (Persons, 1989; 1995), and Plan Analysis (Caspar, 1995).

Pattern-focused conceptualization. The last broad type of case conceptualization places more emphasis focus on the patient and the patient's interpersonal systems. Rather than being based on specific theories of human functioning, it focuses on the critical elements in a general case conceptualizations and looks for patterns representing the patient and factors that contribute to their style and mode of action and functioning. A pattern is a predictable and consistent style or manner of thinking, feeling, acting and coping, and defending the self in stressful and non-stressful circumstances (Sperry et al., 1992). Eells et al. (1998) argued that most of these methods incorporate four dimensions: (a) symptoms and problems, (b) precipitating stressors or events that activate the pattern, (c) predisposing life events or stressors that influence vulnerability to maladaptive functioning, and (d) a mechanism that links the preceding categories together. The goal of this approach is to put forth an explanation of the precipitants and maintaining influences of the individual's problems. A "theory" is constructed to fit the client and their system. This type of case conceptualization emphasizes developing treatment goals that maximize the "fit" between a patient's issues or symptoms and the treatment interventions provided.

CHAPTER II
THERAPIST COMPETENCE

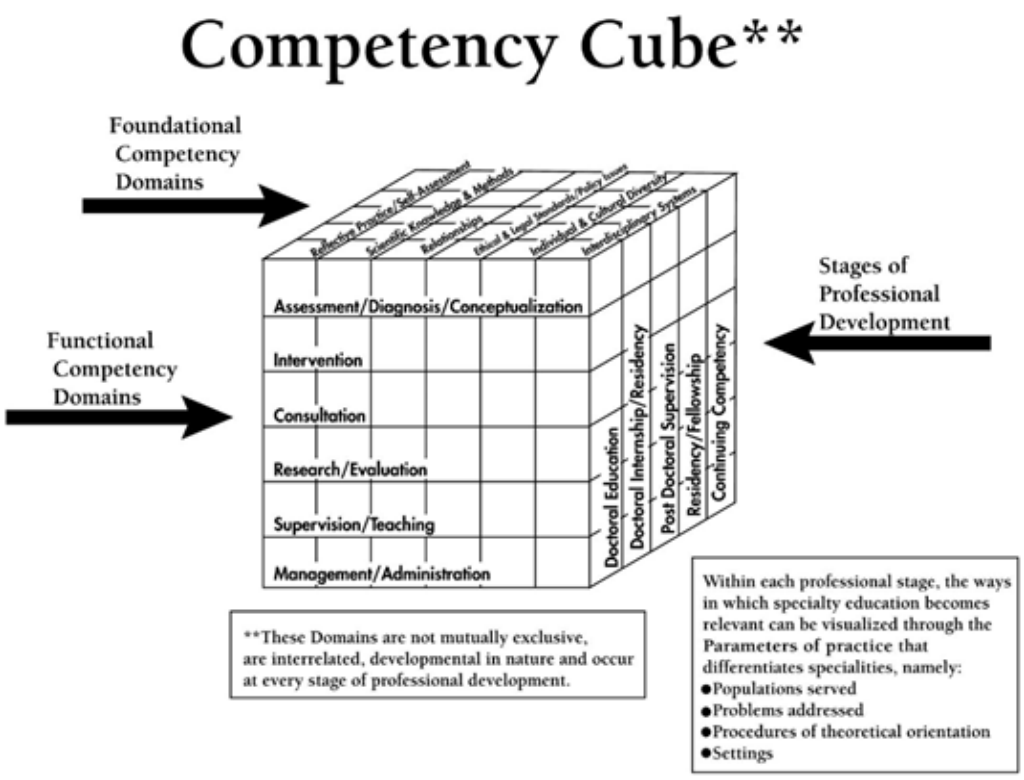
Therapists do count for effects in psychotherapy (Nezu & Nezu, 2005), and an important therapy factor influencing outcome is therapist competence (Beutler, Castonguay, & Follettee, 2006; Trepka et al., 2004). Ensuring therapist competence is also an important ethical principle. The American Psychological Association's *Ethical Principles* (2002) states that "Psychologists provide services, teach, and conduct research with populations and in areas only within the boundaries of their competence, based on their education, training, supervised experience, consultation, study, or professional experience" (Principle 2.01a). There is considerable ambiguity, however, in regards to the definition of therapist "competence" (Milne, Claydon, Blackgurn, James, & Sheikh, 2001; Shaw et al., 1999). Kazantzi (2003) has suggested that competence includes (a) competence related to a particular set of techniques that involves (a1) displaying adherence to a theoretical or conceptual framework in order to guide therapeutic interventions, and (a2) skillfully implementing the interventions as intended by the respective treatment manual; and (b) general therapeutic or common-factor competence, which involves (b1) engaging the patient in a constructive therapeutic relationship, and (b2) applying knowledge of when and when not to apply treatment interventions. Thus, when assessing therapist competence the therapist's ability to provide treatments that are themselves of an acceptable standard (Fairburn & Cooper, 2011) is central. This requires evaluating the therapist's knowledge of the treatment and its use, and the therapist's ability to implement the treatment. A competent therapist also must possess a range of other more global psychotherapeutic skills, including the ability to assess patients well (Barber et al., 2007; Sharpless & Barber, 2009).

Competency-based Education

Competency-based education in evidence-based treatments and practices have only begin to gain interest in recent years. Rather than focusing on a core curriculum created to meet predetermined learning objects, a competency-based approach focuses on the assessment of competency-defined student learning outcomes to practice in one's profession (Nelson, 2007; Roberts, Borden, Christiansen, & Lopez, 2005; McDaniel et al., 2014). It provides measurement of outcomes that relate to actual performance then uses those measurements to guide future training needs and professional development. Within psychology, many licensing boards, training councils, and organizations have worked to define and measure the competencies expected of mental health providers throughout the course of their training; from classwork to clinical work to continuing education. In 1996, the Committee on Accreditation (CoA) of the American Psychological Association (APA) revised its Guidelines and Principles for Accreditation (CoA, 1996) to mandate programs to outline training and learning

outcomes in terms of competence. In 2002, continued focus on development the competency-based education model in psychology created the "Cube" 3-dimensional model (see Figure 2) which conceptualizes foundational skills needed (i.e. understanding of scientific knowledge, ethics, diversity) and functional abilities to perform (i.e. assessment, interventions, research) across time (i.e. stages of professional development).

Figure 2. Cube model (Rodolfa et al., 2005)



In the past 10 years, task forces and workgroups have been created to continue to develop competency-based education in psychology. Their focus was to create guidelines to prepare for health service practice. The Assessment of Competency Benchmarks Work Group was developed to delineate competencies appropriate for different levels of training. In 2009, the APA released the Competency Benchmarks for Professional Psychology to assist in operationally defining core competencies and "behavioral anchors" across developmental levels (i.e. "readiness for practicum" means possessing entry-level skills; needs intensive supervision to "readiness for entry to practice" means serves as resource or consultant to others).

Competency Cluster 1: Professionalism. The Professionalism cluster involves issues related to: (a) professional values and attitudes; (b) individual, cultural, and disciplinary diversity; (c) ethics; and (d) reflective self-practice, self-assessment, and self-care. Professional values and attitudes refer to the behaviors and comportment needed to be a psychologist. This includes having integrity, understanding how to conduct oneself in a professional manner, accepting of personal responsibility, acting to safeguard the welfare of others, and

displaying professional identity as a psychologist. Individual, cultural, and disciplinary diversity refers to awareness, sensitivity and skills in working professionally with diverse individuals, groups and communities. This includes knowledge of oneself as a cultural being, knowledge of others as cultural beings, understanding how culture influences interactions, and being sensitive and understanding of diversity in professional work. Professionalism also includes the ability to identify and address ethical and legal issues with individuals, groups, and organizations.

Competency Cluster 2: Relational. The Relational cluster involves the abilities to effectively and meaningfully with individuals, groups, and/or the communities in order to achieve higher quality and more cost-effective care (Institute of Medicine, 2001). In order to develop and maintain effective relationships with a wide range of audiences, skills in clear and respectful verbal, nonverbal, and written communication and abilities in negotiating conflict and managing difficult feedback are essential.

Competency Cluster 3: Science. The Science cluster focuses on the integration of science and practice. It involves two general areas: (a) scientific knowledge and methods; and (b) Research/Evaluation. Scientific Knowledge and methods refers to understanding research, research methodology, data collection and analysis techniques, biological bases of behaviors, cognitive-affective bases of behavior, and development across the lifespan. Research/Evaluation refers to generating research that contributes to the professional knowledge base and/or evaluates the effectiveness of professional activities. This includes the abilities to function as leaders on research projects, evaluation programs, and developing practice standards.

Competency Cluster 4: Application. The Application cluster emphasizes delivering effective, evidence-based interventions. This includes skills in (a) evidence-based practice; (b) assessment; (c) intervention; and (d) consultation. In order to provide care that fits the individual served, the time demands, service delivery, and financial models of the clinic, abilities in interviewing and intervening based on evidence-based practices and treatments are essential. Assessment refers to the ability screening and assessment activities that provide rich clinical information to inform treatment. Intervention is a key competency because psychologists need to be able to treat mental health issues, address unhealthy behaviors, assist in adherence and compliance with care, and deal with many other psychosocial issues. Clinical consultation focuses on expert guidance and being readily available to other providers to assist in understanding complex symptom presentations.

Competency Cluster 5: Education. The Education cluster involves issues related to: (a) teaching; and (b) supervision. Teaching includes abilities in creating appropriate learning opportunities for students, using varied teaching methods to maximize learning and training of students and other health care professionals. Supervision refers to understanding the ethical, legal, and contextual issues of the supervisory role. This includes providing regular feedback to students on progress in competencies, understand supervision models and practices and utilizing a variety of formals (i.e. case discussion, direct observation, co-therapy) depending on the specific

needs and level of competency of each trainee.

Competency Cluster 6: Systems. The Systems cluster involves issues related to: (a) interdisciplinary systems; (b) Management-Administration; and (c) Advocacy. Interdisciplinary systems refer to understanding and interacting with professionals in multiple disciplines. This includes understanding systems of care and to understand and develop skills in systemic thinking. Knowing the various functions of team members contributes to increase effectiveness in clinical collaboration and promotes shared decision making. Management-Administration refers to the ability to be leaders and administrators and able to promote effective communication at the staff, clinical, and organizational levels. Additionally, psychologists should be able to understand how health care policy affects clinical, operational, and financial aspects of health care. Finally, advocacy means understanding the multiple factors that contribute to a patient's health functioning and development and intervening to promote change at the patient, institutional, community, or societal level.

Supervision

One way of helping to maximize competency is through clinical supervision. Supervision is defined as "an intervention provided by a more senior member of a profession to a more junior member or members of that same profession. This relationship is evaluative, extends over time, and has the simultaneous purposes of enhancing the professional functioning of the more junior person(s), monitoring the quality of professional services offered to the clients that she, he, or they see, and serving as a gatekeeper for those who are to enter the particular profession" (Bernard & Goodyear, 2004, p. 8). The American Psychological Association's (APA) Office of Accreditation in 1996 made supervision a skill domain that doctoral and internship training programs must include in their training in order to be accredited. The American Psychological Association's Ethical Principles of Psychologists, and its Code of Conduct both identify supervised experience as a way to establish competence in a specific area (APA, 2002). It is one of the primary mechanisms used to enhance and maintain therapist competence, in addition to formal training. Although supervision is often provided during = an individual's formal training, therapists also often receive ongoing supervision after the end of their formal study.

The function of supervision includes (a) enhancing the professional functioning of supervisees, (b) monitoring client care, and (c) assessing the fit between the needs of the supervisee and the needs of the patient (Bernard & Goodyear, 2004; Cottone & Tarvydas, 2003). The supervisor encompasses the role of teacher, counselor, mentor, coach, and/or consultant (Bernard & Goodyear, 2004). Supervision has been found to promote competence, through the "habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection of daily practice" (Epstein & Hundert, 2002, p. 226). Supervised practice provides for experiential training foundation in regards to the psychotherapist's knowledge,

skills, and values to be consolidated and applied (Falender & Shafranske, 2004). The activities used in clinical supervision include direct observation, evaluation, feedback, facilitation of supervisee self-assessment, and their acquisition of knowledge skills through instruction modeling, and mutual problem-solving (Falender & Shafranske, 2004). Clinical supervision has been found to improve job satisfaction, enhance treatment outcomes, and it is a protective factor against emotional exhaustion and turnover intention (Lamber, 2006; Bambling, King, Raue, Schweitzer, & Lambert, 2006; Knudsen, Ducharme, & Roman, 2008). Thus, when considering the efficacy of interventions, in addition to an EBT basis, therapist supervision should be considered.

Methods Used To Assess Therapist Competence

Despite its centrality to the provision of effective therapy, there has been relatively little research on the assessment of therapist competence. The main quantitative methods used are (a) measures of knowledge, and (b) measures of skill at implementing a treatment assessed through (b1) evaluation of patient outcome, (b2) evaluation of treatment sessions, and (b3) evaluation of the therapist in standardized role plays.

Direct measures of knowledge. Assessing therapist's knowledge of a treatment includes their knowing the treatment's strategies and procedures, its indications and contraindications, typical responses to the treatment, potential adverse effects, common difficulties encountered in the therapy and how to address them, and when to shorten, extend, or terminate treatment (Fairburn & Cooper, 2011). However, most studies that have assessed therapist knowledge have used direct measures of knowledge that include assessments that are generally narrow in focus and concentrate largely on the treatment's strategies and procedures (Herschell, Kolko, Baumann, & Davis, 2010; Rakovshik & McManus, 2010). No standardized, more general test of therapist knowledge of EBT psychotherapy has been developed to date.

Evaluation of patient outcomes. A meta-analysis of studies assessing therapist skill (based on videotaped, audiotaped, or transcribed therapy sessions rated by experts or trained raters) found that therapist competence is a significant predictor of client outcomes (Webb, Derubeis, & Barber, 2010). Thus, one way of measuring a therapist's skill at implementing treatment is through patient outcomes as the goal of treatment. Because patient outcome is an indirect measure of therapist competence it has a major shortcoming, in that is affected by variables other than the quality of treatment provided (e.g., patient characteristics such openness to treatment; intelligence; severity of the problem). Therefore, controlling for these variables when using patient outcome as an assessment of therapist is important, but generally quite difficult because of how extensive the variables are.

Evaluation of treatment sessions. The most widely used method for assessing the skills of therapists is by rating videotapes of the therapist's therapy sessions. This method requires that treatment sessions (generally

recorded) be evaluated by a trained rater on the presence and quality of certain therapist behaviors (e.g., in cognitive-behavioral therapy: eliciting key cognitions, use of guided discovery, setting of homework). A score is generated for the features, and if it is above a specific threshold, the therapist is judged to have been competent in this session (Fairburn & Cooper, 2011). There are several limitations to this method. These include the difficulty in defining, operationalizing, and demarcating aspects of treatment, and inter-rater reliability can be difficult to achieve (e.g. Jackson & Gortner, 2000). Additionally, the measures used to make these ratings often have not been validated, nor have the threshold scores. Because it requires sessions be recorded, carefully reviewed, and rated, this method is very time-consuming.

Evaluation of standardized role plays. Medical education has utilized the "standardized patient" approach as a method for teaching and evaluating skills (Ainsworth, et al., 1991), but it has not been widely used to evaluate psychotherapy skills. It involves a simulated patient (actor) who enacts a series of prepared clinical scenarios. This method attempts to control for patient characteristics that are problematic for the previous methods. However, this method is also subject to some similar concerns as the prior methods, such as difficulty in achieving reliable ratings of therapist performance, and the difficulty in establishing the validity of the scores.

.

CHAPTER III
MENTAL HEALTH AND MENTAL HEALTH TREATMENTS IN VIETNAM

Prevention and care of mental disorders is a growing public health problem worldwide. Across the world, 12.0% to 47.4% (median 26%) of people will experience a diagnosable mental disorder at some point in their lifetime (WHO, 2001; Kessler, et al., 2008; Andrade et al., 2003). Not only is there a high prevalence of neuropsychiatric disorders worldwide, but many of these disorders have early age of onset, contributing to the extent to which they contribute to the global burden of disease. Neuropsychiatric disorders are estimated to contribute 13-14% of the global burden of disease, the second greatest cause of years lost due to disability (YLD), and globally account for one third of YLD; depression alone is the third greatest cause of YLD (WHO, 2006; Mathers, Fat, & Boerma, 2008). In addition to the high prevalence and early age onset of mental disorders, the high level of global disability attributed to mental health problems also may be due in part to the failure to receive timely or adequate treatment (Alegria et al., 2000; Wang et al., 2007).

In Asia, which contains over half the world's population, prevalence and burden rates similar to that found around the world have been reported. In China, for instance, according to the Global Burden of Disease Study, mental health problems constitute 18% of the disease burden, and this is estimated to rise to 20% by 2020 (Murray & Lopez, 1996). In Cambodia, approximately 35% of adults are estimated to meet the diagnostic criteria for a psychiatric illness (de Jong, et al, 2001).

Mental health Resources In Asia

Although the majority of psychotherapy research has been conducted in the U.S., the U.S. contains only about 5% of the world's population (Arnett, 2009). The present study focuses on Asia, as it contains over half the world's population yet little psychotherapy research has been conducted there. Even in High Income Countries (HIC) such as the U.S. and in Europe, less than half of individuals with mental health problems receive care within a 12 month period (WHO, 2005) but in Low and Middle Income Countries (LMIC) the treatment gap is even greater. In China, for instance, more than 88% of individuals with non-psychotic mental disorders have never received any type of professional help for psychological problems (Phillips, et al., 2009). In Cambodia, only 0.1% of the population access mental health services every year (Belford, 2010), despite the fact that approximately 35% of adults meet the diagnostic criteria for a psychiatric illness (de Jong, et al, 2001).

Psychotherapy is one of the methods used by mental health professionals to the mental health needs of the population (Weissman, Verdili, Gameroff, Bledsoe, Betts, et al., 2006). Overall, in the U.S. there are over 250,000 mental health care providers, for slightly over 300 million people (Vanenhos, et al, 1992). In the U.S., it is estimated that a third of the population has used psychotherapy at some point in their lives (Vandenhos,

Cummings, & Deleon, 1992; Villeneuve, 2001). Over the past decade, in any given year slightly over 3% of the U.S. population has received at least one psychotherapy session (Olfson & Marcus, 2010). In contrast, in Asian countries such as China there are less than 15,000 professional mental health care providers for 1.2 billion people, 450 providers for 210 million people in Indonesia, 40 providers for 8 million people in Cambodia, and 286 providers for 88 million people in Vietnam (Belfer, 2008; Meshvara, 2002; WHO, 2005). In addition, in LMIC mental health providers such as psychiatrists are heavily concentrated in the large cities, with little mental health support in rural areas. For sub-specializations such as pediatric mental health, the figures are even much lower. Most LMIC have one child psychiatrist for every 1-4 million people (WHO, 2005). In Malaysia, for 24 million people there are only seven child psychiatrists, several of whom have not had formal training in child psychiatry (Meshvara, 2002). In Vietnam, there are only about 20-30 child psychiatrists (the equivalent of about 1 child psychiatrist per 750,000 children), the large majority of whom have not had a formal residency or fellowship in child psychiatry (Hong, Yamazaki, Banaag, & Yasong, 2004).

Another impediment to successful mental health treatment is that although psychotherapists in HIC are increasingly using psychotherapies that have an empirical basis, non-EBT (i.e., non-evidence based) treatments such as psychoanalysis are increasingly popular in Asian countries (Chang, Tong, Shi, & Zeng, 2005). In addition to wasting resources and ultimately undermining the confidence that society has in psychological mental health treatments, use of such treatments means that an even a smaller proportion of the population with mental health problems will receive appropriate and effective treatment. This issue has even received media attention in the U.S. with articles in The New Yorker (Osnos, 2011), the Washington Post (Wan, 2010), and the BBC World Service (2011). Psychoanalytic therapy is popular among the affluent, and thus it can be much more lucrative for Chinese psychotherapists to provide psychoanalysis, despite the lack of empirical support for its effectiveness (Chang, et al., 2005; Qian, Smith, Chen, & Xia, 2002).

Vietnam

Although Asia is a vast and diverse continent containing over half of the world's population, most of the psychotherapy research that has been conducted in Asia has focused on a small subset of Asian countries, primarily China, Korea, and Japan. The present study focuses on the Asian country of Vietnam, the 13th largest country in the world, with a documented need for mental health services but little clinical infrastructure (Lam & Weiss, 2007). Vietnam is a country of approximately 330,000 km² stretching more than 1,600 kilometers along the edge of the Southeast Asian mainland from the South China Sea to the Gulf of Thailand. It borders China to the north and Laos and Cambodia to the west, to the east and south lies what the Vietnamese call the East Sea. It has a population of 88.77 million (GSO, 2013). The per capita annual gross national income in Vietnam is $1,730 compared to $53,670 in the United States (World Bank, 2014). The main language used in the country is

Vietnamese (80% speak Vietnamese), and the main ethnic group is Kinh/Viet, although there are over 54 ethnic groups.

Following the end of a long and destructive war in 1975, economic and social challenges in Vietnam were substantial. To address inefficiencies associated with its centralized economy, in 1986 Vietnam shifted to a mixed market-based economy. After two decades of this 'Doi Moi' reform, Vietnam achieved significant economic progress, with GDP growth stabilized at 8% per year, although in the recent economic downturn annual growth has declined to 5.4-6.4% between 2009-2013 (World Bank, 2014). However, while the policies of Doi Moi generally have been successful economically, social and health domains have not developed comparably. It has begun to be recognized that the rapid economic growth has come with social costs, as with many developing countries, increasing stress (e.g., Gabriele, 2006).

Mental Health In Vietnam

There is little awareness of mental disorders in the general population. Mental disorders are highly stigmatized and discrimination is rampant, even more so than in Western countries (Weiss, 2007). For instance, a study looking at perceptions of epilepsy, which is a neurological disorder but treated as a mental disorder and managed within the mental health system in Vietnam, found that only 67% of participants had heard of epilepsy, 10% of participants believed it was a form of insanity, 36% of participants objected to individuals with epilepsy interacting with their children, and 67% believed that individuals with epilepsy should be denied a job (Tuan et al., 2007). There is little human rights protection for those who seek mental health treatments. The 1989 Law on Protection of People's Health provides certain rights to the mentally ill, such as obtaining a relative's consent prior to treatment. However, enforcement of even this most basic law is inconsistent at best, and only mental health hospitals review human rights protection of patients each year (Vuong et al., 2011). Other mental health facilities have no review to ensure human rights protection for the mentally ill. Additionally, most mental health providers receive less than a day's training on human rights protection.

There has been relatively little mental health research in Vietnam. In an unpublished epidemiological survey conducted over a 3-year period (2000-2002) of eight localities that represented various geographic and socioeconomic conditions throughout the country, an overall prevalence rate of 14.9% for mental health disorders was found, with alcohol abuse at 5.3%, depression at 2.8% and anxiety at 2.6% (National Psychiatric Hospital No 1, 2002). A more recent study on depression and suicide have found higher lifetime prevalence rates, with 25% of 14-25 year olds reporting that felt so sad or helpless that it impairs their daily functioning, 2.8% had engaged in self-injurious behavior, and 0.5% had attempted suicide (Ministry of Health, 2005). Another study found 33% of women who presented to general health clinics in Ho Chi Minh City had depressive symptoms with 19% of them reporting they had suicidal ideations (Fisher et al., 2004). An

unpublished study from the Hanoi School of Public Health in 2008 found that the DALY (number of years lost due to ill health, disability, or early death) for mental and neurological disorders were 15% for men and 22% for women. The Vietnam Health Report 2006 estimated that 10 million people are in need of mental health care, whereas the Health Statistics Yearbook indicated that 114,000 patients had received services for mental illness or behavioral disorders in 2005, up from 73,000 in 2000 (Vietnam Health Report, 2006; Ministry of Health Vietnam, 2000; 2005).

Mental Health Resources In Vietnam

As is true for LMIC, in the early stages of modernization the Vietnamese government made an explicit decision to focus its limited resources on direct economic development, giving low priority to education and health, in particular mental health (Stern, 1998). As a result, resources for treatment of mental health problems in Vietnam are limited (WHO, 2005; WHO-AIMS, 2006) with, for instance, 286 psychiatrists, 730 general physicians working in mental health facilities, 1700 psychiatric nurses, 50 psychologists, 125 social workers, and 650 other mental health workers serving approximately 88.77 million people. Additionally, most psychologists are trained in general psychology, not clinical psychology, and social workers rarely work in mental health (Niemi, Thanh, Tuan, & Falkenberg, 2010). In terms of all physicians, only 51-80% have training for key mental health conditions (WHO-AIMS, 2006). Although there are about 75 medical doctors per 100,000 population, only about 1 medical doctor (both psychiatrists and general physicians who work in mental health facilities) per 100,000 provide mental health services (GSO, 2013). Furthermore, with a socialize medical model, all Vietnamese should, in theory, have access to free psychotropic medicines; however, only 60-70% of the population have free access to essential psychotropic medicines (i.e. Clopromazine, Diazepam, Haloperidol, Levomepromazine, Risperidone, Amitriptyline, Valproic acid, Carbamazepine, and Clomipramine). For those that have difficulty with free access and thus pay out of pocket, the cost of antipsychotic medication can be prohibitive at 33% of one day's minimum wage and the cost of antidepressant medication is 13% of one day's minimum wage (WHO-AIMS, 2006).

There has been increasing recognition in Vietnam of the need for resources to be shifted to social domains such as mental health (Gabriele, 2006). Despite tremendous growth in the mental health system in the last 15 years, resources are still very limited. The number of mental health patients has steeply increased. In 2004, community-based facilities cared for 46,070 patients (56.9/100,000 people) and by 2008, this number almost tripled to 126,600 patients (150/100,000 people) (WHO-AIMS, 2006; MOH, 2008). Mental health care in Vietnam is provided through a 4 area tier system (capital, province, district, and commune) with two major types of services, community-based and hospital based. There were 600 outpatient facilities in 2006, and by 2011, it only grew to 700 outpatient mental health facilities in all of Vietnam (WHO-AIMS, 2006; Vuong et al.,

2011). As of 2011, there were 30 outpatient departments at the central and provincial mental health hospitals, 35 mental health departments in provincial center for social disease control and prevention or provincial mental health dispensaries, and 642 mental health divisions in a district preventive health center. Just in the past 5 years, mental health has become more integrated into primary health care with 6278 commune health stations (out of 10,750 communes) which function as gatekeepers to the mental health care system (Vuong et al., 2011). These community-based services promote mental health and diagnose and treat mental disorders; however, these community-based facilities are not staffed by psychiatrists (who all work in hospitals) but rather general physicians. In 2011, there were 2 central mental health hospitals, 31 provincial mental health hospitals, 23 psychiatric departments in general provincial hospitals, 2 day treatment (partial hospitalization) hospitals, and 1 child/adolescent inpatient clinic. In total, these sites had 5,000 beds (or 6.08 beds per 100,000). The hospital bed occupancy rate was 122.9% in 2004 and despite increases in the number of beds remains at 122.6% in 2011 (Vuong et al., 2011). Despite the growth and need for mental health services, less than 20% of community-based facilities and less than 5% of hospital-based facilities provide psychosocial treatments (WHO-AIMS, 2006). The majority of care is medication management.

CHAPTER IV
RATIONALE AND PURPOSE FOR THE PROPOSED STUDY

In sum, then, mental health represents a significant challenge in both the developed and the lesser developed countries of the world. Psychotherapy represents one set of methods that can help to address this challenge. There are over 400 different forms of psychotherapy: research supports the efficacy of some of these, for others research suggests a lack of efficacy, and for most there have been no research evaluations. Reflecting these differences in efficacy (of those that have been evaluated) are the use of evidence-based techniques and methods to ensure therapist competence. Case conceptualization has frequently been described as an "essential component" of psychotherapy and therapist competence. The organization and integration of the information from a patient and their system and the quality of the case conceptualization can impact how therapists understand their patients and implement a treatment plan (Crits-Cristoph, Cooper, & Luborsky, 1998).

Relatively little of research in EBT and therapist competency has been conducted in Asia. Asian countries vary greatly in the psychotherapeutic approaches they use, in their psychotherapy training, and licensing / certification. The present study focuses on Vietnam, the 13th largest country in the world, with the world's second most rapidly expanding economy. While mental health clinics ("advice centers") are rapidly being established in Vietnam, little if anything is known about the competency or training of the 'psychotherapists' who staff these clinics or in other sites that provide psychotherapy. To guide development of mental health treatment in Vietnam, and to provide a model for similar countries, the broad purpose of the present project is to assess the knowledge and competency of psychotherapists in Vietnam.

Research Hypotheses

The present study focused on three primary dependent variables. The first two involve the techniques that the Vietnamese psychotherapists reported that they use to treat common mental health problems, and the third involves the causes they ascribe for the mental health problem being treated. Participants in the study reported (a) what psychotherapy techniques that they would use to help a client described in a vignette with a common mental health problem (e.g., anxiety; depression), (b) through what mechanism this technique would work, and (c) the causes of the mental health problem described in the vignette. Psychotherapy techniques reported by the participants are categorized into either (a) psychotherapy techniques that are specific to a particular form of psychotherapy ("*psychotherapy-specific techniques*"), or (b) techniques that are non-specific, general, or common to most forms of psychotherapy ("*common-factor psychotherapy techniques*"). Exposure therapy, for example, is a technique specific to behavior therapy whereas development of a therapeutic relationship is a factor common to most forms of psychotherapy.

The first variable used in the study was "*EBT level of psychotherapy techniques*", which was the extent to which the psychotherapy technique reported used by the research participant was evidence-based. The second variable used in the study was "*EBT level of psychotherapy mechanism*", the extent to the mechanisms through which this technique was reported to operate were evidence-based. The third variable used in the study was the extent to which the causes for the vignette client's mental health problems reported by the participant were evidence-based. Thus, the three variables used in the study were (a) *EBT level for psychotherapy techniques*, (b) *EBT level for psychotherapy mechanisms,* and (e) *EBT causal factors*. Several independent variables were included in the present study. These included participants' number of years of professional experience, their degree (bachelor's, master's, etc.), and their self-reported therapeutic / theoretical orientation. To assess participants' theoretical orientation, participants completed the Psychotherapy Therapeutic / Theoretical Orientation scale, where they were asked to rate the level to which each of 12 different therapeutic / theoretical orientation guided or influenced them. This scale produces three factors: (a) Freudian; (b) Humanistic / Eclectic; (c) Cognitive-Behavioral. Each participant had a mean score on Freudian, Humanistic / Eclectic, and Cognitive-Behavioral. Additionally, participants were grouped into "Non-EBT" based on highest scores on either the Freudian and Humanistic / Eclectic whereas the "EBT" group had the highest scores on Cognitive-Behavioral. These various factors were used in the research hypotheses below:

1. The overall mean scores for (a) *EBT level for psychotherapy techniques*, (b) *EBT for psychotherapy mechanisms,* and (c) *EBT causal factor* will be significantly below the midpoint of 2.0. That is, on average Vietnamese therapists will have non-EBT approaches to psychotherapy intervention.
2. The mean score for (a) level *EBT level for psychotherapy techniques* will be significantly higher than that for (b) *EBT level for psychotherapy mechanisms*. This hypothesis is made because technique procedures can be described and implemented mechanically whereas describing the process of change requires more conceptual understanding.
3. The mean score for those participants with a Bachelor's degree or less will not differ significantly from participants who have a Master's degree or higher for (a) *EBT level for psychotherapy techniques*, (b) *EBT for psychotherapy mechanisms,* and (c) *EBT causal factor*. This hypothesis is made because in contrast to in high income countries, Vietnamese therapists generally do not have evidence-based training regardless of their educational level as there are few opportunities for EBT training.
4. There will be no relationship between years of professional experience for (a) *EBT level for psychotherapy techniques*, (b) *EBT for psychotherapy mechanisms,* and (c) *EBT causal factor*. This hypothesis is similarly made because in Vietnam there have been few opportunities for evidence-based

training, thus an increased number of years of practice does not provide for increased opportunity for evidence-based training.

5. For participants with a Bachelor's degree or less, there will be no relation between years of professional experience for (a) *EBT level for psychotherapy techniques*, (b) *EBT for psychotherapy mechanisms*, and (c) *EBT causal factor*. However, for those with a Master's Degree or higher, there will be a negative relation between years of professional experience for (a) *EBT level for psychotherapy techniques*, (b) *EBT for psychotherapy mechanisms*, and (c) *EBT causal factor*. These hypotheses were made because for Bachelor level or lower therapists receive relatively little EBT training, regardless of how long they have been in the field. In contrast, for Master's level or therapists, newer therapists are more likely to have received EBT than therapists with more professional experience.
6. Therapeutic / Theoretical Orientation
    1. Scores on Non-EBT therapeutic / theoretical orientations (comprised of Freudian Orientation, and Humanistic-Eclectic Orientation) will each be <u>negatively correlated</u> with (a) *EBT level of psychotherapy techniques*, (b) *EBT level of psychotherapy techniques* and (c) *EBT causal factors*. EBT therapeutic / theoretical orientation (Cognitive-Behavioral Orientation) will be positively correlated with (a) *EBT level of psychotherapy techniques*, (b) *EBT level of psychotherapy techniques* and (c) *EBT causal factors*.
    2. Additionally, means cores for Non-EBT group will be <u>significantly lower</u> than EBT group on (a) *EBT level of psychotherapy techniques*, (b) *EBT level of psychotherapy techniques* and (c) *EBT causal factors*. This hypothesis is made because individuals who are Freudian or Humanistic-Eclectic in orientation are likely to have less evidence-based training as compared to individuals who are Cognitive-Behavioral.

CHAPTER V
METHODS

Participants

Sample. Participants included 62 providers of psychotherapy mental health services, including psychologists, psychiatrists, counselors, and other individuals who provide non-medication treatment for mental health problems. They were recruited from Danang City (the 4th largest city in Vietnam), Hanoi (capital of Vietnam), and Ho Chi Minh City (HCMC; the largest city in Vietnam). Descriptive statistics for demographics are reported in the results section (see Table 1, Figures 3-4).

Sample selection and procedures. Because there are no licensure requirements for providing "psychotherapy" in Vietnam, the criteria for sample selection were that the individual (a) referred to themselves as a "counselor", "psychologist", "therapist" or "advisor" (a generic term used in Vietnam to describe people provide professional assistance to individual with personal or emotional problems), (b) worked with people with emotional and behavioral mental health problems (i.e. problems for which psychotherapy would be appropriate. This included in addition to standard "mental health" problems, relationship problems), in order to (c) attempt to improve the behavioral or emotional functioning of the client. The provider did not have to be a psychologist, did not have to call themselves a "psychotherapist" but they did have to provide behavioral, non-medical treatments that were fundamentally verbally based, rather than based on medication, or some procedure that directly involves manipulation of the physical body (e.g., surgery). The participants were required to work with adults, although not necessarily exclusively. The individuals' formal training (e.g., whether they had a Master's degree) was not an inclusion requirement.

To identify potential participants, we first contacted providers with whom we already had professional contact as well as providers at the various mental health clinics in Danang, Hanoi, and HCMC. In the three cities, there were 14 clinics. Providers identified through this process were asked to suggest clinics or agencies in these three cities that met the inclusion criteria. The director of each of the centers was contacted first by email then through a phone call, where the purposes of the study and its procedures were explained. The director was then asked for permission to involve the center or agency in the study. If s/he agreed, then the director was sent a form in which s/he listed the various staff who met the inclusion criteria, and the director informed the staff about the study. The director gave staff a form to complete and send back to the project giving or declining to give the project permission to contact the staff member. If they indicated interest in participating, an appointment was set up to meet with a Research Assistant. At the appointment, the interviewer obtained informed consent. Then, the participant was asked to complete the background questionnaire, read the short case vignettes and selected one for the study. S/he then read the full case vignette, and was interviewed on

therapy techniques and case conceptualization causal factors on the chosen case vignette. The interview lasted approximately 2 hours. Participants were paid the Vietnamese equivalent of approximately $25 for completing the interview.

Measures

Background Questionnaire. Participants were asked to provide basic demographic information including their gender and age as well as detailed information on their educational level, training and supervision experiences, and therapy experiences. Therapy experiences included the types of patients with whom they typically worked (e.g., diagnoses, age range), and self-reported therapeutic / theoretical orientation. The self-reported therapeutic / theoretical orientation question included a quality control item where a made-up therapy ("Serrion Therapy") was included. Participants were categorized into (a) Pseudo-therapists (with no degree-related training in mental health); (b) Professionals (having a degree in psychology, psychiatry, social work, or other applied mental health field); and (c) EBP therapists, from the VNU masters in clinical psychology program.

Assessment of EBT knowledge and use. The participants were presented with four vignettes that described common adult mental health problems including: (a) depression, (b) anxiety, (c) behavior problems, and (d) somatization. The provider was asked to select the case that they would be most comfortable treating, and with which they had the most experience. They then were asked a series of questions:

1. "Can you please tell me, if you had a client like that described in the vignette, what you think would the cause of the problems be? Obviously, you cannot say what the exact causes of the problems of the client in the vignette are since it is just a brief description, but think about similar clients and families you have known, and in as much detail as possible please tell me what the cause of the problems might be." There was no limit as to the number of causal factors the participants could provide.
2. "If this family came to you for help with this problem, what would you do? In as much detail as possible, please tell me what you would do to help the family, what techniques and procedures would you use? If you would use more than 3 techniques, please tell me the top 3 techniques you would use."
3. "Why you would use each technique? What is your goal for using each techniques?"

Logically, providers first should develop an understanding of the cause of the patient's problems (#1), and only then treat the patient (#2 and #3). However, to avoid influencing the provider in their responses, they were first asked question #2 (treatment techniques) and #3 (technique goals/mechanism of change), then question #1 (the cause of the problems). That is, participants were asked to give their techniques and description or process of the technique first, then once all techniques were described, the interviewer went back

to each technique and asked participants to explain the goal of the technique or the mechanism of change. Finally, they were asked to identify causal factors and how those causal factors contributed to the problems.

Coding of interview responses. Three codes were derived from the interview. The first was "*EBT level of psychotherapy techniques*", which was the extent to which the psychotherapy technique reported described by the research participant was evidence-based. The second variable was "*EBT level of psychotherapy mechanism*", which was the extent to the mechanisms through which this technique was reported to operate were evidence-based. The third variable was "*EBT causal factors*", the extent to which the causes for the vignette client's mental health problems reported by the participant were evidence-based.

In regards to *EBT level of psychotherapy techniques*, each technique first was identified as either specific or common-factor. That is, techniques coded as to whether they were specific to a particular form of psychotherapy ("*psychotherapy-specific*") or non-specific or common to most forms of psychotherapy ("*common-factor psychotherapy*") (Wampold, 2001, Persons, 2008). Then, the technique was rated in regards to the extent to which the participant's description reflected a technique that was evidence-based, on as scale from 0 to 4. A score of 0 indicated that the technique was not evidence-based or too vague in description to be coded, whereas a 4 indicated that the technique was evidence-based and comprehensive with no significant missing or incorrect components (see Appendix D for each score criteria and examples). For the mechanism, a score of 0 indicated that there was no understanding of the evidence-based mechanism of change, and 4 indicated a comprehensive understanding of the mechanism or process of change (see Appendix E for each score criteria and examples). Theoretically, participants could score high on one or low on the other of these two codings, although empirically these codings are likely to be moderately highly correlated, since they both reflect EBT understanding. Coding of the level of EBT for causal factors for the mental health problem describe in the vignette was based on the extent to which these factors were evidence-based, and appropriate for the vignette (i.e., a causal factor that was EBT for depression would not be considered EBT for somatization). This factor was coded from 0 to 4, with 0 indicating no EBT recognized causal factors were included in the descriptions whereas a 4 indicated a clear, EBT-based description of the causal factors for the client's problem was presented (see Appendix F for each score criteria and examples).

Data Analysis

Demographics and interview data were collected and entered into an SPSS database. Data analyses were conducted in several stages. First, missing data were evaluated for frequency and type. A threshold of 5% or greater total missing responses per participant was utilized for exclusion from the study. 0 participants exceeded this threshold. Participants with missing data were excluded pairwise in analyses. Next, descriptive statistics (i.e., central tendency, variability, skewness, and kurtosis) were examined for all study variable distributions.

Demographic analysis. Personal, professional, and practice pattern demographics were used to describe the sample. Descriptive analysis was by frequency counts, percentages, means and standard deviations in univariate analysis. A table and narrative describes and summarizes the sample in the results chapter (see Tables 1-3). Exploratory factor analysis was conducted to identify therapeutic / theoretical orientation factors for use in the hypothesis tests (see Table 3).

Hypothesis testing. In this study, a comparison of means and correlation tests were used. For Hypothesis 1 and 2, exploratory analyses were performed to test assumptions for conducting t-tests. If the skewness and / or kurtosis suggested that the score distribution were normal, a one-sample t-test (for Hypothesis 1) and a paired-sample t-test (for Hypothesis 2) were performed. If the skewness and / or kurtosis suggested that the score distribution significantly departed from the normal distribution, then a Wilcoxon signed-rank test was used since it is a nonparametric analogue to the paired-sample t-tests. Effect sizes were also conducted. For Hypothesis 3 and 6.1, exploratory analyses to test assumptions for t-tests were performed. If the skewness and / or kurtosis suggested that the score distributions were normal, an independent t-test was performed; however, if the scores have non-normal distribution, then a Mann-Whitney U test was performed. For Hypothesis 4, 5, and 6.2 correlations were performed. A Pearson's product-moment correlation test was used if assumptions were met. If the skewness and /or kurtosis suggested that the score distribution was non-normal, then a Kendall's tau correlation test was used since it is a nonparametric analogue to the Pearson's product-moment correlation test. When data distributions are non-normal, then the median is a better measure of central tendency than the mean. Nonparametric tests such as the Wilcoxon signed-rank test, Mann-Whitney U test, and Kendall's tau correlation ranks of the individual observations rather than on their actual values (Field, 2013). The Kendall's tau correlation was chosen over Spearman's coefficient as it is a better estimate of the correlation in the population (Howell, 1997). Additionally, it is better for smaller samples and those with a large number of tied ranks (Fields, 2009).

CHAPTER VI
RESULTS

Descriptive Statistics

Tables 1 and 2 present descriptive statistics for demographic and educational background and experience with specific psychopathology.

Demographic. For the 62 participants in the study, the mean age was 34.4 years (SD = 8.1 years). Overall, 48 (77.4%) were female, 48 (77.4%) referred to themselves as psychologists, 4 (6.5%) were psychiatrists, 6 (9.7%) counselors, and 7 (11.3%) identified as other. Percentages for professional title exceeded 100% due to several participants endorsing more than one professional title. Two participants (3.2%) had a 3-year degree, 28 (45.2%) had a Bachelor's degree, 21 (33.9%) had a Master's degree, 6 (9.7%) had a Doctorate degree, and 5 (8.1%) had a Medical degree. (See Table 1). Participants had an average 7.0 years (SD = 5.3) years of professional experience and saw on average 10.6 (SD = 10.8) clients a week (See Figures 3-4). The majority of participants (51.6%) currently participate in informal supervision, and 25.8% have formal supervision; only 12.9% had never had any previous or current supervision (see Figure 5).

Table 1. Demographics and Educational Background of Participants

	Total
Variable	**Frequency (%)**
Gender (N = 62)	
Male	14 (22.6%)
Female	48 (77.4%)
Professional Identity (N = 62)	
Psychologist	48 (77.4%)
Psychiatrist	4 (6.5%)
Counselor	6 (9.7%)
Other	7 (11.3%)
Highest Degree Earned (N = 62)	
Associate's (3 year degree)	2 (3.2%)
Bachelor's	28 (45.2%)
Master's	21 (33.9%)
Ph.D.	6 (9.7%)
M.D.	5 (8.1%)
	Mean (SD)
Age (years) (N = 62)	34.4 (8.1)
Years of professional experience (N = 62)	7.0 (5.3)
Number of Patients seen per week (N = 61)	10.6 (10.8)

Figure 3. Histogram of Years of Experience as a Mental Health Professional (N = 62)

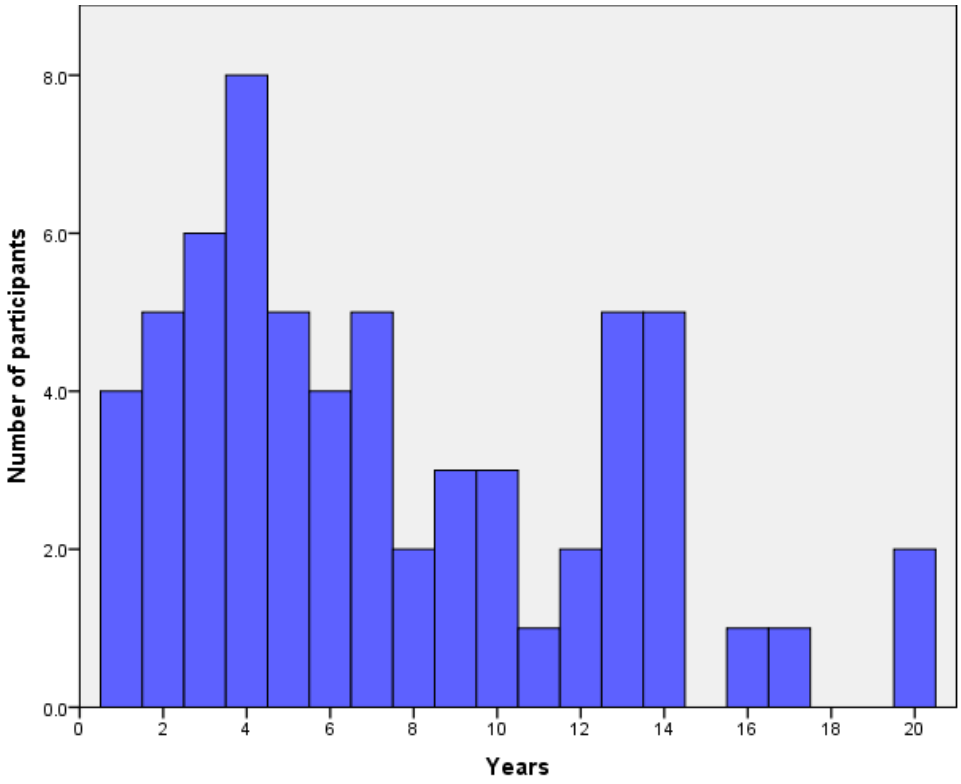


Figure 4. Histogram of Clients Seen Per Week (N = 61)

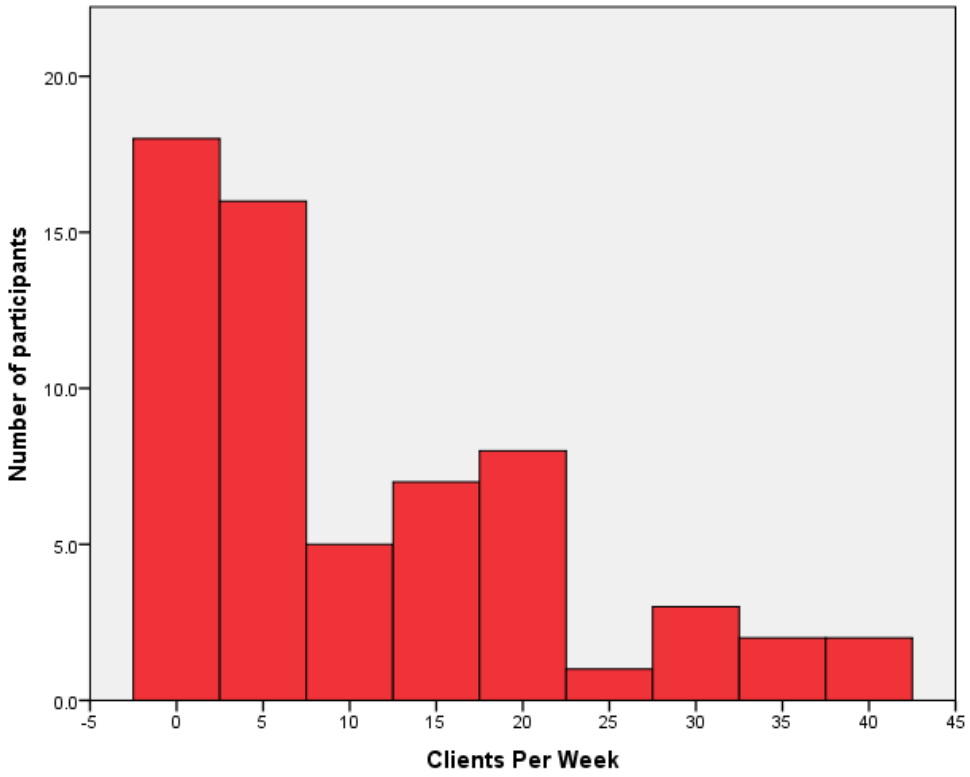
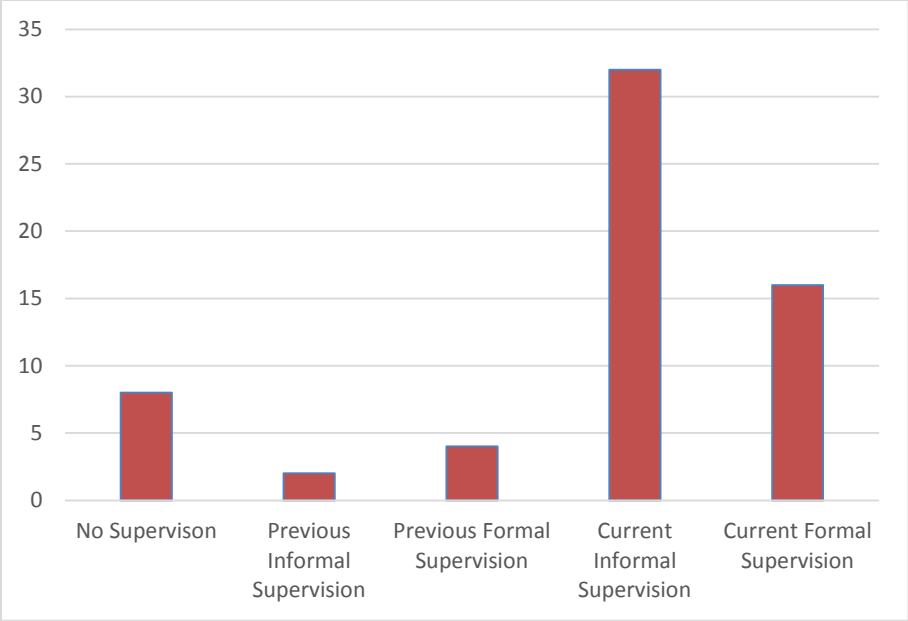


Figure 5. Summary of Supervision



Experience with specific client problems. Participants were asked to rate on a scale of 0 to 5 their level of experience with 26 different client problems. Table 2 shows participant's ratings for the different client problems. The top three client problems that participants rated as having at least moderate experience were Anxiety (45.8%), Mental Retardation (41.9%), and Relationship Issues (38.7%).

Table 2. Level Of Clinical Experience With Different Forms of Psychopathology (N = 62)

Variable	Score 0	Score 1 or 2	Score 3 or higher
	Frequency (%)	Frequency (%)	Frequency (%)
Psychopathology (N = 62 for all)			
Depression	24 (38.7%)	21 (33.9%)	17 (27.4%)
Somatoform	8 (12.9%)	35 (56.5%)	19 (30.6%)
Anxiety	6 (9.7%)	27 (43.5%)	29 (45.8%)
Behavior Problems	4 (6.5%)	38 (61.3%)	20 (32.3%)
Relationship Issues	4 (6.5%)	34 (54.8%)	24 (38.7%)
Mental Retardation	12 (19.4)	24 (38.7%)	26 (41.9%)
Oppositional Defiant	16 (25.8%)	32 (51.6%)	14 (22.6%)
Gambling	14 (22.6%)	33 (53.2%)	15 (24.2%)
Academic / Motivational Issues	14 (22.6%)	37 (59.7%)	11 (17.7%)
Learning Disability	9 (14.5%)	33 (53.2%)	20 (32.3%)
Developmental Disability	11 (17.7%)	36 (58.1%)	15 (24.2%)
Phobias	20 (32.3%)	28 (45.2%)	14 (22.6%)
Sexual Abuse	12 (19.4%)	33 (53.2%)	17 (27.4%)
Hysteria	13 (21.0%)	36 (58.1%)	13 (21.0%)
Violence and Abuse	18 (29.0%)	28 (45.2%)	16 (25.8%)
Bipolar Disorder	19 (30.6%)	32 (51.6%)	11 (17.7%)
ADHD	17 (27.4%)	32 (51.6%)	13 (21.0%)
Gender Identity	14 (22.6%)	38 (61.3%)	10 (16.1%)
Substance Abuse and Addiction	16 (25.8%)	32 (51.6%)	14 (22.6%)
OCD	25 (40.3%)	25 (40.3%)	12 (19.4%)
Sexual Problems	18 (29.0%)	32 (51.6%)	12 (19.4%)
Hypocondriasis	22 (35.5%)	30 (48.4%)	10 (16.1%)
Asperger's Disorder	16 (25.8%)	29 (45.8%)	17 (27.4%)
Somatization	8 (12.9%)	36 (58.1%)	18 (29.0%)
Conversion Disorder	19 (30.6%)	29 (46.8%)	14 (22.6%)
Schizophrenia	21 (33.9%)	32 (51.6%)	9 (14.5%)

Self-reported therapeutic / theoretical orientation. Participants were asked to rate on a scale of 0 to 5 the extent to which they had been influenced by different therapeutic / theoretical orientations. Zero represented

not at all and 5 represented being very greatly influenced: psychoanalysis, behavior, cognitive, humanistic, Systemic, Serrion (fake), client-centered, Freudian, Biology, Eclectic, psychodynamic, or other. “Serrion Therapy” is a made up therapy included in this study as a quality control item, and 13 participants rated it above a 0 (indicating minor to moderate influence). An exploratory factor analysis (EFA) with an orthogonal rotation was conducted on the 12 items in Therapeutic / Theoretical Orientation. Table 3 shows the factor loadings after rotation , with values above 0.4. The items that cluster on the same factors suggest that Factor 1 represents Freudian therapies, Factor 2 Humanistic/Eclectic therapies, Factor 3 cognitive-behavioral. Means and standard deviations are presented in Table 4.

Table 3. Therapeutic / Theoretical Orientation Factors

Orientation	**Factor 1**	**Factor 2**	**Factor 3**
	Freudian	**Humanistic/Eclectic**	**Cognitive-Behavioral**
Psychoanalysis	0.85		
Behavioral			0.84
Cognitive			0.80
Humanistic		0.67	
Systemic		0.72	
Serrion	0.40		
Client-centered			0.45
Freudian	0.97		
Biology	0.47		
Eclectic		0.75	
Psychodynamic		0.43	
Rogerian		0.51	

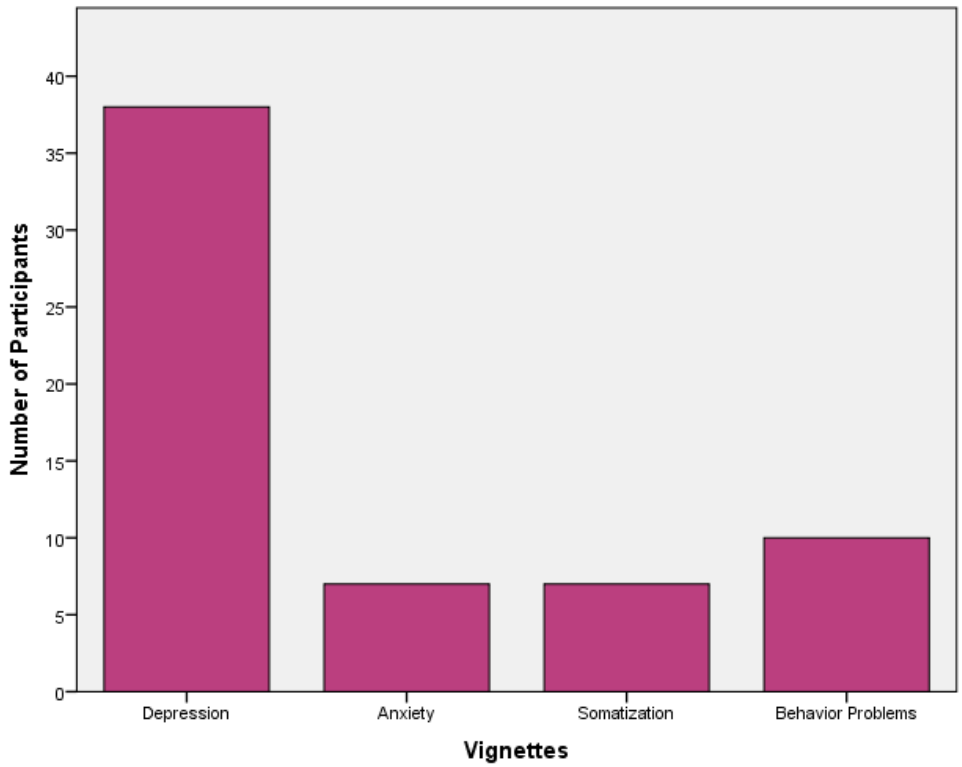
Table 4. Therapeutic / Theoretical Orientation Factor Means and Standard Deviation (N = 62)

Orientation Factor	**Mean**	**SD**
Freudian	1.05	0.82
Humanistic/Eclectic	1.41	0.93
Cognitive-Behavioral	1.84	0.84

Vignettes. Participants were provided with a summary of the four vignettes, and were asked to choose one to read the full vignette (see Appendix B). The vignettes were of clients with (a) depression, (b) anxiety, (c) somatization, and (d) behavior problems. Thirty eight of the participants (61.3%) chose the depression vignette,

7 (11.3%) chose the anxiety vignette, 7 (11.3%) chose the somatization vignette, and 10 (16.1%) chose the behavior problem vignette (see Figure 6).

Figure 6. Number of Participants by Vignette (N = 62)



Techniques. Participants were asked to provide up to 3 techniques or treatments for the client from the vignette they chose. Four participants provided two techniques and one participant provided four techniques. Techniques were first coded as either psychotherapy-specific or common-factor psychotherapy. A total of 183 techniques were presented; the majority of responses 154 (84.2%) were psychotherapy-specific. Table 5 shows the frequency of psychotherapy-specific and common-factor psychotherapy techniques by vignette and total. Table 6 shows the frequency of proportion of psychotherapy-specific techniques to total techniques per participant by vignette and total. Forty (64.5%) of participants gave only psychotherapy-specific techniques and 22 (35.5%) provided at least 1 common-factor psychotherapy technique. Because participants could provide only *psychotherapy-specific* or *common-factor psychotherapy* techniques (and none of the other), the mean of the total techniques and total mechanisms were computed across these two sub-categories.

Each technique received two scores, a technique score and a mechanism score. Each score was ranged from 0 to 4 (see Appendix D-E for criteria and examples). High scores reflected answers that were clear, concise, and complete. Figures 7-12 shows the distribution of ratings for (a) psychotherapy-specific techniques,

(b) common-factor psychotherapy technique, (c) EBT level of psychotherapy technique, (d) psychotherapy-specific mechanism, (e) common-factor psychotherapy technique, and (f) EBT level of psychotherapy technique.

Table 7 shows the means, standard deviations, skewness, and kurtosis of these variables as well as for (a) EBT Causal Factor and (b) Years of Professional Experience. Histograms of technique and mechanism variables are presented in Figure 13-14. These data indicated that the sample had a non-normal distribution. Table 8 shows the most frequent types of techniques. Nearly a third of all participants gave relaxation (32.3%) and behavioral activation (30.6%) as a technique, with 11.3% of overall participants giving both as part of their 3 techniques.

Table 5. Frequency of Psychotherapy-specific and Common-factor Psychotherapy Techniques

Variable	**Vignettes**				**Total**
	Depression (N=38)	**Anxiety (N=7)**	**Somatization (N=7)**	**Behavior Problem (N=10)**	**N = 62**
Psychotherapy-Specific Techniques (N = 61)	93	19	18	24	154 (84.2%)
Common-Factor Psychotherapy (N = 24)	19	2	3	5	29 (15.8%)
Total	112	21	21	29	183[a]

[a] 1 participant provided 4 techniques, 4 participants provided only 2 techniques

Table 6. Frequency of Proportion of Psychotherapy-specific Techniques (N = 62)

Variable	**Vignettes**				**Total**
	Depression (N=38)	**Anxiety (N=7)**	**Somatization (N=7)**	**Behavior Problem (N=10)**	**(N = 62)**
0% Psychotherapy-Specific Techniques	1	0	0	0	1 (1.6%)
33% Psychotherapy-Specific Techniques	3	0	1	1	5 (8.1%)
67% Psychotherapy-Specific Techniques	9	3	0	3	15 (24.2%)
75% Psychotherapy-Specific Techniques	1	0	0	0	1 (1.6%)
100% Psychotherapy-Specific Techniques	24	4	6	6	40 (64.5%)
Total	38	7	7	10	62

Figure 7. Number of Psychotherapy-specific Techniques Given (N = 154)

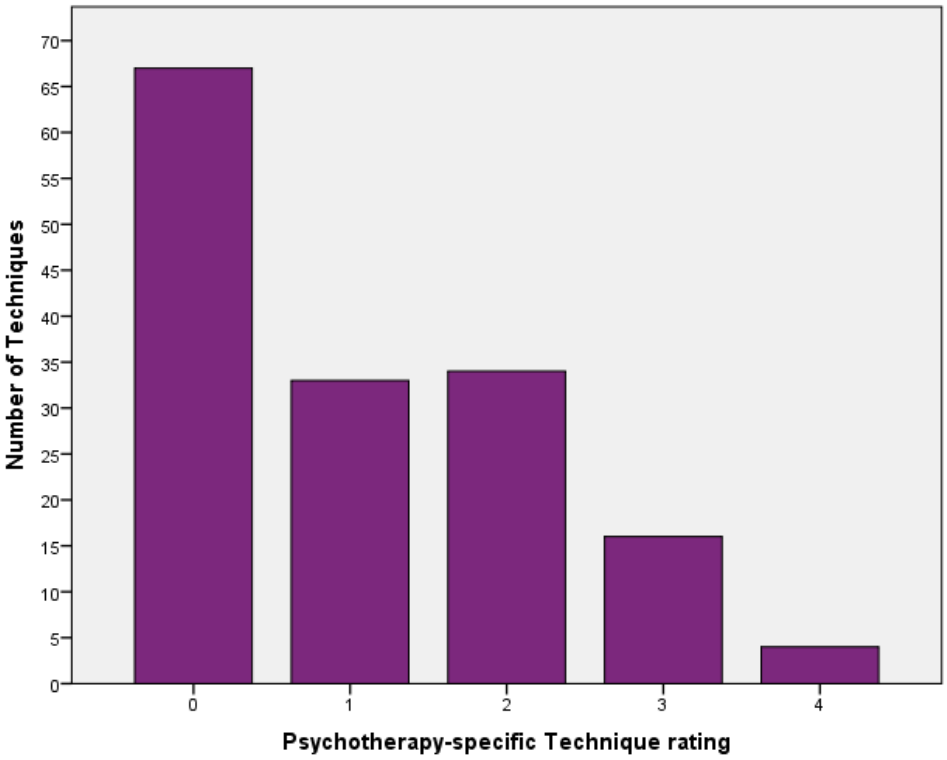


Figure 8. Number of Common-factor Psychotherapy Techniques Given (N = 29)

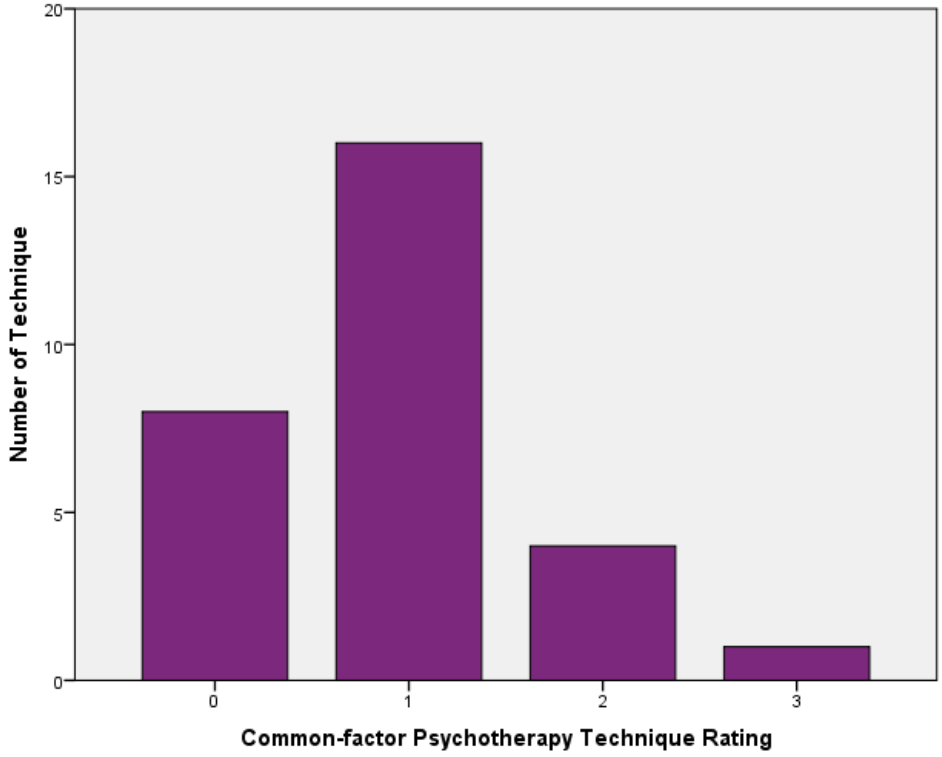


Figure 9. EBT Level of Psychotherapy Technique Rating (N = 183)

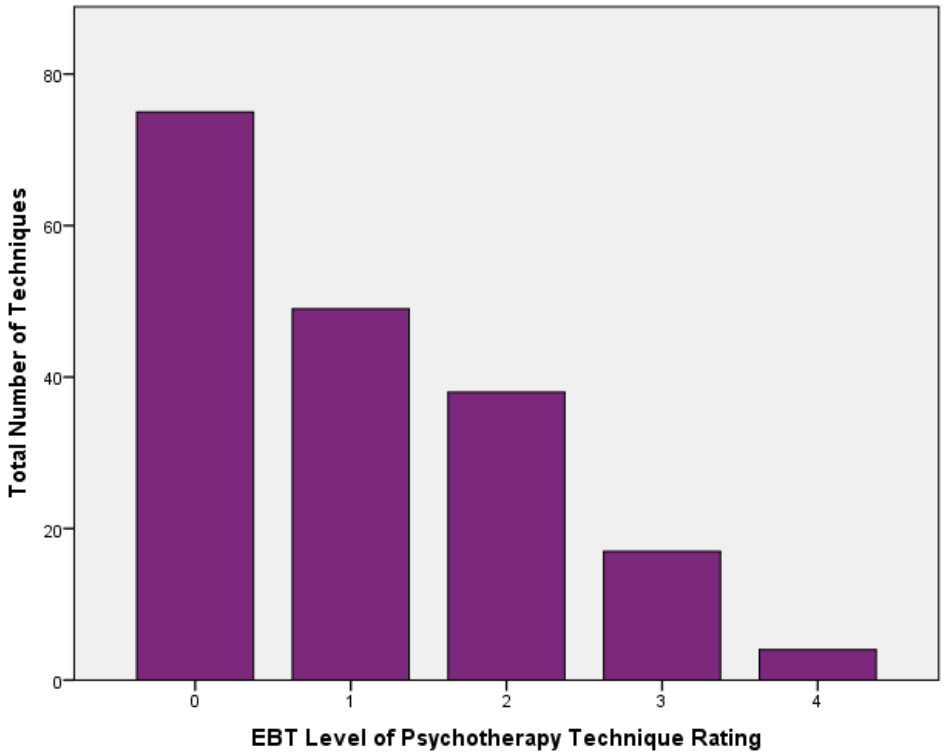


Figure 10. Number of Psychotherapy-Specific Mechanisms Given (N = 154)

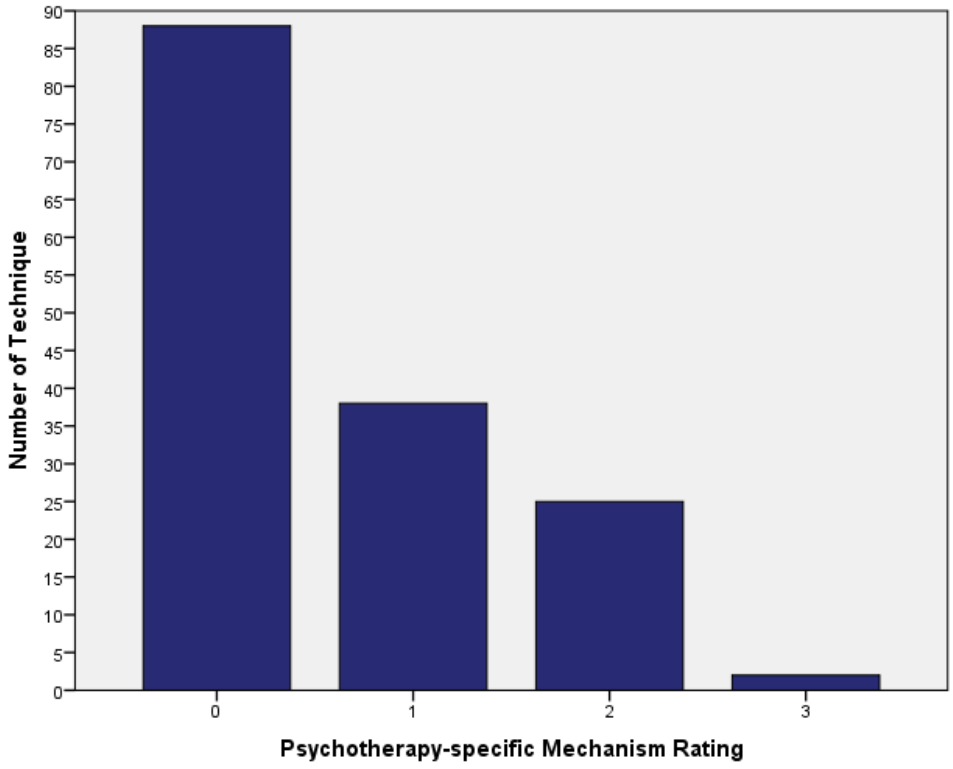


Figure 11. Number of Common-factor Psychotherapy Mechanisms Given (N = 29)

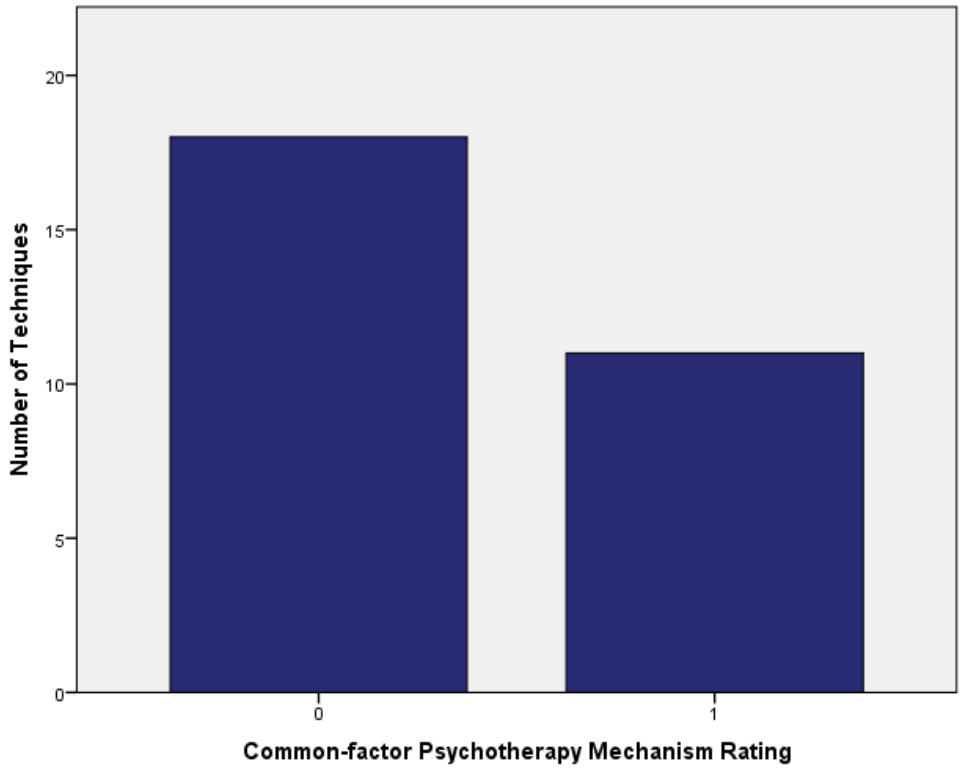


Figure 12. EBT Level of Psychotherapy Mechanisms (N = 183)

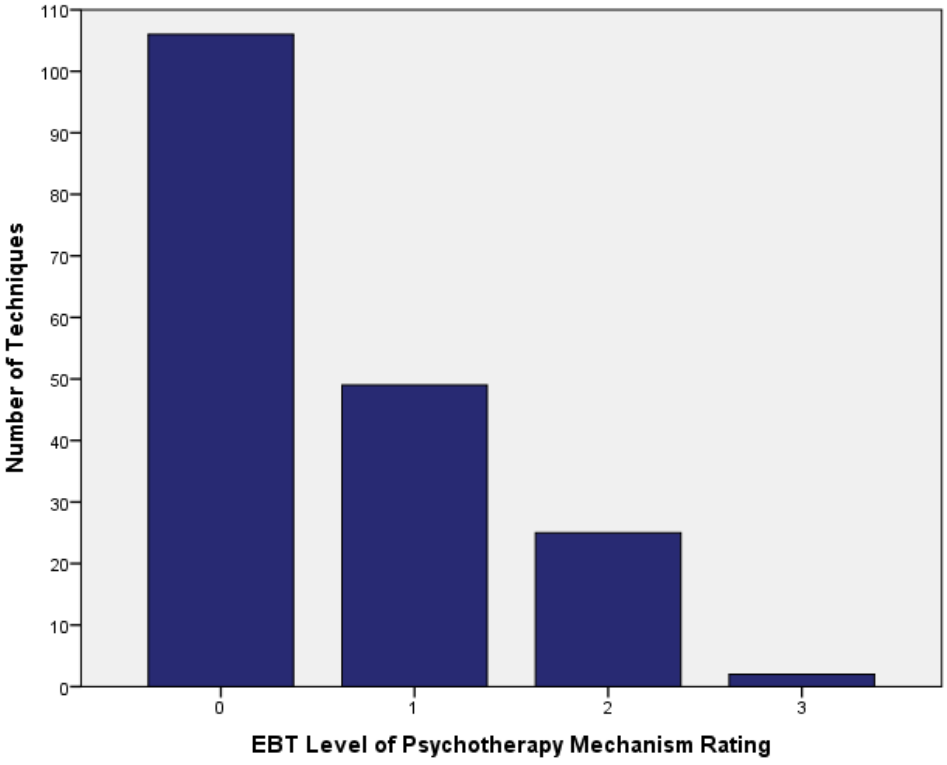


Table 7. Mean, Standard Deviation, Skewness, and Kurtosis For Techniques, Mechanisms, Causal Factor, and Years Experience

Variable	Mean (SD)	Skewness (SE)	Kurtosis (SE)
EBT level for techniques (N = 62)	1.07 (0.92)	0.97** (0.30)	0.47 (0.60)
EBT level for mechanisms (N = 62)	0.58 (0.54)	0.65* (0.30)	-0.64 (0.60)
EBT causal factor (N = 62)	1.35 (0.77)	-0.27 (0.30)	-0.58 (0.60)
Years of professional experience (N = 62)	7.04 (5.29)	0.74* (0.30)	-0.37 (0.60)

* $p < .05$ ** $p < .01$

Figure 13. Histogram of the Scores on EBT Level of Psychotherapy Techniques (N = 62)

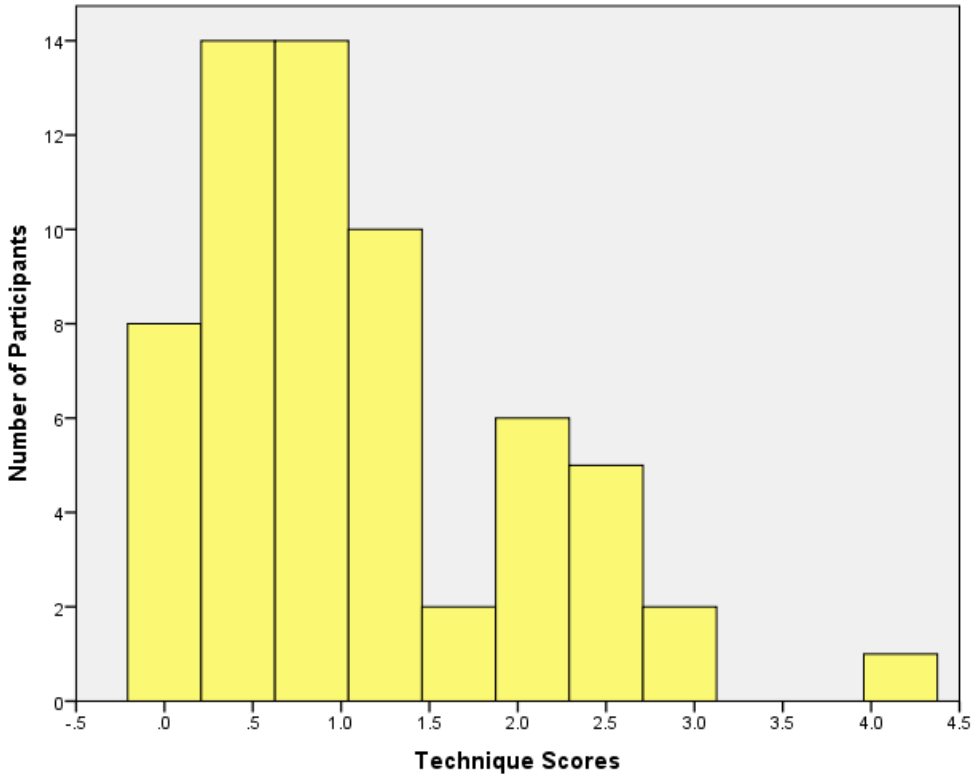


Figure 14. Histogram of the Scores on EBT Level of Psychotherapy Mechanisms (N = 62)

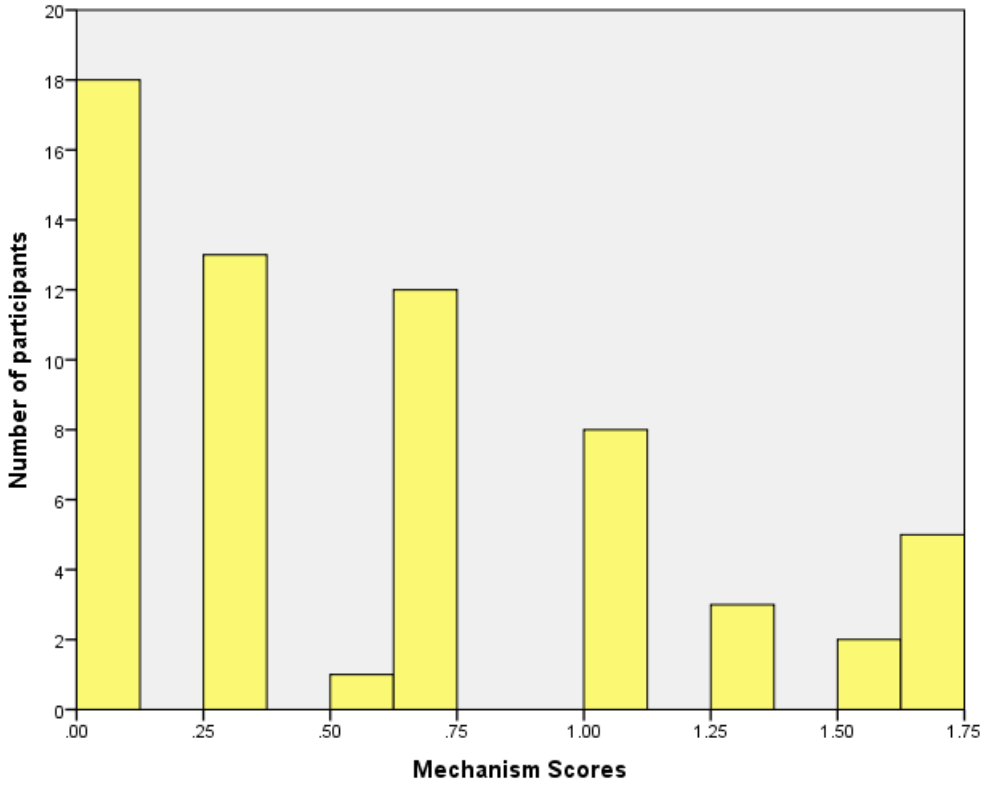


Table 8. Summary of Common Techniques

Technique	Frequency	Proportion of Participants
Relaxation	20	0.32
Behavioral Activation	19	0.31
Clinical Interview/Assessment	16	0.26
Behavioral Therapy	16	0.26
Cognitive Therapy	15	0.24
Family Systems / Family Therapy	15	0.24
Freudian-influenced Therapies	10	0.16
Therapies targeting Emotions	6	0.10

Causal Factors. Participants were asked to state what they believed where the causal factors of the client's problems and how it contributes to the problem. There was no minimum or maximum number of causes that they could provide. The number of causal factors ranged from 1 to 9 with a mean of 3.9 (SD = 1.4) (see

Figure 15). Mean, standard deviation, skewness, and kurtosis are presented in Table 7. A histogram of the causal factor is presented in Figure 16. These data suggests that the sample has a normal distribution. The most common causal factors were relationship issues between the client and their family, friends, and colleagues/employer (93.5%), the grandfather's death (51.6%) (which was a central event in the vignettes), and personal qualities such as lack of motivation, self-esteem, and self-confidence (48.4%). Other causal factors included academic and work issues, and symptoms such as lack of sleep, sadness, loss of appetite (see Figure 17). The actual EBT causes (e.g., negative thoughts; being laughed at in front of class) were so infrequent that they were placed in the "Other" category.

Figure 15. Histogram of the Number of Causal Factors (N = 62)

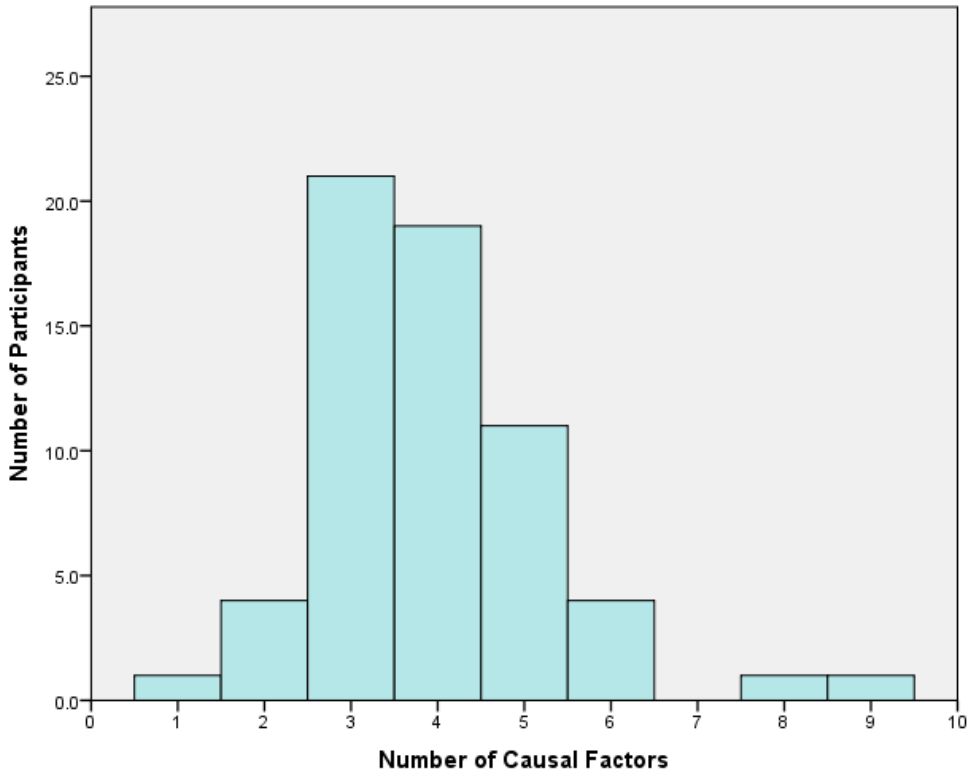


Figure 16. Histogram of the Scores on EBT Causal Factor (N = 62)

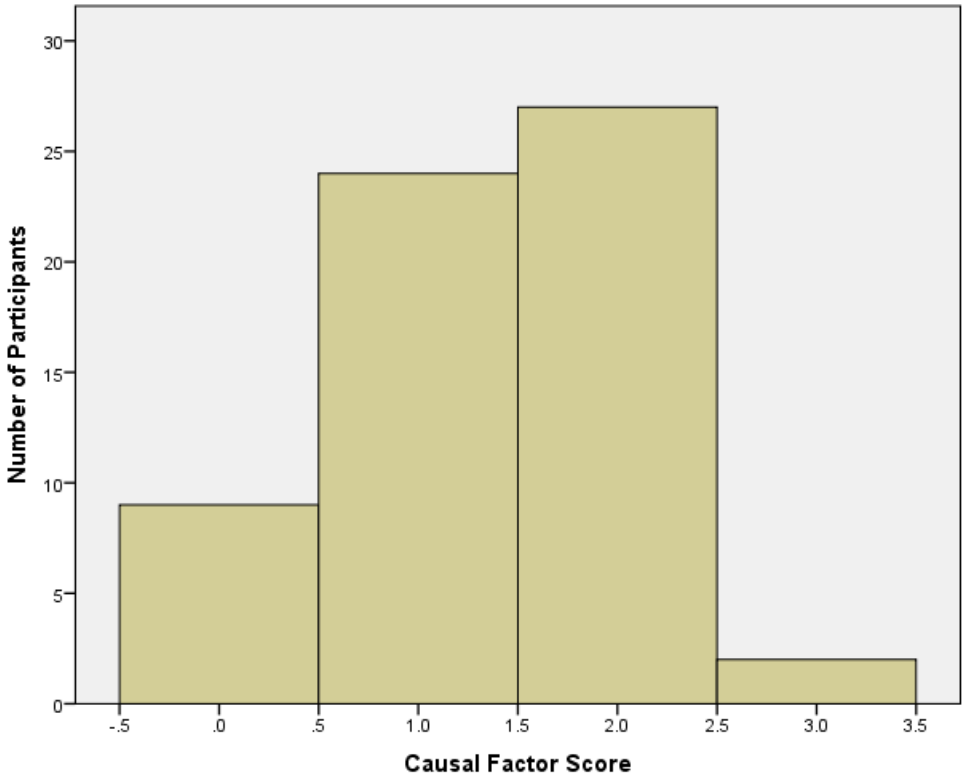
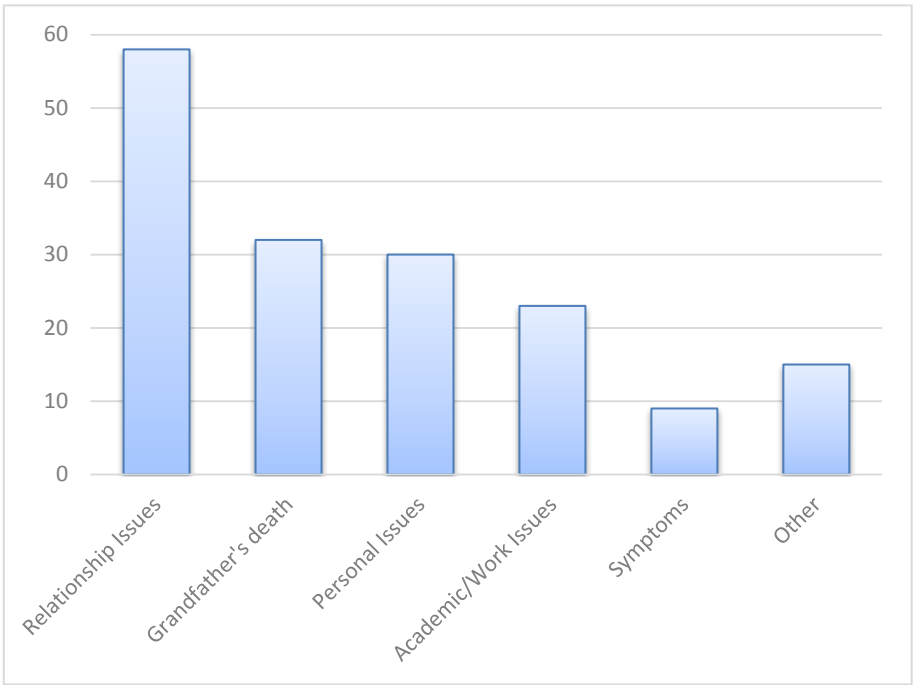


Figure 17. Number of Causal Factors



Hypothesis 1

The mean score of the (a) *EBT level for psychotherapy techniques*, (b) *EBT level for psychotherapy mechanisms,* and (c) *EBT causal factor* will be significantly below the midpoint of 2.0. The distributions for each variables were first assessed. Mean, standard deviation, skewness, skewness standard error, kurtosis, kurtosis standard error, and histograms for these variables were conducted, and two of the three variables (*EBT level of psychotherapy technique* and *EBT level of psychotherapy mechanism*) had non-normal distribution (see Tables 7 and Figures 13-16). For comparison purposes, both one-sample t-tests and Wilcoxon signed-rank tests were conducted for all dependent variables.

One-sample t-tests against a hypothesized mean of 2.0 were first conducted for the three dependent variables, *EBT level of psychotherapy technique*, *EBT level of psychotherapy mechanism,* and *EBT causal factor*. All analyses were highly significant; (a) *EBT level for psychotherapy technique* scores (M = 1.07) were significantly below the midpoint 2.0, $t(61) = -7.90$, $p < 0.001$, Cohen's $d = 1.01$ (b) *EBT level for psychotherapy mechanism* scores (*M = 0.58*) were significantly below the midpoint 2.0, $t(61) = -20.73$, $p < 0.001$, Cohen's $d = 2.63$, (c) *EBT causal factor* scores (M = 1.35) were significantly below the midpoint 2.0, $t(61) = -6.60$, $p < 0.001$, Cohen's $d = 0.84$ (see Table 9).

Wilcoxon signed-rank tests were then conducted for all the dependent variable, *EBT level of psychotherapy technique, EBT level of psychotherapy mechanism,* and *EBT causal factor* to determine whether the dependent variables were significantly lower than the midpoint 2.0 using non-parametric tests. Results of those analyses indicated that median or mean scores of the dependent variables were significantly less than 2.0: *EBT level of psychotherapy techniques* (*Mdn* = 0.67, $z = -5.47$, $p < .001$, $r = .69$) and mechanisms (*Mdn* = 0.42, $z = -6.88$, $p < .001$, $r = .87$), common-factor psychotherapy techniques (*Mdn* = 0.42, $z = -6.88$, $p < .001$, $r = .87$), and causal factor (*Mdn = 1.00, z* = -4.98, *p < .001, r* = .63) (see Table 8). The results indicated that the providers assessed in the present study had little EBT understanding of therapy procedures, therapy mechanisms, or causal factors of psychopathology.

Table 9. Analysis of Dependent Variables Compared to 2.0

Variable	**Test**	**Mean (SD)**	***t*(df)**	***d***
EBT level for psychotherapy technique (N = 62)	One-sample t-test	1.07 (0.92)	-7.90** (61)	1.01
EBT level for psychotherapy mechanisms (N = 62)	One-sample t-test	0.58 (0.54)	-20.73** (61)	2.63
EBT causal factor (N = 62)	One-sample t-test	1.35 (0.77)	-6.60** (61)	.84
Variable	Test	**Median**	**z**	***r***
EBT level for psychotherapy technique (N = 62)	Wilcoxon Signed-Rank	0.67	-5.47**	.69
EBT level for psychotherapy mechanisms (N = 62)	Wilcoxon Signed-Rank	0.42	-6.88**	.87
EBT causal factor (N = 62)	Wilcoxon Signed-Rank	1.00	-4.98**	.63

** $p < .001$

Hypothesis 2

The mean score for (a) *EBT level for psychotherapy techniques* will be significantly higher than (b) *EBT level for psychotherapy mechanisms.*

Distributional tests were first conducted for each dependent variable. Mean, standard deviation, skewness, skewness standard error, kurtosis, kurtosis standard error, and histograms for these variables were conducted and both had nonnormal distribution (see Table 7 and Figures 13-16). To compare results with other hypotheses, a paired-samples t-test and Wilcoxon Signed-Rank test were conducted. For the paired-samples t-test, there was a significance difference between the score on *EBT level of psychotherapy technique* (M = 1.07, SD = 0.92) and *EBT level of psychotherapy mechanism* (M = 0.58, SD = 0.54), $t(61) = 6.00$, $p < 0.001$, $d = 0.76$ (see Table 10). For the Wilcoxon signed-rank test, results of this analysis indicated that the mean score on *EBT level for psychotherapy technique* (Mdn = 0.67) was significantly higher than the mean score for *EBT level for psychotherapy mechanism* (Mdn = 0.42), z = -5.02, $p < 0.001$, r = -.64 (see Table 10). These results suggest that participants had more EBT knowledge in relation to the therapy techniques themselves as compared to the mechanisms through which the techniques work.

Table 10. Analyses Comparing Technique and Mechanism Mean Scores

Variable	**Test**	**Technique Mean (SD)**	**Mechanism Mean (SD)**	***t*(df)**	***d***
Technique - Mechanism	paired-samples t-test	1.07 (0.92)	0.58 (0.54)	6.00** (61)	0.76
Variable	**Test**	**Technique Median**	**Mechanism Median**	**z**	***r***
Technique - Mechanism	Wilcoxon Signed-Rank	0.67	0.42	-5.47**	.69

** $p < 0.01$

Hypothesis 3

The mean score for those with a Bachelor's degree or lower will be no different than for those who have a Master's degree or higher for (a) *EBT level for psychotherapy techniques*, (b) *EBT for psychotherapy mechanisms*, and (c) *EBT causal factor*. Distributional analyses were first conducted for each variable. Mean, standard deviation, skewness, skewness standard error, kurtosis, kurtosis standard error, and histograms for these variables were computed and two of the variables, Master Level technique, and causal mechanism displayed non-normal distribution (see Table 11, and Figures 18-23). To compare results with other hypotheses, independent samples t-tests and Mann-Whitney tests were conducted.

For the independent-samples t-tests, Bachelor and Master Level participants differed on only the *EBT level of psychotherapy technique*, with Bachelor Level (M = 1.30, SD = 0.90) significantly higher than Master Level (M = 0.84, SD = 0.90), $t(60) = 2.01$, $p < 0.05$, $r = .25$. Bachelor Level (M = 0.71, SD = 0.55) scored marginally higher on the *EBT level of psychotherapy mechanism* than Master Level (M = 0.46, SD = 0.50), $t(60) = 1.89$, $p < 0.07$, $r = .25$. There was no significant difference between Bachelor Level (M = 1.42, SD = 0.85) and Master Level (M = 1.29, SD = 0.69) on *EBT causal factor*, $t(60) = 0.66$, *ns*, $r = .08$ (see Table 12). For the Mann-Whitney tests, results were similar. Bachelor Level (Mdn = 1.33) scores on the *EBT level of psychotherapy technique* was significantly higher than Master Level (Mdn = 0.67) scores, $z = -2.14$, $p < 0.05$, $r = -.27$; Bachelor Level (Mdn = 0.67) scores on the *EBT level of psychotherapy mechanism* was marginally higher than Master Level (Mdn = 0.33) scores, $z = -1.86$, $p < 0.07$, $r = -.24$. There was no difference between Bachelor Level (Mdn = 2.00) scores on the *EBT causal factor* and Master Level (Mdn = 1.00) scores, $z = -0.68$, *ns*, $r = -.09$ (see Table 12). These results indicate that Bachelor's Level or lower participants did significantly better at explaining the techniques, and marginally better at explaining the mechanisms compared to Master's Level or higher participants; however, they were no differences on causal factors scores.

Table 11. Mean, Standard Deviation, Skewness, and Kurtosis For Dependent Variables By Education Level (N = 31)

Group	Variable	Mean (SD)	Skewness (SE)	Kurtosis (SE)
Bachelor's or lower	EBT level for techniques (N = 31)	1.30 (0.90)	0.25 (0.42)	-0.83 (0.82)
Bachelor's or lower	EBT level for mechanisms (N = 31)	0.71 (0.55)	0.31 (0.42)	-1.09 (0.82)
Bachelor's or lower	EBT causal factor (N = 31)	1.42 (0.85)	-0.26 (0.42)	-0.59 (0.82)
Bachelor's or lower	Years of Professional Experience (N = 31)	4.99 (3.89)	1.08* (0.42)	0.07 (0.82)
Master's or higher	EBT level for techniques (N = 31)	0.84 (0.16)	1.94** (0.42)	4.12** (0.82)
Master's or higher	EBT level for mechanisms (N = 31)	0.46 (0.50)	1.11* (0.42)	0.65 (0.82)
Master's or higher	EBT causal factor (N = 31)	1.29 (0.69)	-0.46 (0.42)	-0.76 (0.82)
Master's or higher	Years of Professional Experience (N = 30)	9.09 (5.76)	1.08 (0.42)	0.65 (0.82)

* $p < 0.05$ ** $p < 0.01$

Figure 18. Histogram of EBT Level of Technique Score For Bachelor's Level (N = 31)

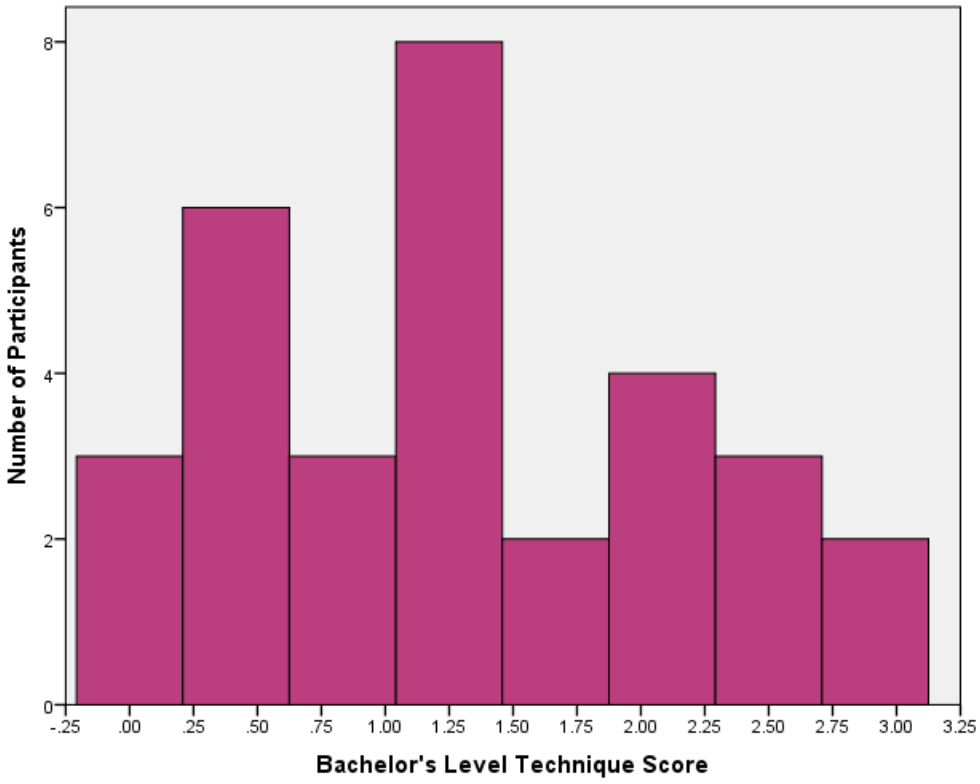


Figure 19. Histogram of EBT Level of Mechanism Score for Bachelor's Level (N = 31)

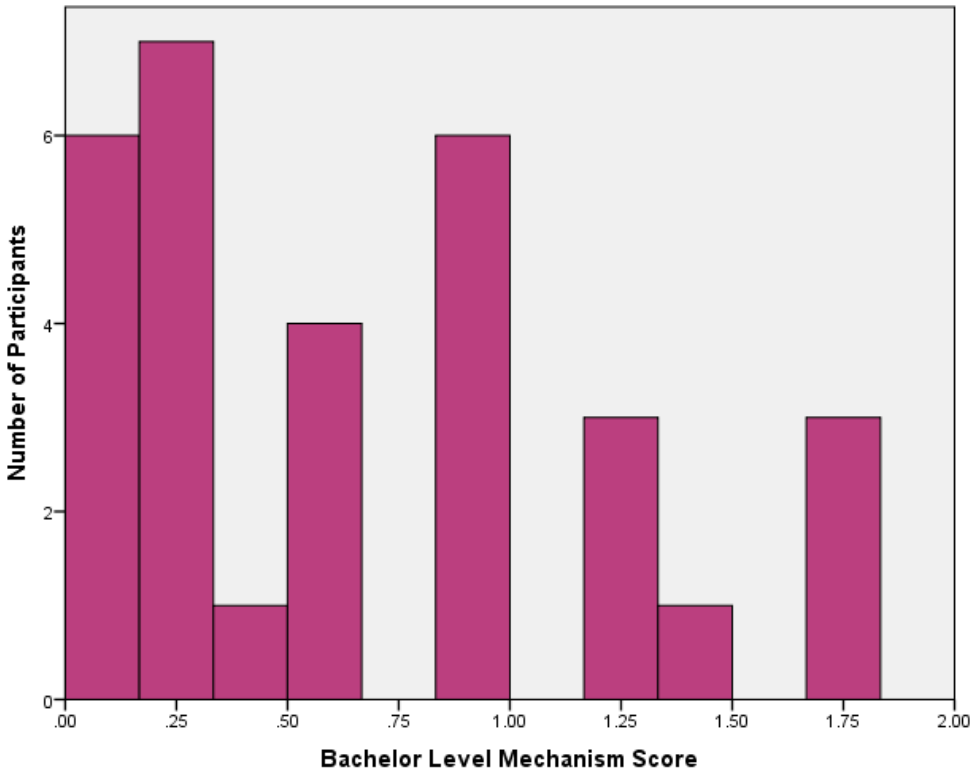


Figure 20. Histogram of EBT Causal Factor Score For Bachelor's Level (N = 31)

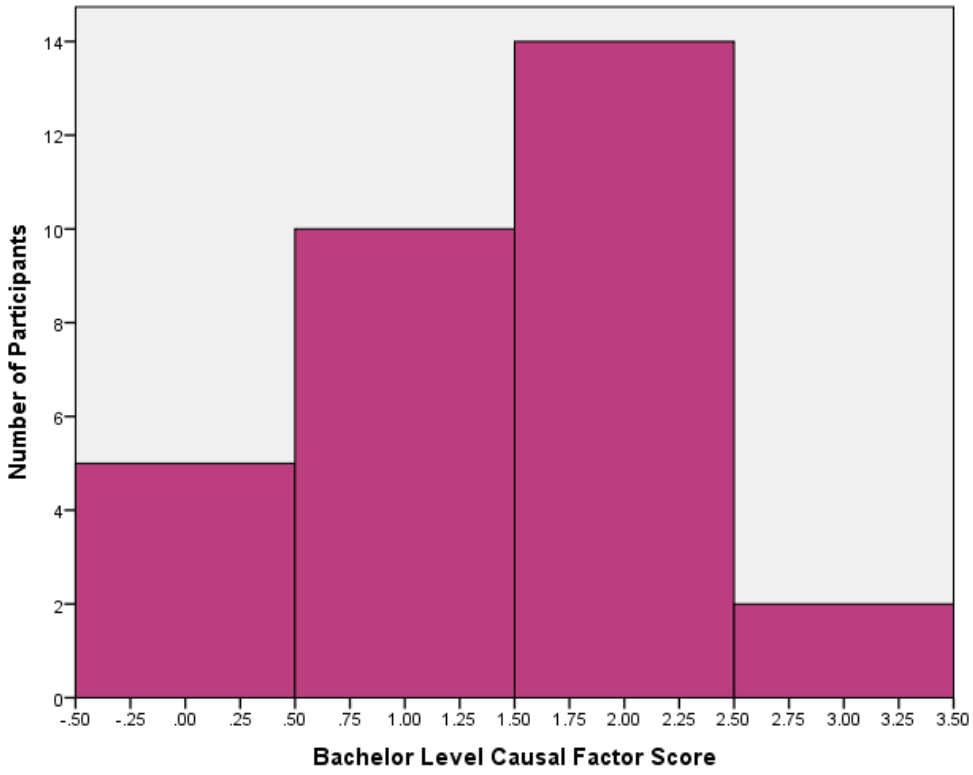


Figure 21. Histogram of EBT Level of Technique Score For Master's Level (N = 31)

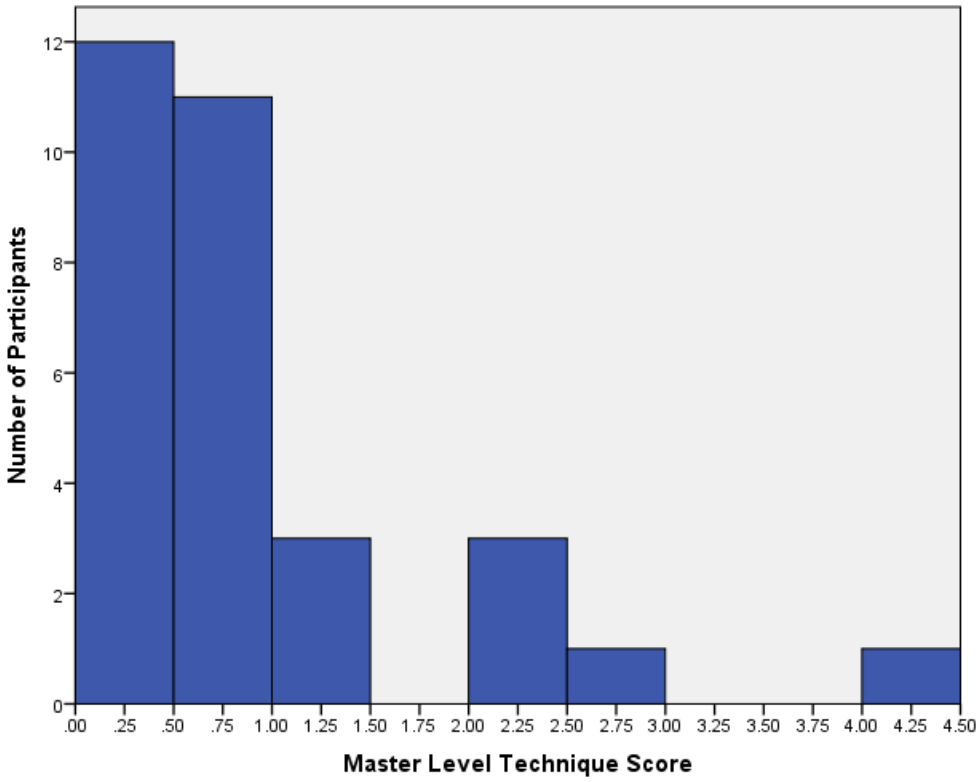


Figure 22. Histogram of EBT Level of Mechanism Score For Master's Level (N = 31)

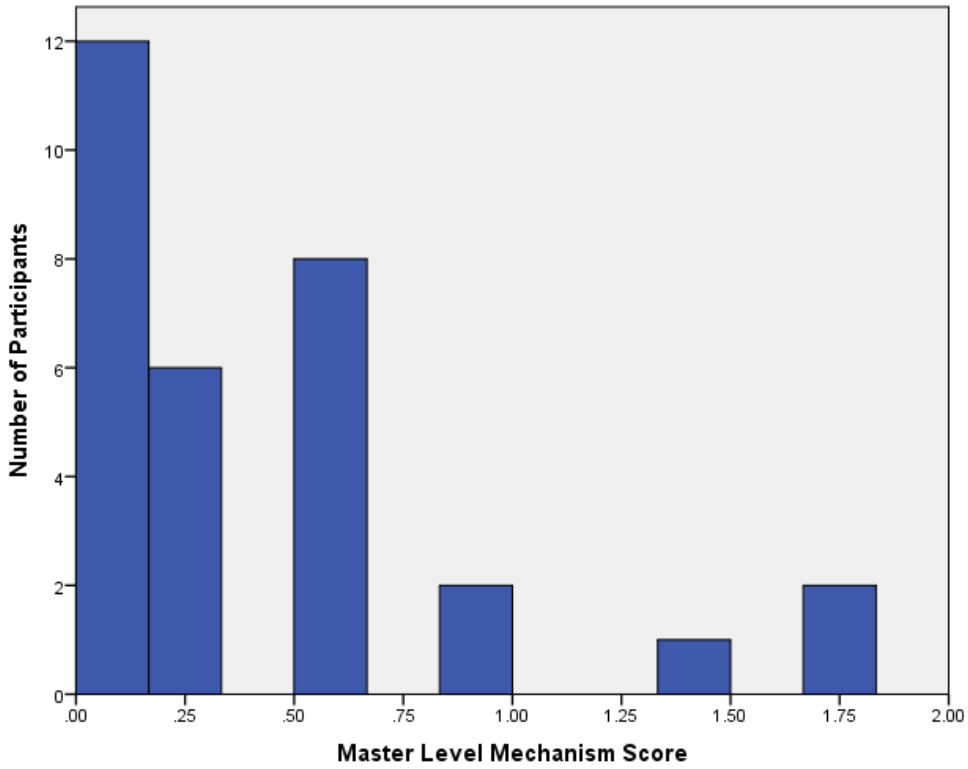


Figure 23. Histogram of EBT Causal Factor Score For Master's Level (N = 31)

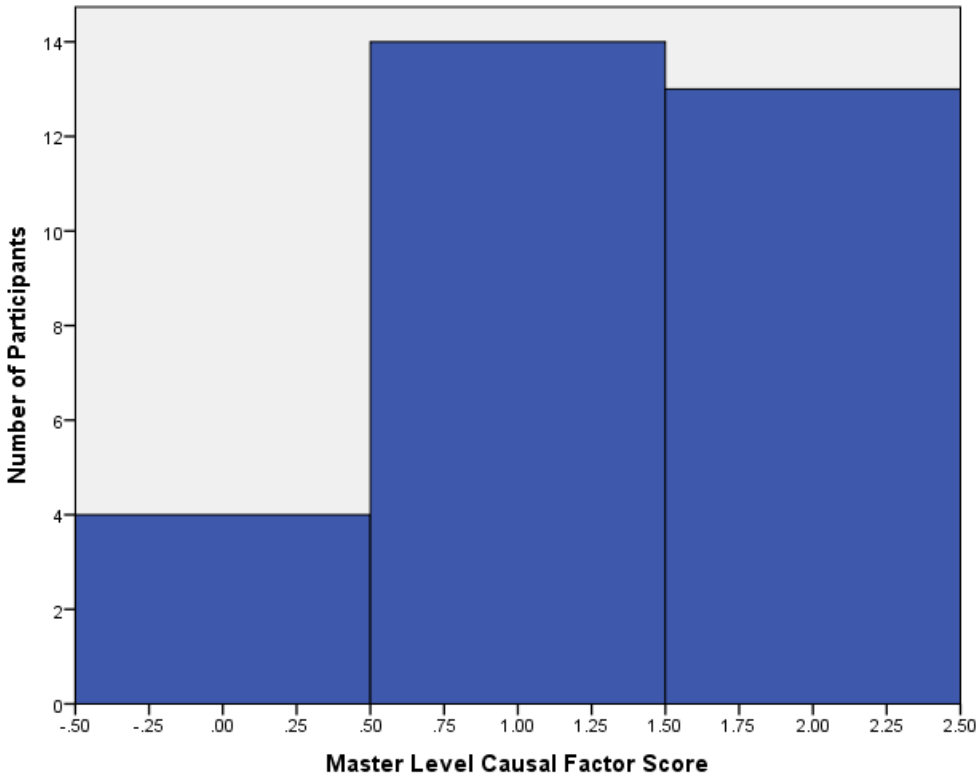


Table 12. Analyses Comparing Education Level for Technique, Mechanism, and Causal Factor

Variable	**Test**	**Bachelor Mean (SD)**	**Master Mean (SD)**	***t*(df)**	***r***
EBT level for psychotherapy technique	Independent t-test	1.30 (0.90)	0.84 (0.90)	2.01* (60)	.25
EBT level for psychotherapy mechanisms	Independent t-test	0.71 (0.55)	0.46 (0.50)	1.89^{+} (60)	.24
EBT causal factor	Independent t-test	1.42 (0.85)	1.29 (0.69)	0.66 (60)	.08
Variable	**Test**	**Bachelor Median**	**Master Median**	**z**	***r***
EBT level for psychotherapy technique	Mann-Whitney test	1.33	0.67	-2.14*	-.27
EBT level for psychotherapy mechanisms	Mann-Whitney test	0.67	0.33	-1.86^{+}	-.24
EBT causal factor	Mann-Whitney test	2.00	1.00	-0.68	-.09

$^{+}$ $p < 0.07$ * $p < 0.05$ ** $p < 0.01$

Hypothesis 4

There will be no relation between number of years of professional experience, *Years of Professional Experience*, for (a) *EBT level for psychotherapy techniques*, (b) *EBT for psychotherapy mechanisms*, and (c) *EBT causal factor*. Distributional tests were first conducted for each dependent variable and *Years of Professional Experience*. Mean, standard deviation, skewness, skewness standard error, kurtosis, kurtosis standard error, and histograms for these variables were conducted and 3 of the variables, *EBT level for psychotherapy techniques* and *EBT for psychotherapy mechanisms*, and *Years of Professional Experience* showed non-normal distribution s (see Table 11, and Figures 13-16, and 24).

To compare results with other hypotheses, Pearson and Kendall Tau correlations were conducted. First, between dependent variables. Both Pearson and Kendall Tau correlations yielded the same conclusions for all tests. There were significant positive relations between the dependent variables, *EBT level of psychotherapy technique* and *EBT level of psychotherapy mechanism*, $r = .73$, $\tau = .57$, $p < 0.001$; *EBT level of psychotherapy mechanism* and *EBT causal factor*, $r = 0.35$, $\tau = .30$, $p < 0.01$; and marginal positive relationship between *EBT level of psychotherapy technique* and *EBT causal factor*, $r = 0.23$, $\tau = .19$, $p < 0.07$; (see Table 13). There was a significant positive relationship between *EBT level of psychotherapy technique* and *EBT level of psychotherapy mechanism*, $r = .73$, $\tau = .57$, $p < 0.01$ for both; *EBT level of psychotherapy mechanism* and *EBT causal factor*, $r = .36$, $\tau = .30$, $p < 0.01$ for both; and marginally positive relationship between *EBT level of psychotherapy technique* and *EBT causal factor*, $r = ..23$, $\tau = .19$, $p < 0.10$ for both. There was no significant relation between years of professional experience and (a) technique, $r = -.10$, $\tau = -.08$, (b) mechanism, $r = -.10$, $\tau = 0.07$, and (c) causal factor, $r = -.14$, $\tau = -.12$, all *ns* (see Table 13). These results indicate that more experienced therapists did not provide better descriptions of techniques or better explanations for the underlying mechanism or causal factors than less experienced therapists.

Figure 24. Histogram of Years of Professional Experience (N = 62)

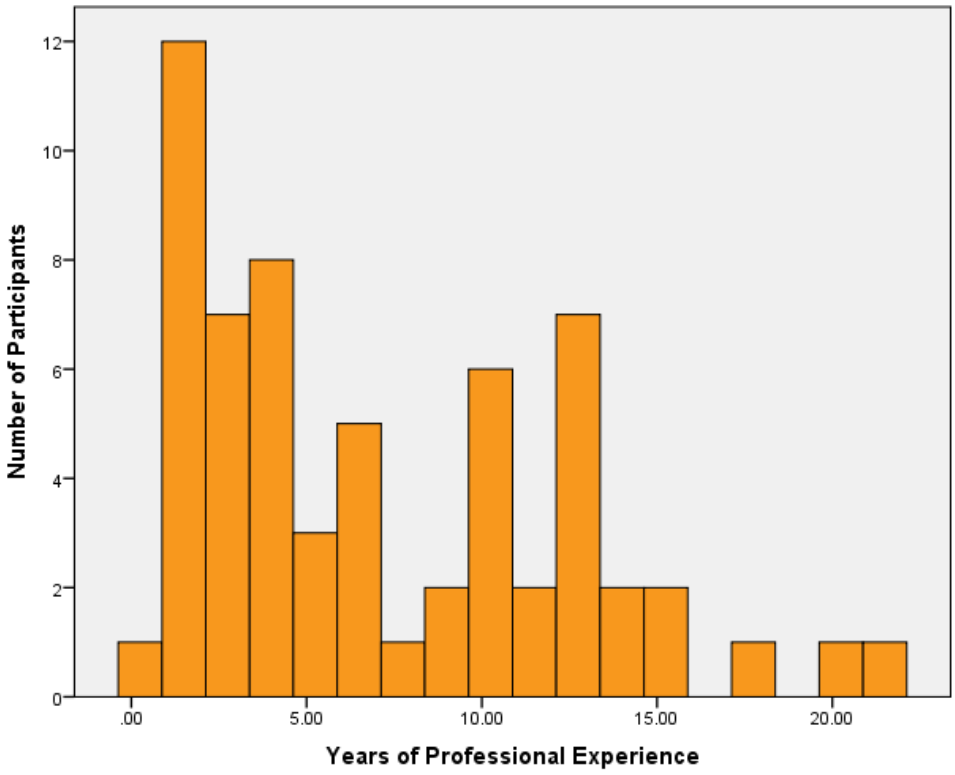


Table 13. Correlational Analyses Between Technique, Mechanism, Causal Factor, and Years of Professional Experience

		Technique	Mechanism	Causal Factor
Pearson Correlation	Mechanism	.73**		
Pearson Correlation	Causal Factor	.23^{+}	.36**	
Pearson Correlation	Years of Professional Experience	-.10	-.10	-.14
Kendall's Tau	Mechanism	.57**		
Kendall's Tau	Causal Factor	.19^{+}	.30**	
Kendall's Tau	Years of Professional Experience	-.08	-.07	-.12

$^{+}$ $p < 0.10$ * $p < 0.05$ ** $p < 0.01$

Hypothesis 5

Among participants with a Bachelor's degree or less, there will be no significant relation between years of professional experience and (a) *EBT level for psychotherapy techniques*, (b) *EBT for psychotherapy mechanisms*, and (c) *EBT causal factor*. For those with a Master's Degree or higher, there will be a negative

relation between years of professional experience and (a) *EBT level for psychotherapy techniques*, (b) *EBT for psychotherapy mechanisms*, and (c) *EBT causal factor*.

Distributional tests were first conducted for each dependent variable and *Years of Professional Experience*. Mean, standard deviation, skewness, skewness standard error, kurtosis, kurtosis standard error, and histograms for these variables were conducted and two of the variables Years of Professional Experience, and *EBT level for psychotherapy techniques* showed non-normal distribution (see Table 12, and Figures 18-23, and 25-26).

Both Pearson and Kendall's Tau correlations were performed. Again, similar to the results in Hypothesis 4, there was not a significant correlation between the number of years of professional experience and technique, mechanism, or causal factor, regardless of educational level. Significance levels were not different for Pearson correlations or Kendall's tau correlations. For participants at the Bachelor's level or lower, there was significant positive relationship between technique and mechanism, $r = .75$, $\tau = .65$, $p < 0.01$, technique and causal factor, $r = .42$, $\tau = .32$, $p < 0.05$, and mechanism and causal factor, $r = .50$, $\tau = .41$, $p < 0.01$ (see Table 13). For participants at the Master's level and higher, there was only a significant positive relationship between technique and mechanism, $r = .67$, $\tau = .39$, $p < 0.01$ (see Table 13). These results indicate that regardless of educational level, more experienced therapists were not better at describing evidence-based technique nor or the underlying mechanism or causal factors.

Figure 25. Histogram of Years of Professional Experience For Bachelor's Level or Lower (N = 31)

Figure 26. Histogram of Years of Professional Experience For Master's Level or Higher (N = 31)

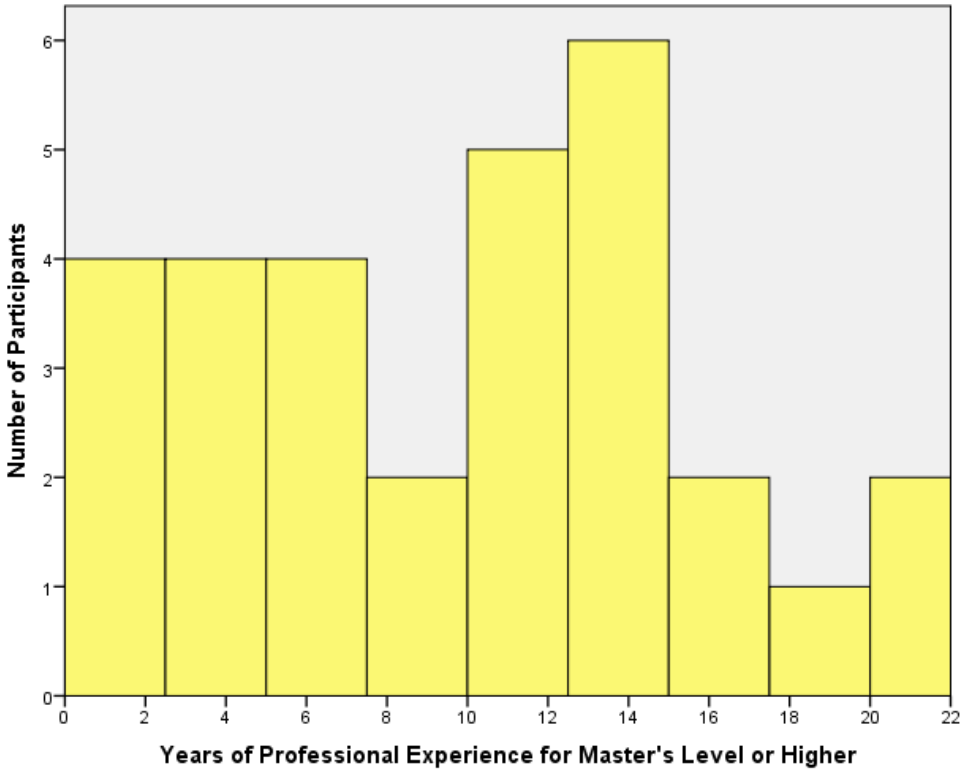


Table 13. Correlational Analyses Comparing Education Level for Technique, Mechanism, and Causal Factor By Education Level

			Technique	Mechanism	Causal Factor
Bachelor's Level or lower	Pearson Correlation	Mechanism	.75**		
Bachelor's Level or lower	Pearson Correlation	Causal Factor	.42*	.50**	
Bachelor's Level or lower	Pearson Correlation	Years of Professional Experience	.09	-.06	-.09
Bachelor's Level or lower	Kendall's Tau	Mechanism	.65**		
Bachelor's Level or lower	Kendall's Tau	Causal Factor	.32*	.41**	
Bachelor's Level or lower	Kendall's Tau	Years of Professional Experience	.14	.00	-.13
Master's Level or Higher	Pearson Correlation	Mechanism	.67**		
Master's Level or Higher	Pearson Correlation	Causal Factor	-.02	.15	
Master's Level or Higher	Pearson Correlation	Years of Professional Experience	-.06	.03	-.14
Master's Level or Higher	Kendall's Tau	Mechanism	.39**		
Master's Level or Higher	Kendall's Tau	Causal Factor	.01	.13	
Master's Level or Higher	Kendall's Tau	Years of Professional Experience	-.10	.08	-.12

* $p < 0.05$ ** $p < 0.01$

Hypothesis 6.1

Factor 1, Freudian Therapies, and Factor 2, Humanistic-Eclectic Therapies, will be negatively correlated with (a) *EBT level of psychotherapy techniques*, (b) *EBT level of psychotherapy techniques* and (c) *EBT causal factors*. Factor 3, Cognitive-Behavioral Therapies, will be positively correlated with (a) *EBT level of psychotherapy techniques*, (b) *EBT level of psychotherapy techniques* and (c) *EBT causal factors*. Distributional tests of normality are shown in Table 14. None of the independent variables had skewness or kurtosis that was significant. Histograms of the independent variables are shown in Figures 27-29.

Pearson's and Kendall's Tau correlations were computed to assess the relations between the independent variables. There was a significant positive relationship between the independent variables, Factor 1 (Freudian) and Factor 2 (Humanistic/Eclectic), $r = .43$, $\tau = .33$, ps < 0.001 (see Table 15). There was no relationship

between Factor 3 (CBT) with either Factor 1 (Freudian), $r = .16$, $\tau = .09$, ps > 0.05, or Factor 2 (Humanistic/Eclectic), $r = .11$, $\tau = .05$ ps > 0.05 (see Table 15).

Pearson and Kendall's tau correlations were previously computed between the dependent variables, *EBT level of psychotherapy technique, EBT level of psychotherapy mechanism, and EBT causal factors* (see Table 13). Pearson and Kendall's tau correlations were computed between each factor and (a) *EBT level of psychotherapy techniques,* (b) *EBT level of psychotherapy mechanisms*, and (e) *EBT causal factors* (see Table 16).

EBT level of psychotherapy technique was significantly correlated with all factors: negatively with Factor 1 (Freudian), $r = -.36$, $\tau = -.26$, ps (one-tailed) < 0.01, negatively with Factor 2 (Humanistic/Eclectic), $r = -.45$, $\tau = -.35$, p (one-tailed) < 0.001; and positively with Factor 3 (CBT), $r = 26$, p (one-tailed) < 0.05; $\tau = 0.23$, p (one-tailed) < 0.01.

EBT level of psychotherapy mechanism was correlated negatively with Factor 1 (Freudian), $r = -.23$, $\tau = -.15$, ps (one-tailed) < 0.05, negatively with Factor 2 (Humanistic/Eclectic), $r = -.28$, p (one-tailed) < 0.05, $\tau = -.24$, p (one-tailed) < 0.01, and positively with Factor 3 (CBT), $\tau = .17$, p (one-tailed) < 0.05. Pearson correlation between Factor 3 (CBT) only showed marginally positive correlation, $r = .20$, p (one-tailed) < 0.07.

EBT causal factor was positively correlated with Factor 3 (CBT), $r = .25$, $\tau = .23$, p (one-tailed) < 0.05. There was no significant relation between *EBT causal factor* with Factor 1 (Freudian) or Factor 2 (Humanistic /Eclectic).

These results indicate that the higher the level of self-reported higher influence of CBT therapies, the more EBT-based the techniques and underlying mechanisms and causes participants reported. Conversely, the higher the level of self-reported higher influence of Freudian Therapies or Humanistic / Eclectic Therapies, the lower the EBT level was for the techniques and underlying mechanisms and causes reported.

Table 14. Mean, Standard Deviation, Skewness, and Kurtosis for Factors

Variable	Mean (SD)	Skewness (SE)	Kurtosis (SE)
Freudian Factor (N = 62)	1.05 (0.82)	0.56 (0.30)	-0.53 (0.12)
Humanistic/Eclectic Factor (N = 62)	1.41 (0.93)	0.26 (0.30)	-1.02 (0.60)
Cognitive-Behavioral Factor (N = 62)	1.84 (0.84)	0.59 (0.30)	-0.44 (0.60)

Figure 27. Histogram of Freudian Factor Scores (N = 62)

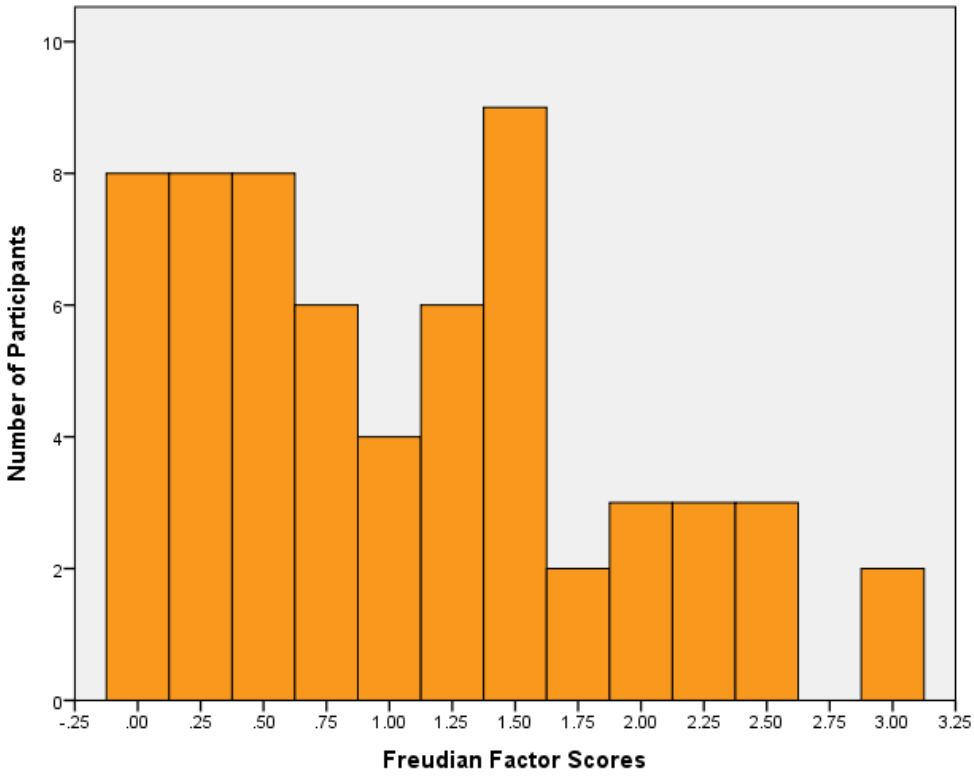


Figure 28. Histogram of Humanistic / Eclectic Factor Scores (N = 62)

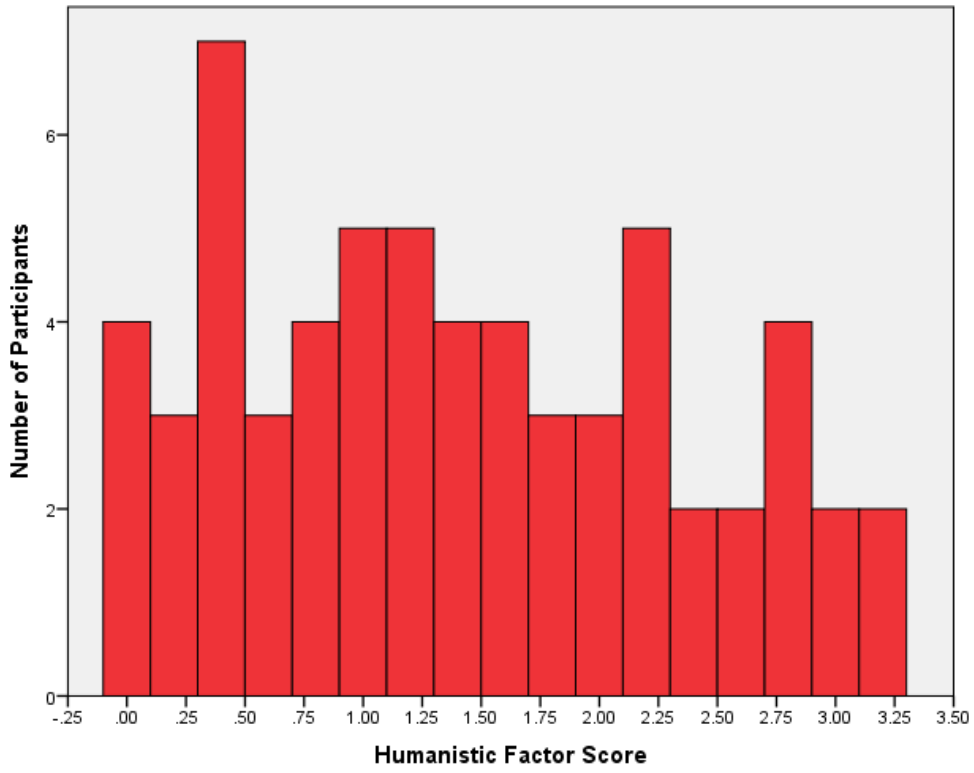


Figure 29. Histogram of Cognitive-Behavioral Factor Scores (N = 62)

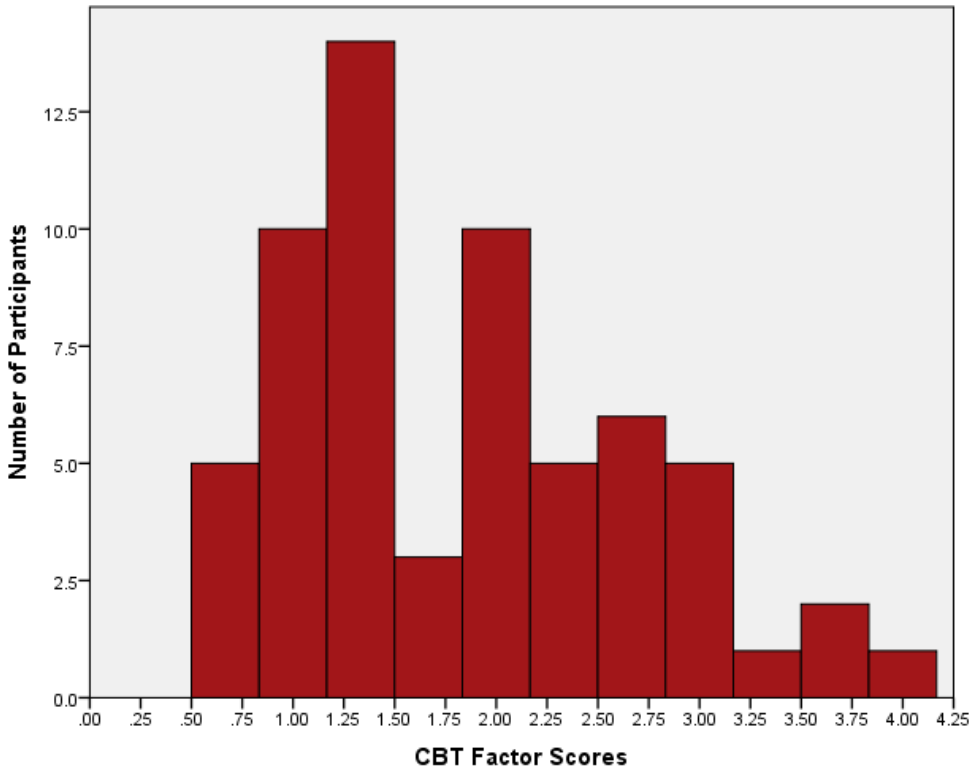


Table 15. Correlations between Therapeutic / Theoretical Orientation Factors (N = 62)

		Factor 1 (Freudian)	Factor 2 (Humanistic/Eclectic)
Factor 2 (Humanistic/Eclectic)	Pearson's correlation	.43**	
Factor 3 (CBT)	Pearson's correlation	.16	.11
Factor 2 (Humanistic/Eclectic)	Kendall's Tau	.33**	
Factor 3 (CBT)	Kendall's Tau	.09	.05

** $p < 0.01$

Table 16. Correlations Between Factors and Dependent Variables (N = 62)

		Factor 1	Factor 2	Factor 3
EBT level of psychotherapy technique	Pearson's correlation	-.36**	-.45**	.26*
EBT level of psychotherapy mechanism	Pearson's correlation	-.23*	-.28*	.20^{+}
EBT causal factors	Pearson's correlation	.06	.09	.25*
EBT level of psychotherapy technique	Kendall's Tau	-.26**	-.35**	.23**
EBT level of psychotherapy mechanism	Kendall's Tau	-.15*	-.24**	.17*
EBT causal factors	Kendall's Tau	.04	.08	.23*

$^{+}$ $p < 0.07$ * $p < 0.05$ ** $p < 0.01$ (all one-tailed)

Hypothesis 6.2

Participants grouped non-EBT will have significantly lower scores than those in the EBT group on (a) *EBT level of psychotherapy techniques*, (b) *EBT level of psychotherapy techniques* and (c) *EBT causal factors*. Participants in the EBT group will be positively correlated with (a) *EBT level of psychotherapy techniques*, (b) *EBT level of psychotherapy techniques* and (c) *EBT causal factors*. Participants were grouped into non-EBT or EBT based on their highest score on the 3 Theoretical Orientation factors. Participants whose highest scores were on either Freudian or Humanistic/Eclectic were placed in the non-EBT and those with highest scores on CBT were placed in EBT group. If there was a tie with CBT, participants were placed in the non-EBT group. Means, standard deviations, and / or percentages of descriptive variables are presented in Table 17. Mean, standard deviation, skewness, and kurtosis, and histograms for dependent variables were conducted and all variables in non-EBT group were found to have significant non-normal distributions (see Table18 and Figures 30-35)

Due to violations of normality, the Mann-Whitney U test was performed. The non-EBT group score on the *EBT level of psychotherapy technique* (*Mdn* = 0.58) was significantly lower than the EBT group score (*Mdn* = 1.33), *U* = 242.00, *z* = -3.35, *p* (one-tailed) < 0.001, *r* = -.43. Additionally, the non-EBT group score on the *EBT level of psychotherapy technique* (*Mdn* = 0.33) was significantly lower than the EBT group score (*Mdn* = .67), *U* = 249.50, *z* = -3.28, *p* (one-tailed) < 0.001, *r* = -.42. There was no difference in score on the *EBT causal factor* between the non-EBT group (*Mdn* = 1.00) and EBT group (*Mdn* = 2.00), *U* = 392.00, *z* = -1.28, *ns*, *r* = -.16 (see Table 19). Results suggest that the EBT group did a better job than the non-EBT group explaining EBT technique and mechanisms but not underlying causal factors.

Table 17. Descriptive Statistics for Non-EBT (N = 28) and EBT (N = 34) groups

	Non-EBT	**EBT**	**Total**
	N = 28	N = 34	N = 62
Variable	Frequency (%)	Frequency (%)	Frequency (%)
Gender			
Male	9 (32.1)	5 (14.7)	14 (22.6)
Female	19 (67.9)	29 (85.3)	48 (77.4)
Professional Identity			
Psychologist	20 (71.4)	28 (82.4)	48 (77.4)
Psychiatrist	3 (10.7)	1 (2.9)	4 (6.5)
Counselor	4 (14.3)	2 (5.9)	6 (9.7)
Other	1 (3.6)	3 (8.8)	7 (11.3)
Highest Degree Earned			
Associate's (3 year degree)	0 (0)	2 (5.9)	2 (3.2)
Bachelor's	11 (39.3)	17 (50.0)	28 (45.2)
Master's	10 (35.7)	11 (32.4)	21 (33.9)
Ph.D.	4 (14.3)	2 (5.9)	6 (9.7)
M.D.	3 (10.7)	2 (5.9)	5 (8.1)
	Mean (SD)	**Mean (SD)**	**Mean (SD)**
Age (years)	34.7 (7.6)	34.2 (8.5)	34.4 (8.1)
Years of professional experience	6.5 (5.7)	7.5 (5.0)	7.0 (5.3)
Number of Patients seen per week	12.7 (10.9)	8.8 (10.5)	10.6 (10.8)

Table 18. Mean, Standard Deviation, Skewness, and Kurtosis for Dependent Variable by Group

Variable		**Mean (SD)**	**Skewness (SE)**	**Kurtosis (SE)**
Non-EBT	EBT level for techniques (N = 28)	0.63 (0.57)	1.80** (0.44)	5.00** (0.86)
Non-EBT	EBT level for mechanisms (N = 28)	0.33 (0.40)	1.58** (0.44)	3.44** (0.86)
Non-EBT	EBT causal factor (N = 28)	1.21 (0.83)	-0.02 (0.44)	-0.76 (0.86)
EBT	EBT level for techniques (N = 34)	1.44 (1.00)	0.41 (0.40)	-0.26 (0.79)
EBT	EBT level for mechanisms (N = 34)	0.79 (0.56)	0.10 (0.40)	-1.14 (0.79)
EBT	EBT causal factor (N = 34)	1.47 (0.71)	-0.44 (0.40)	-0.16 (0.79)

** $p < .01$

Table 19. Mann-Whitney Analyses Comparing Group for Technique, Mechanism, and Causal Factor

	Non-EBT Median	**EBT Median**	**U**	**z**	**r**
Technique	0.58	1.33	242.00	-3.35**	-.43
Mechanism	0.33	0.67	249.50	-3.28**	-.42
Causal Factor	1.00	2.00	392.00	-1.28	-.16

** $p < 0.001$ (one-tailed)

Figure 30. Histogram of EBT Level of Technique for Non-EBT Group (N = 28)

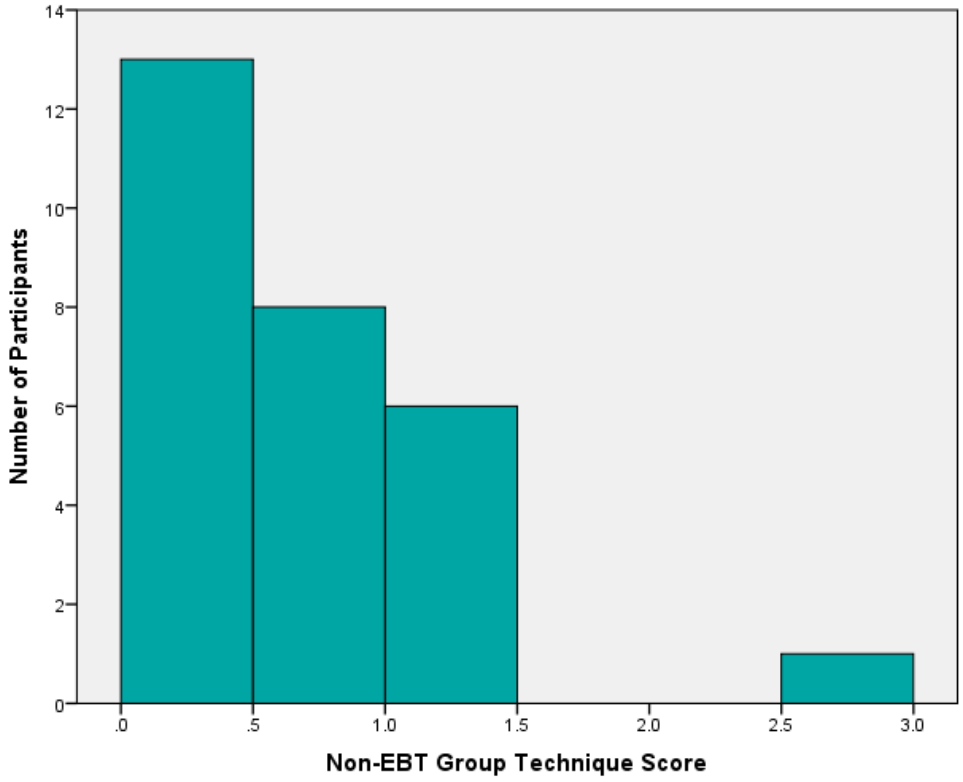


Figure 31. EBT Level of Mechanism for Non-EBT Group (N = 28)

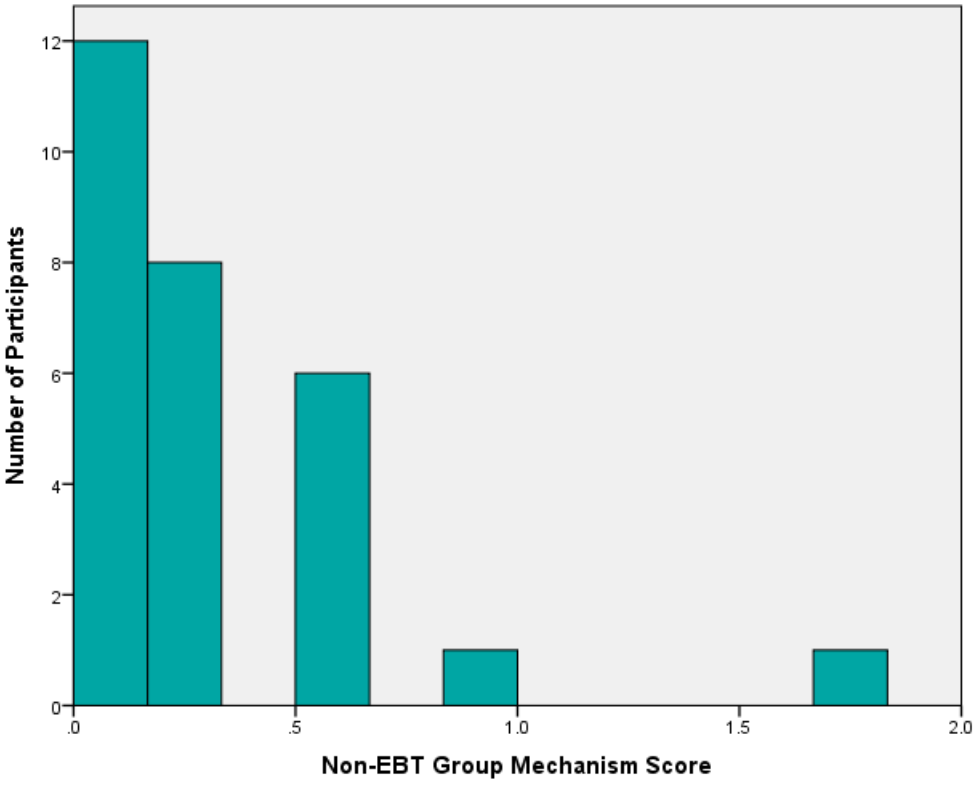


Figure 32. Histogram of EBT Causal Factor for Non-EBT Group (N = 28)

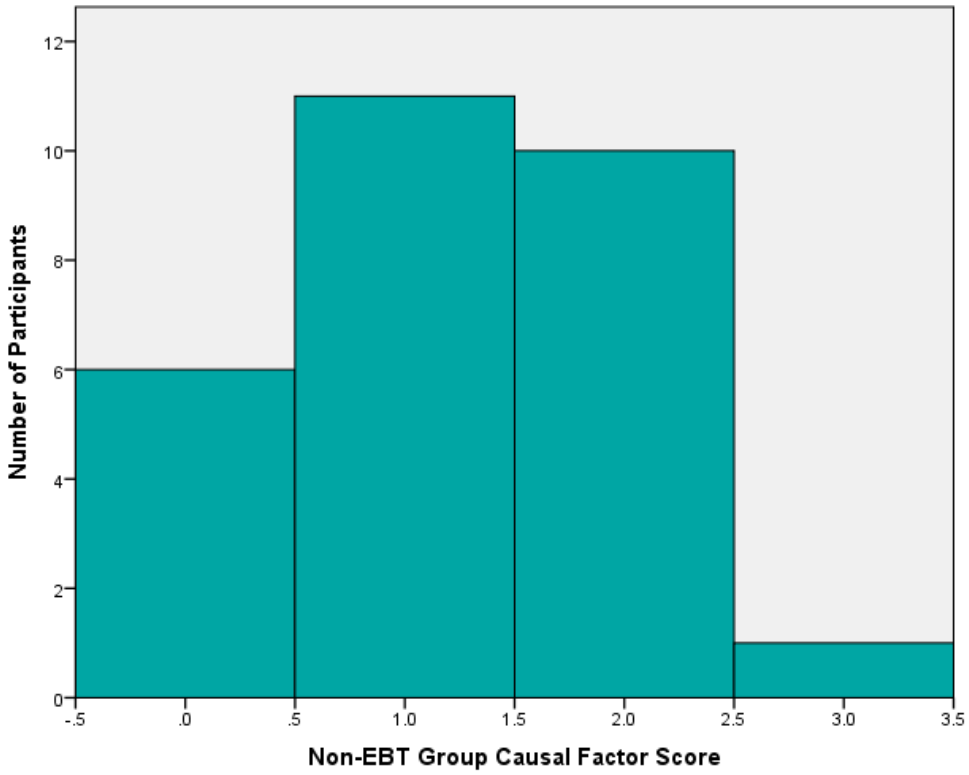


Figure 33. Histogram of EBT Level of Technique for EBT Group (N = 34)

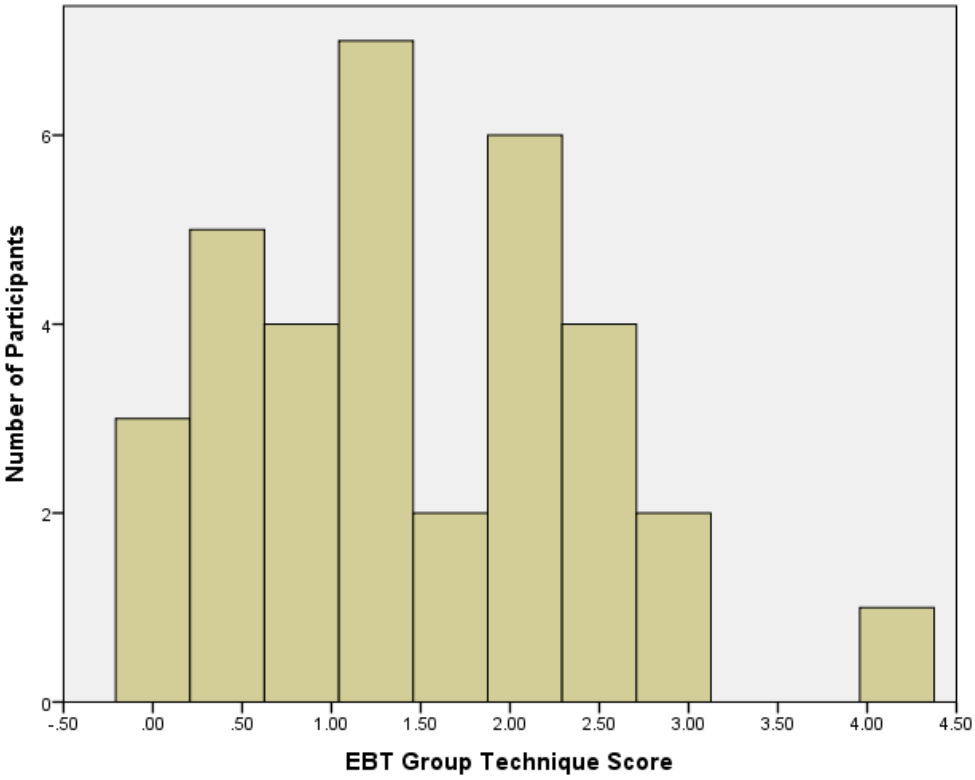


Figure 34. Histogram of EBT Level of Mechanism for EBT Group (N = 34)

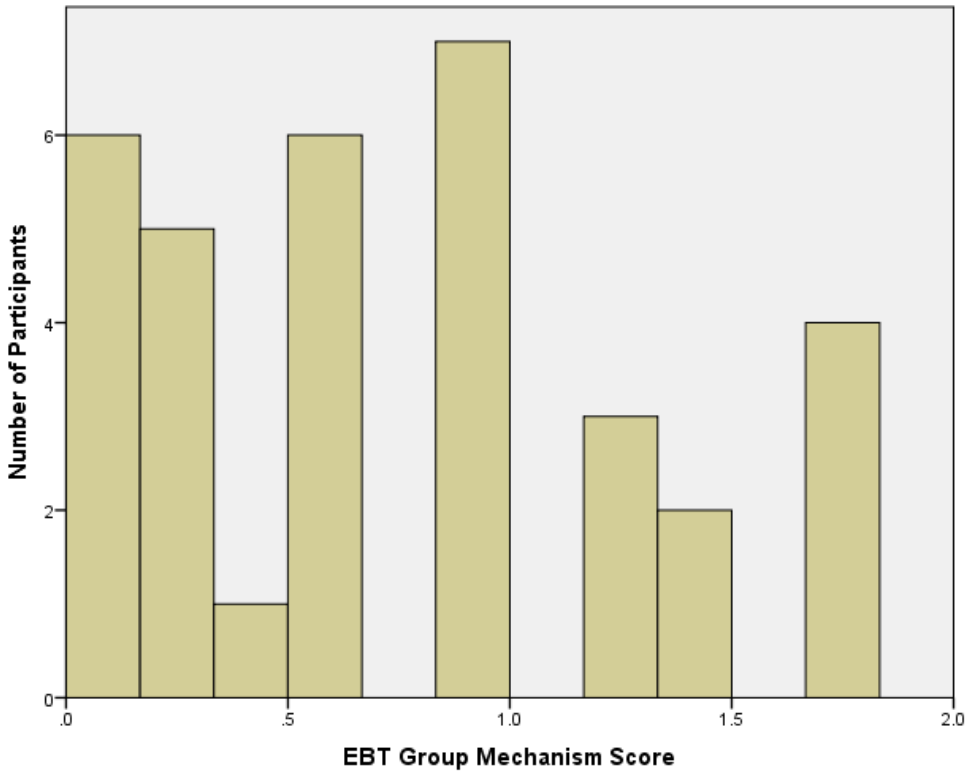
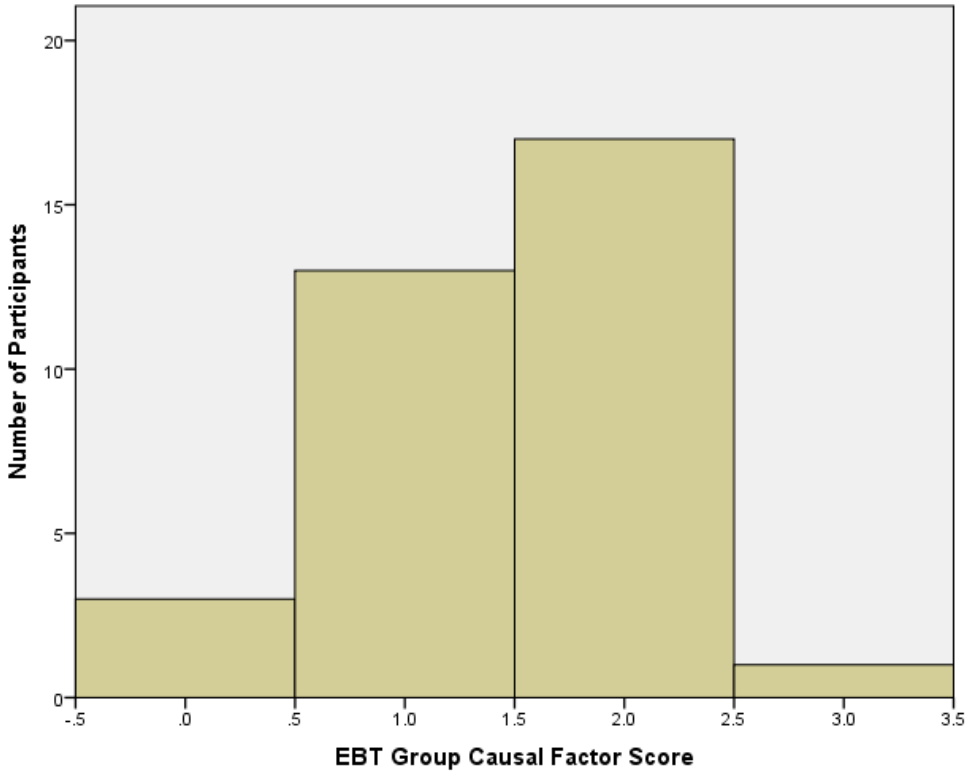


Figure 35. Histogram of EBT Causal Factor for EBT Group (N = 34)



CHAPTER VII
DISCUSSION

There has been little research into therapist expertise and competency despite the fact that it can be an influential factor in psychotherapy process and outcome (Eells, et al., 2005; Beutler, Machado, & Neufeldt, 1994; Wampold, 2001). Of the research in this area, virtually all of the studies have been conducted in High Income Countries (HIC) such as the U.S.; no research on therapist competence has been conducted in Asia to date. Given the potential highly important role that psychotherapy can play in addressing the mental health treatment gap between HIC and LMIC, the object of the current study was to examine therapist competence among Vietnamese therapists. The primary aims of this study were to assess: (a) whether Vietnamese mental health psychotherapists understand the causes of mental health disorders; (b) the therapists' appropriate use and understanding of evidence-based treatments, and (c) their understanding of mechanisms of treatment, which is necessary to most appropriately, flexibly, and effectively use the treatments.

Therapists were asked to choose the clinical problem (depression, anxiety, somatization, or conduct problems) that they felt most comfortable treating. They then were asked to provide up to three techniques they would use to treat the problem, explain the goal of techniques, and give causal factors that contributed to the development of the clinical problem. Although 77% of the sample called themselves "psychologist," nearly half (48%) of these individuals had a Bachelor's degree or lower. By contrast, in most if not all states in the United States, "psychologist" is a protected title, and a Master's degree or now in many states a PhD or PsyD is necessary to legally refer to oneself as a "psychologist". The mean years in their occupation was 7.0, suggesting that most providers actually were at least somewhat "experienced." In their research in the U.S., Eells and colleagues (2005) categorized "experienced" therapists as those with 10 or more years of experience.

Therapists were asked to report their therapeutic / theoretical orientation. One item, "Serrion" therapy, was included in the Psychotherapy Theoretical Orientation scale as a quality control item. Thirteen therapists (21%) rated it above a 0, indicating they were at least somewhat influenced by this non-existent therapy. "Serrion", "Carl Rogers", and "Freudian" therapies were the items among the 12 that did not have a Vietnamese translation. One possible reason why some therapists selected this item may be because they did not know much about psychotherapy, but to appear more knowledgeable rated the item higher than 0, as it was English / Foreign sounding, like Freud and Carl Rogers, and hence more prestigious. This explanation is supported by the fact that the Serrion item loaded on the "Freudian" factor.

Over three-quarters (77%) of participants reported that they currently received either informal or formal supervision, which is a high percentage. There are three possible explanations for the high rate of supervision. First, similar to the "Serrion" item, participants may have felt that answering yes to this question was the more

socially desirable answer, to appear more knowledgeable and professional. Second, participants may not have fully understood what clinical supervision is (although the questionnaire provided a brief explanation) and erroneously may have assumed it referred to administrative supervision where an employee is monitored by an individual senior to them in an organization to ensure that they work the appropriate number of hours, etc., which is common in Vietnam. And third, it is possible that this estimate is accurate, reflecting the relatively low level of training on average that the Vietnamese psychotherapists had. The quality of this supervision was not assessed in the present study, however.

The factor analysis on the Theoretical Orientation scale found three factors. Freudian and Humanistic / Eclectic were moderately correlated with each other, but not with Cognitive-Behavioral. This perhaps reflects the fact that the former two theoretical approaches can be see, in some ways, as relatively simple (although in reality they are not), and simply involve talking with a client. They thus may appeal to individuals in Vietnam where there is relatively little formal training available in psychotherapy.

Providers reported the most familiarity with Anxiety Disorder, Mental Retardation, and Relationship Problems. However, although only 27% of providers reported a moderate level of familiarity with depression, over 61% selected the depression vignette to discuss, and although the anxiety vignette was available only 11% of providers chose this case. One possible explanation for the majority of providers selecting the depression vignette despite the fact that only slightly more than one quarter of the providers stated they were familiar with "depression" is that they may not have been familiar with the actual symptoms of "depression", therefore failing to link the vignette to the label.

Of the 183 techniques the participants provided, nearly 85% of them where psychotherapy-specific, techniques that are specific to a particular form of psychotherapy (such as exposure therapy). Only one-third of participants gave a common-factor psychotherapy technique (such as relationship development). Most of the common-factor psychotherapy techniques focused on the clinical interview / assessment rather than other common-factor psychotherapy techniques such development of the therapeutic alliance. This may be due to clinical interviews and assessments being relatively structured activities (and hence easier to understand) whereas many other common-factor psychotherapy techniques are more abstract (e.g., the therapist expressing empathy for the client).

A number of the variables analyzed violated the normality assumption, and hence had to be analyzed using non-parametric statistics. This reflects the fact that for some of the ratings, the modal score was 0 (e.g.,. EBT level for mechanism). As hypothesized, therapists demonstrated low levels of understanding evidence-based treatments, their mechanism, and causal factors for clinical problems. We used the rating midpoint of 2.0 as an indication of at least moderate knowledge and understanding of evidence-based psychotherapy processes; however, the means and medians of all three dependent variables were significantly below 2.0.

The top two techniques presented were relaxation (32% of participants) and behavioral activation (31%). Both of these treatments may be popular because they are action-oriented with concrete goals easier to identify, and may be seen as more appealing to clients. Additionally, these treatments may be appealing to the therapists because they can be brief and relatively uncomplicated techniques (although in reality they can be complex) that can be more easily learned mechanically compared to other psychological interventions such as cognitive therapy, which require comprehensive training and significant supervised practice to carry out effectively. Research indicates that a lecture, workshop, or brief training is not sufficient for developing understanding CT . For instance, a study that provided a 4 day CBT training to general practitioners found no major difference between the intervention and control group after 6 months in knowledge of depression and attitude towards its treatment, nor was there any difference in patients' outcome (King, et al., 2002). Nonetheless, a quarter of the general practitioners in the study's experimental group utilized cognitive or cognitive-behavioral therapy to treat patients, which suggests therapists in general may be unaware of the limits of their knowledge and competency.

Given their lack of knowledge of EBT techniques, it is not surprising that the Vietnamese therapists had limited understanding of underlying causal factors. The median EBT level for causal factors was 1 (on a 0 to 4 scale). Participants (93%) focused on relationship issues (between the client and family members, peers, and employer/co-workers) as causal factors, which is not too surprising given that many of therapists reported relatively extensive experience providing treatment for relationship issues. However, they often were unable to explain how these relationship issues would impact on the development of the vignette client's mental health problem. For instance, participants sometimes stated that the grandfathers death was responsible for the vignette client being sad (or anxious, or having somatic complaints, or being hostile and oppositional), but were unable to say why it made the client sad. It is interesting that despite the focus on relationship issues, only about a quarter of the therapists stated Family Systems / Family Therapy as one of their top three techniques.
The EBT level of therapy techniques was significantly higher than the EBT level of mechanisms, reflecting the fact that it is generally easier to explain how something is done rather than explaining why it works. In this case, it may be easier to learn in a somewhat mechanical manner a technique, without truly understanding why it works. In fact, to some extent, understanding why something works is not essential. This suggests, however, that even these trained Vietnamese mental health professionals who are providing at least somewhat EBT services are functioning more like task-shifting paraprofessionals than actual mental health professionals. Mental health task-shifting involves mental health professionals providing training to non-mental health professionals (which can include generalist physicians, nurses, or even lay community members) with a relatively circumscribed focus (WHO, 2008). For instance, generalist nurses might be provided training in behavioral activation, where they learn how to implement the technique and with whom. But because their

training is relatively limited, they do not fully understand the technique and how it functions. Our results suggest that even those psychotherapists who are providing EBT treatment may be functioning more like such task-shifting paraprofessionals than true mental health professionals.

An explanatory factor analysis of the Therapeutic / Theoretical Orientation scale found three factors: Freudian, Humanistic/Eclectic, and Cognitive-Behavioral. We predicted that Freudian and Humanistic/Eclectic would be negatively correlated with EBT level for technique, mechanism, and causal factor whereas Cognitive-Behavioral would be positively correlated with EBT level for technique, mechanism, and causal factor. This hypothesis was supported. There was one small difference in significance between Pearson's and Kendall's tau correlations. Pearson's correlation was only marginally significant for Cognitive-Behavioral Orientation and EBT level of mechanism, $r = .20$, $p < 0.07$ whereas Kendall's Tau was significant, $\tau = .17$, $p < 0.05$. Given that some of the dependent variables had non-normal distributions, and the Pearson's correlation is more sensitive to outliers, Kendall's Tau correlation probably should be considered the more accurate result. Overall, these results are not surprising, since Freudian and Humanistic approaches are not evidence-based whereas Cognitive-Behavioral approaches are, but they do support the validity of the assessments in this study.

When we grouped therapists into either EBT or Non-EBT, we found significant differences EBT level of on technique and EBT level of mechanism but EBT level of causal factors, with the EBT group providing more EBT responses in both instances. The significant differences are most likely due to the EBT group having more evidence-based training than the non-EBT group. The fact that there was no difference between groups for EBT level of causal factor was contrary to our expectations. One possible explanation is that in Vietnam at present, at its best EBT training focuses on how to implement a technique and why it works, but not on the initial development of the clinical problem.

Study Limitations

Limitations to this study should be considered when interpreting its findings. First, our sample was recruited from the three major urban areas in Vietnam: Hanoi, Ho Chi Minh City, and Danang. Although the majority of "psychotherapists" in Vietnam likely are in those three areas, our sample may not be completely representative of Vietnam since it only included these three cities. However, therapists in this study likely are more EBT competent than therapists from less developed and Westernized areas of Vietnam; thus, if anything, our estimates are over-estimates of EBT competency in Vietnam. Second, in developing the study a major concern was that participants not feel like they were being personally or professionally evaluated, and that their responses to the interview could in some way impact on their professional status, their situation at their clinic or agency, etc. This was necessary for ethical reasons as well as to ensure broad participation. Therefore, interviews were not recorded, and the data coding consequently relied on the ability of the interviewer to

accurately transcribe responses for each interview question. Third, the two primary coders as well as the third reliability coder all were strongly EBT-oriented. However, a high level of familiarity with EBT approaches was necessary in order to code the responses, and it is unclear how this orientation might have influenced results (e.g., "Freudian" approaches are inherently non-EBT, regardless of whether one is Freudian or cognitive-behavioral). Fourth, participants were asked to self-report various aspects of their education, training, therapeutic / theoretical orientation, etc., which may or may not accurately reflect their actual characteristics or influences. Finally, the study used a direct measure of knowledge as an assessment of therapist competence. Knowledge is a central component of competency but does not include skill, the ability to correctly implement the knowledge. However, it was clear from the results that the large majority of participants lacked the knowledge and understanding of evidence-based treatments, so their ability to implement EBT treatments is undoubtedly limited.

Implications

These results suggest two basic implications. The first is that in all likelihood, the majority or even the large majority of Vietnamese patients or clients who see a "psychotherapist" for emotional, behavioral, or relationship problems are receiving ineffective treatment. Nonetheless, there are some encouraging signs that some providers have familiarity with evidence-based treatments such as behavioral activation and appear eager to utilize these treatments. Second, the use of ineffective treatment methods presents a risk not just for the clients who receive the treatment but also for the professional field. Although this parallels the early development of psychotherapy in the West (i.e., it began with treatments that have no support for their efficacy, such as psychoanalysis), the risk is that as clients fail to experience treatment gains in line with their expectations, societal sentiment may turn against psychotherapy, making it more difficult to increase treatment access. This differs from the West in that psychotherapy developed during a period when, by current standards, medical treatments in general were not very effective.

Future Directions

The present study suggests several possible next steps. First, it would be useful to expand the range of competency variables to include factors in addition to understanding of causes and use of evidence-based treatments. These competency factors could include knowing treatments indications and contraindications, typical responses to the treatment, potential adverse effects, common difficulties encountered in therapy and how to address them, and when to shorten, extend, or terminate treatment (Fairburn & Cooper, 2011). Second, it would be useful to assess therapist characteristics, such as theoretical orientation and supervision, through other methods besides simple self-report. Measures such as the Intentions List (Hill & O'Grady, 1985), which has

therapists review a session audio tape and rate what their intentions were at that time can be mapped onto particular theoretical orientations. Another measure, Development of Psychotherapists Common Core Questionnaire (DPCCQ; Orlinsky et al., 1999), was developed internationally to study therapists and their development, including of theoretical orientation; this measure also could be useful. Third, given the low number of common-factor psychotherapy techniques in the study, a measure such as the Commonalities Paired-Comparison Questionnaire (Tracey, Lichetenberg, Goodyear, Claiborn, & Wampold, 2003) could be used to clarify what common-factor techniques are important to Vietnamese therapists and what their understanding and competency in these techniques are. Fourth, it would be useful to assess the relation between therapist competency and patient outcomes. Finally, it would be useful to measure competency over time before and after formal training, such as at the Vietnamese National University Masters in Clinical Psychology program. Participants could be assessed at baseline and throughout training, which could determine whether training programs such as this could be used to address the low levels of EBT competency in Vietnam.

APPENDIX

Appendix A: Demographic Questionnaire

Back translation of Vietnamese Measures

BACKGROUND QUESTIONNAIRE

Today's Date:_____/_____/_____

I. Basic Information

1. Age _____
2. Gender Male Female
3. In what mental health field is your professional training? (That is, how do you refer to yourself in professional context? Check all that apply)

   ___Psychologist ___Psychiatrist ___Social Worker ___Advisor

   ___Counselor ___Nurse ___Other (please specify):
4. What is the highest level of education you have completed?

   ___High School (or equivalent) ___Bachelor's degree ___Master's degree

   ___Doctoral degree ___Medical Degree ___Other (please specify):
5. From what school or university did you graduate? _____
6. In what field is your highest degree (if any)? _____
7. How many years did it take to complete this degree? _____years
8. What year did you complete this degree? _____

II. Professional Experiences

9. How many years have you been working in your current occupation? _____ years
10. What is the name of your position? _____
11. How long have you been working as a mental health professional?_____
12. Each week, how many clients do you assess/treat? _____
13. How much is your current therapeutic practice guided by each of the following therapeutic frameworks (ranging from 0 = not at all [influenced] to 5 = very greatly):

	Not influenced	Influenced a little	Influenced somewhat	Influenced significantly	Influenced very greatly
Psychoanalysis					
Behavioral					
Cognitive					
Humanistic					
Systemic					

	Not influenced	Influenced a little	Influenced somewhat	Influenced significantly	Influenced very greatly
Serrion					
Client-Centered					
Freudian					
Biology					
Eclectic					
Psychodynamic					
Rogerian					
Other:					
Other:					

14. Please identify your level of experience/exposure with the following clinical issues: (0= no experience, 1 = very little experience, 2 = some experience, 3 = moderate experience, 4 = a lot of experience/primary population you work with)

_____ Depression/anxiety
_____ Anxiety
_____ Relationship Issues
_____ Oppositional behaviors
_____ Academic/motivational
_____ Intellectual Disability
_____ Sexual abuse
_____ Violence / physical abuse
_____ ADHD
_____ Substance Abuse /Dependence
_____ Sexual Problems
_____ Asperger's
_____ Conversion Disorder
_____ Somatoform
_____ Behavioral Problems
_____ Mental Retardation
_____ Gambling / Game addiction
_____ Learning Disability
_____ Phobias
_____ Hysteria
_____ Bipolar Disorder
_____ Gender Identity Issues
_____ OCD
_____ Hypochondriasis
_____ Somatization
_____ Schizophrenia
_____ Other (please specify): _____

15. What is the age group of your clients (check all that apply):

_____ Age 12 and younger _____ Age 13-19 _____ Age 20-49
_____ Age 50 – 64 _____ Age 65 and older

Supervision

Supervision is a meeting with a more experienced member of your profession, the purpose of which is to help you improve your professional skills and abilities, and to provide better treatment for your clients. The more junior member discusses one or more clinical cases, and the more senior member provides suggestions, comments, advice, etc. to improve the clinical skills and ability of the more junior member.

16. Are you <u>currently</u> receiving psychotherapy supervision?
    a. No supervision
    b. Yes, informal supervision (case discussions on an unplanned basis, when a problem occurs)
    c. Yes, formal supervision (regular planned meetings, every week, or every two weeks, etc.)

If you answered "a. No supervision" please answer Question 17:

17. Have you <u>ever</u> received psychotherapy supervision?
    a. No I have never received supervision
    b. Yes, in the past, I have received informal supervision (case discussions on an unplanned basis, when a problem occurs)
    c. Yes, in the past, I have received formal supervision (regular planned meetings, every week, or every two weeks, etc.)

If you answered yes to either 16 or 17 (chose b or c for either Question 16 or 17):

18. What is the purpose of the supervision? _____
19. How often do you meet, and for how long? _____
20. Who provides the supervision (degree, job position, etc.)? _____
21. How long have you been receiving/did you receive supervision? _____
22. Of what does the supervision consist (check all that apply):

_____ therapist reports to supervisor	_____ review of notes and written reports
_____ listen to audiotapes of sessions(s)	_____ watch video-recording of session(s)
_____ direct life observation	_____ modeling and demonstrating
_____ co-facilitating / co-therapy	_____ teaching new techniques and therapy skills
_____ case report	_____ team feedback
_____ troubleshooting cases	_____ didactics / workshops

Appendix B: Vignettes

Back translation of Vietnamese Measures

BRIEF SUMMARIES OF VIGNETTES

This interview consists of two parts. The first part of this interview, we would like to ask about the techniques and methodology you use to treat a mental health problem for a patient. Please read the following 4 vignettes regarding a mental health problem and pick the mental health problem you believe you can treat the best. After you pick the vignette, we will ask you a few additional questions regarding the vignette.

A. Lan is a 23 year old woman. In the past few years, she started feeling sad however she is not able to give a reason for why she feels this way. Currently, she has difficulty sleeping and wakes up often at 3am and has trouble falling back asleep. In the community, she rarely meets with friends and co-workers, and her friends and family are starting to worry about her because Lan's work been inconsistent and lacking.
B. Minh is a 23 year old woman. For almost all her life, she has complained about a lot of aches and pains and a few other minor physical issues, such as leg rashes, dizziness, headaches, and stomachaches. The last few months, she has had a few convulsions, and fainting and falling on the ground, and all her body shakes. All of her convulsions last a few minutes. She has already visited her physician however, the doctor has not been able to find the causes of her convulsions.
C. Phuong, male, 23 years old. From when he was young, Phuong has been a shy person, however, at the start of this year, when his family moved to a new neighborhood where he does not know anyone, he has become even more shy. When he was in grade school, Phuong had difficulty talking in front of the class. Now, at his job, he rarely talks in meetings and when he does have to speak, Phuong becomes worried and he stutters and has difficulty speaking.
D. Tuan, male, 23 years old living with his parents. When he was little, he had a lot of conflict with his parents, teachers, and peers at school. In the past few years, Tuan has become even more disrespect with his mother, ignore his mother when she is trying to talk to him or he will speak disrespectfully towards his other. His parents worry about his behaviors because Tuan has been becoming more difficult every day.

Lan [Depression]

Lan is 23 years old. She currently works as a part-time receptionist for a local hotel. She lives with her mother, father, older brother, and their paternal grandmother. Her paternal grandfather, to whom she was very close and spent a lot of time, died a couple of years ago. When Lan was a young child, she like to pretend that she was a doctor, and in the evening when her parents were home for work, she would pretend that they were her patients and she would treat them for different illnesses.

Lan has always tried to do well in school, she had very high standards for herself academically and could be very critical of herself when she failed to meet them. When she was younger she used to get good grades but when she started college Lan did not do as well and dropped out of college. The past several years both of her parents have been very busy with their jobs, and she rarely sees her brother who is studying at medical school. In the past, her grandmother helped to raise and take care of Lan and her brother when they were young. But now the grandmother is older and can't do so much. But she still loves Lan, and will give her money sometimes.

Lan's difficulties started a few years ago when she began to feel very sad but she couldn't say why she felt sad. Now she doesn't feel like eating and has lost weight, and has trouble sleeping and wakes up at 3 in the morning and can't get back to sleep because she keeps thinking about all her failures in life. Even though she has a job, she feels ashamed that she dropped out of college and couldn't get a better job. She has pretended to be sick a few times the past year to stay home from work. On those days she stays in bed all day, usually sleeping.

At work, she used to have a number of friends but they have noticed that she has become irritable and withdrawn over the past year or two. Now when her friends ask her to go do something fun, she usually says she is busy because she is uncomfortable being around her friends, and she mostly stays at home watching TV, and doesn't go out. Her parents became aware of her problems when her boss, a friend of the family, told them he was concerned about Lan's inconsistent work performance.

Lan's father thinks that she is having these problems because she is lazy, and thinks they should punish her when she has problems at work so she will work harder, but her mother thinks that Lan has a medical problem. So they took her to see a medical doctor. The doctor could not find anything specifically wrong with her medically but he suspected that the problem was low calcium in her body, so he gave her intravenous calcium. After a few days, Lan seemed to be better, and her parents thought that her problems were solved. But several weeks later Lan's problems started again. The mother wanted to take her back to the hospital to receive more calcium but the father refused because he didn't want to spend the money.

Minh [Somatization]

Minh is 23 years old. She lives with her mother, father, older brother, and their paternal grandmother. Her paternal grandfather, to whom she was very close and spent a lot of time, died a couple of years ago. When Minh was a young child, she spent a lot of time pretending that she was a doctor, and in the evening when her parents were home for work, she would pretend that they were her patients and she would treat them for different illnesses. The past several years both of her parents have been very busy with their jobs, and she rarely sees her brother who is studying at medical school. In the past, her grandmother helped to raise and take care of Minh and her brother when they were young. But now the grandmother is older and can't do so much, and is often ill and stays in bed. She still loves Minh, though, and will give her money sometimes. When her parents come home from work, they often are both tired, particularly her mother. Sometimes her mother feels ill and has to stay home from work. When this happens, her father sometimes will take the afternoon off from work to come home early and take care of the mother. He cooks dinner and cleans up so the mother can rest.

Minh started working about a year and a half ago. About a year ago, Minh was late for work and had to run from the bus stop. By the time she got to her office, she was dizzy. She became worried that something was wrong with her physically. Later that day, her boss saw she wasn't feeling well and was concerned about her, so he let her go home early. Since then, she's noticed other physical problems like aches and pains, and blurred vision, and she's become more and more worried that she has a serious medical problem. She saw a medical doctor but he wasn't able to find anything wrong with her. She recently has been complaining about feeling dizzy, and over the past few months has had several seizures where she has fainted and fallen on the ground, and her entire body has shaken. These seizures usually last about five minutes. When these seizures happen, her parents and co-worker become very concerned, and have her stay home from work so that she will not feel stressed. Her father also bought her a new jacket because he thought that part of the problem might be the change in the weather, and he wanted to make sure that she was warm. But the seizures continued so they took her to see another doctor. He could not find anything specifically wrong with her medically, so he suspected that the problem was low calcium in her body, so he gave her intravenous calcium. After a few days, her symptoms went away, so she was able to get a new job. However, a month later the symptoms returned. The mother wanted to take her back to the hospital to receive more calcium but the father refused because he didn't want to spend the money.

Phuong [Anxiety]

Phuong is 23 years old. He lives with his mother, father, older brother, and their paternal grandmother. His paternal grandfather, to whom he was very close, was killed by a drunk driver on a motorbike while he and Phuong were crossing the street a few years ago. Since then, his grandmother has been very concerned when Phuong goes out, and always reminds him to be careful.

When Phuong was a young child, he spent a lot of time pretending that he was a doctor, and in the evening when his parents were home for work, he would pretend that they were his patients and he would treat them for different illnesses. The past several years both of his parents have been very busy with their jobs, and he rarely sees his brother who is studying at medical school.

Phuong was always a shy child, but earlier this year his family moved to a larger house in a new neighborhood, and Phuong had to get a new job where he didn't know anyone. He does have one friend whom he sees occasionally outside of work. He would really like to have more friends but thinks he'll just do or say something stupid when he's around other people, so he doesn't talk to anyone, and then he doesn't feel so anxious. He rarely speaks up at his work meetings , and when he does have to talk he becomes nervous, averts his eyes from the group, and his voice shakes. So in order to avoid being nervous, he talks as little as possible at meetings. After working with all of this pressure, Phuong usually leaves work feeling fatigued, tired, and defeated. He once said that when he was in the sixth grade, his teacher asked him to answer a math problem on the board. When he couldn't do it and dropped the chalk on the ground, the whole class laughed at him, and he turned red with embarrassment, which just made the class laugh even louder.

At home, Phuong does what his mother asks him, and he helps his mother take care of the house. Phuong is talkative with his mother but he becomes quiet if someone he doesn't know well comes to visit. Phuong knows his fears are unreasonable but he can't seem to control them. Recently Phuong has begun to have stomachaches once or twice a week. His parents don't know what to do to help him with his problems. His father gets angry with him because he thinks that Phuong's problems are because the father is not strict enough with Phuong, and the father wants to punish him when he is afraid of things. The mother won't let Phuong's father do that, she thinks Phuong may have a medical problem. So they took him to the hospital. When the doctor examined him, he couldn't find anything specifically medically wrong with Phuong but he suspected that the problem was low calcium in his body, so he gave him intravenous calcium. Things seemed better for a week or two and his parents thought that Phuong's problems were solved. But several weeks later Phuong's problems started again. The mother wanted to take him back to the hospital to receive more calcium but the father refused because he didn't want to spend the money.

Tuan [Behavior Problems]

Tuan is 23 years old. He lives with his mother Huong, his father Phuong, his younger sister Ech, and their maternal grandmother. His maternal grandfather, to whom he was very close, was hit and killed by a drunk driver on a motorbike while they were crossing the street a few years ago. His father has been the Assistant Director of a small food manufacturing company for about ten years and his mother owns a small shop where she sells clothing.

Tuan is smart and in elementary school he received good grades. But in secondary school, after his grandfather died and his parents became busy with their jobs, Tuan's grades began to drop. When his parents tried to push him to get good grades, he just said school was boring and there was no point in studying. At school he often got into arguments with other students. When other students tried to be friendly, Tuan thought they were making fun of him so he would start a fight with them. Tuan managed to graduate from high school but didn't go to college, and doesn't have job and won't look for one. He has a few friends but most of them also got in trouble at school, and a few of them are now in jail. Tuan spends a lot of his time watching TV and rarely goes outside or gets exercise, which worries his mother.

When Tuan was young, his parent were very busy with their jobs and didn't pay any attention to him. One time Tuan started crying and told his parents they didn't love him. They felt guilty very guilty because they really did love him very much, so whenever Tuan wanted something they gave it to him. As he got older, his parents tried to have rules but it was hard to keep the rules, and it was often easier just to let Tuan do whatever he wanted, and ignore him when he broke the rules. Sometimes when his parents were in a bad mood and Tuan did something they particularly don't like, they yelled and threatened to punish him by taking away his cell phone or computer, but usually didn't follow through on the threats. They never physically punished Tuan but the father's older brother thinks Tuan is just a bad kid, and he told Tuan's father that if he beat him once or twice, then Tuan would behave better. But Tuan's father never did this.

Tuan recently got into an argument with his mother when she asked him to help around the house. He started to yell and throw things, and his parents left the house. They came back an hour later after he calmed down and the mother cleaned the house. Tuan's mother thinks that he might be possessed by evil spirits and wanted to take him to see a monk, but the father refused because he does not trust monks. The father thinks Tuan may have a medical problem so they took him to the hospital. The doctor thought that Tuan 's problem was low calcium in his body, so he gave him intravenous calcium, which was very painful. Things seemed better for a week or two and Tuan even got a job working as a delivery boy. But several weeks later Tuan was fired for coming to work late and his problems started again. The mother wanted to take him back to the hospital to receive more calcium but the father refused because he didn't want to spend the money.

Appendix C: Interview Answer Forms

Back translation of Vietnamese Measures

DESCRIPTION OF TREATMENT TECHNIQUES USED

ID #: _____ Date: _____

Vignette (circle one): Lan Minh Tuan Phuong

Description of Technique #1:

Additional / Follow-Up Question:

Technique #1 Goal:

Description of Technique #2:

Additional / Follow-Up Question:

Technique #2 Goal:

Description of Technique #3:

Additional / Follow-Up Question:

Technique #3 Goal:

VIGNETTE CASE CONCEPTUALIZATION

ID #: _____ Date: _____
Vignette (circle one): Lan Minh Tuan Phuong

A. What do you think is the root / original cause of the problem?
B. How does the root / original cause contribute to the problem?

	A. Root / Original Cause	B. Contribution
1		
2		
3		
4		
5		
6		
7		
8		
9		

Appendix D: Coding of Therapy Techniques

Score	Elements	Example of Psychotherapy-Specific	Example of Common-factor Psychotherapy
0	No evidence of EBT or very unclear: a. known non-EBT b. unclear what they are talking about c. they have the name but description has no connection to name or evidence-based techniques	Known non-EBT such as oxygen therapy, free association, rebirthing, recalling childhood memories / events, giving advice, genogram, generic art therapy	Observing client's facial expression, gestures, language
1	EBT present but very vague and / or spoiled (or EBT for a different psychopathology): a. they have the name of the EBT, but they cannot describe it correctly or have a few scattered elements but not the main components	Relaxation is deep breathing (but does not describe steps), doing exposure therapy with behavior problems, thinking positively or focusing on positives, teaching emotional expression (but does not describe steps), talking to family; skill building	Listening to client, respect client, genuiness, increasing self-efficacy through encouragement
2	EBT present but insufficiently clear a. describes some correct elements, but may also include some incorrect, unnecessary, or important missing element	Interpreting thoughts that occur during relaxation, briefly describes behavioral activation but missing major components, talks about changing thoughts but focuses procedures on emotions	Providing feedback to the client regarding their problems, strengths, weaknesses. Provide empathy so the client will trust therapist
3	EBT present and clear: a. they understand the technique but may be missing a single important element	Changing cognitions – 1) discuss association between thoughts, feelings, and behaviors; 3) use a thought diary; 4) help change negative thoughts to change feelings [lacks details such as identifying patterns of thoughts and challenging maladaptive cognitions and core beliefs]	Clinical interview focused on history, strengths, weaknesses, goals, client's readiness to change or stage of change, obstacles to treatment [missing obtaining details on presenting problems; getting baseline data to track change over time]
4	Complete comprehensive EBT	Behavioral activation – 1)discussing loss of positive reinforcement which causes depression and how doing things can prevent that; 2) make a list of activities and plan how to do those activities; 3) rate emotions before and after; 4) problem-solve obstacles to initiating or doing those activities; 5) over time increase physical activity, social activities, and leisure / pleasurable activity	Therapeutic alliance: in a safe or healing setting, establish rapport and build trust in therapy and therapist through listening, empathy, explaining confidentiality, collaboratively working on treatment goals and using appropriate language to explain problem, therapy, and tasks.

Example of Rating for Behavioral Activation

Rating	Example
4	"Psychoeducation first on depression, then pleasant activity questionnaire, then choose activities they can do and ones where they have to interact with others, then come up with a plan; monitor and maintain client's progress towards goals, teach skills to cope and overcome problems according to the plans; could also role-play with them to change their negative thoughts"
3	Sessions will be over 5 sessions; First session: assess and rate the current mood and all the relations between emotions and behavior; second session: put forth new activities to reduce doing things alone; session 3: overcome obstacles to implementing doing the new activities and give a reasonable explanation; fourth session; fifth session: guide them regarding future activities (all the future responses)
2	Participate in all the activities, experiences: for example community activities, charity, socialize with friends; client creates relationships; gather information regarding client's interests; guide the client through activities that will change their mood; pick activities that client enjoyed previously; be consistent with the client's situation
1	with the client, create daily routines that are useful and activities that are pleasurable (because a depressed person often have a habit of having problems with participating), so how can we keep them going (we have to guide and encourage them)
0	education and responsibility; have family support and assistance (friend); schedule a duration of time to do activity; tell client to do it; increase relations, reduce physical symptoms

Appendix E: Coding of Therapy Mechanism

Score	Elements	Example of Psychotherapy-Specific	Example of Common-factor Psychotherapy
0	Technique was non-EBT or if EBT, unclear what they were talking about or clearly erroneous mechanism	It will reduce depression (this says nothing about how it does it), help with sleep, change defense mechanisms, reduce anxiety in depression;	Empathy will help client understand parents thoughts and wishes; empathy will help the client feel good about themselves
1	EBT present but mechanism very vague and / or spoiled (or EBT mechanism for a different psychopathology)	Negative thoughts influence depression [lacks changing/challenging them]; improve family relationships [lacks details or mention of positive reinforcement]; increase self-esteem / self-confidence [lacks how]	Listening and feedback will help client see the whole problem and they themselves will put forth solutions
2	EBT mechanism present but insufficiently clear a. describes some correct elements, but may also include some incorrect, unnecessary, or important missing element	Changing negative thoughts to positive thoughts [should be realistic thoughts]; praising /positive attention to appropriate behaviors helps client feel good and want to please their parents/others more [lack positive reinforcement of good behaviors; client learns what appropriate behaviors are; negative behaviors are no longer reinforced]	empathy will help the therapist relate to the client and their problems [lacking helping the client feel understood, accepted, validated – then the client will be open to new perspective or approach to solving a problem]
3	They understand the mechanism, but may be unclear or missing a single important element	by exposing clients to their fears through experiments, client will see nothing bad will happen [lacking extinction of negative cognitions and physiological arousal / response can occur];	Assessment will identify client's issues/problems to intervene and have client agree with the goals of therapy; client will be more comfortable and trusting with therapist so they share more, adhere to treatment, and will listen to therapist better
4	Complete, comprehensive mechanism of action – it is clear they understand how the technique works	If family does not attend to physical complaints, patient will no longer be reinforced for the behavior; behavioral activation works through leisure and social activities by increasing positive reinforcement	Build rapport and trust in the therapeutic alliance; a clinical interview will inform therapist on the client and allow them to create appropriate treatment directions and goals. Assessment will help show change over time.

Appendix F: Coding of Causal Factors

Score	Depression	Anxiety	Somatization	Behavior Problems
4	Negative or distorted cognitions, perceptions, core beliefs, thoughts about the self, world, or future; perseveration / rumination of idiosyncratic schemas; Lack or loss of positive reinforcement; social isolation	Negative experience such as being teased, ridiculed, or humiliated conditions fear; conditioned fear causes avoidance of anxiety-provoking situation reduces anxiety which reinforces the anxiety; negative thoughts, catastrophic thinking; distorted process of source of threat or danger either through attentional or interpretative biases or hypervalent cognitive schemas	Modeling of physical complaints; reinforcement of physical complaints through increase of others' attention and reduction demands; anxiety/depression/stress manifesting as physical complaints; heightened sensitivity to physical sensations; catastrophic thinking about physical sensations	Reinforcement of negative behaviors; inconsistency of follow-through on demands and consequences; client learned negative behaviors get them what they want / out of demands; poor prosocial skills lead to rejection from nondeviant peers thus modeling of negative behaviors from deviant peers
3	Missing one from above; but clearly understands most of the causes; may have 1-2 non-causal factors as well	Missing one from above; but clearly understands most of the causes; may have 1-2 non-causal factors as well	Missing one from above; but clearly understands most of the causes; may have 1-2 non-causal factors as well	Missing one from above; but clearly understands most of the causes; may have 1-2 non-causal factors as well
2	missing 2 from above; vaguely states above such as family being too busy / loss of grandfather [lacks loss of positive reinforcement]; high expectations for self and then doesn't meet those expectations	missing 2 from above; vaguely states above such as worries about family members; family too busy so doesn't have support to go out; moving to a new neighborhood and other stressors increases anxiety	missing 2 from above; vaguely states above such as mother / grandmother gets sick a lot [doesn't mention modeling]; high expectations from self / parents / boss; get sympathy	missing 2 from above; vaguely states above such as parents too busy; have bad friends; lack of motivation for school
1	Vaguely states 1-2 element from above; loss of self-confidence / self-esteem; sees brother is successful and she isn't	Vaguely states 1-2 element from above; father punishes him for being shy / anxious	Vaguely states 1-2 element from above; parents are worried about her [attention; social reinforcement]	Vaguely states 1-2 element from above; family relationships are poor
0	Unclear what they are saying or clearly not a causal factor such as lack of a boyfriend; childhood memories	Unclear what they are saying or clearly not a causal factor such as brother is successful	Unclear what they are saying or clearly not a causal factor such as low blood calcium	Unclear what they are saying or clearly not a causal factor such as father didn't physically punish client enough

REFERENCES

Abramowitz, J. S., Deacon, B. J., & Whiteside, S. P. (2012). *Exposure therapy for anxiety: Principles and practice*. New York, NY: Guilford Press.

Ackerman, S. J., & Hilsenroth, M. J. (2003). A review of therapist characteristics and techniques positively impacting the therapeutic alliance. *Clinical Psychology Review*, *23*(1), 1-33.

Aguilar, B., Sroufe, L., Egeland, B., & Carlson, E. (2000). Distinguishing the early-onset/persistent and adolescence-onset antisocial behavior types: From birth to 16 years. *Development and Psychopathology*, *12*(02), 109-132.

Ahn, H. N., & Wampold, B. E. (2001). Where oh where are the specific ingredients? A meta-analysis of component studies in counseling and psychotherapy. *Journal of Counseling Psychology*, *48*(3), 251.

Allen, L. A., Gara, M. A., Escobar, J. I., Waitzkin, H., & Cohen Silver, R. (2001). Somatization: a debilitating syndrome in primary care. *Psychosomatics*, *42*(1), 63-67.

American Psychiatric Association. (1998). Practice guideline for the treatment of patients with panic disorder. *American Journal of Psychiatry, 155,* 1–34.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (5th ed.)*. Arlington, VA: American Psychiatric Publishing.

American Psychological Association (APA). (1995). *Template for developing guidelines: Interventions for mental disorders and psychosocial aspects of physical disorders*. Washington , DC : Author.

American Psychological Association (APA). (2006). Evidence-based practice in psychology. *American Psychologist, 61*(4), 271-285.

American Psychological Association. (2010, June). *Anxiety disorders and effective treatment*. Retrieved from http://www.apa.org/helpcenter/anxiety-treatment.aspx on July 21, 2014.

American Psychological Association (APA). (2012). *A Practical Guidebook for the Competency Benchmarks*. Retrieved from http://www.apa.org/ed/graduate/benchmarks-guide.aspx on July 21, 2014.

Andrusyna, T.P., Luborsky, L., Pham, T., & Tang, T.Z. (2006). The mechanisms of sudden gains in supportive-expressive psychotherapy for depression. *Psychotherapy Research, 16*, 526-536.

Anh, H., Minh, H., & Phuong, D. (2007). Social and behavioral problems among high school students in Ho Chi Minh City. In L.B. Dang & B. Weiss (Eds.), *Research findings from the Vietnam Children's Mental Health Research Training Program* (pp. 111-196). Hanoi, Vietnam: Educational Publishing House.

Arnett, J.J. (2009). The neglected 95%, a challenge to psychology. American Psychologist, 64, (6), 571-574.

Bachrach, H.M., Galatzer-Levy, R., Skolnikoff, A., & Waldron, S. (1991). On the efficacy of psychoanalysis. *Journal of the American Psychoanalytic Association, 39*. 871-916.

Barber, J.P. (2007). Issues and findings in investigating predictors of psychotherapy outcome. *Psychotherapy Research, 17,* 131-136.

Barkley, R. A. (2013). *Defiant Children* (3rd Ed). New York, NY: Guildford Press.

Barlow, D.H. (Ed.) (2002). *Anxiety and its disorders: The nature and treatment of anxiety and panic* (2nd ed). New York: Guildford.

Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: a test of a four-category model. *Journal of personality and social psychology*, *61*(2), 226.

Baxter, A. J., Scott, K. M., Vos, T., & Whiteford, H. A. (2013). Global prevalence of anxiety disorders: a systematic review and meta-regression. *Psychological medicine*, *43*(05), 897-910.

Baxter, A. J., Vos, T., Scott, K. M., Ferrari, A. J., & Whiteford, H. A. (2014). The global burden of anxiety disorders in 2010. *Psychological medicine*, 1-12.

BBC (2010, October 13). On the couch with Sigmund Freud in China. *BBC World Service.* Retrieved from http://www.bbc.co.uk/ on October, 7, 2011. worldservice/news/2010/10/101012_freud_china_nh_hs.shtml

Bechtoldt, H., Norcross, J.C., Wyckoff, L.A., Pokrywa, M.L., & Campbell, L.F. (2001). Theoretical orientations and employment settings of clinical and counseling psychologists: A comparative study. *Clinical Psychologist, 54*(1), 3–6.

Beck, A. T. (1979). Cognitive therapy and the emotional disorders. Oxford, England, International Universities Press.

Beck, A. T., Emery, G., & Greenberg, R. L. (2005). *Anxiety disorders and phobias: A cognitive perspective*. Cambridge, MA: Basic Books. Beck, A. T, Rush, A. J., Shaw, B. E, & Emery, G. (1979). *Cognitive therapy of depression.* New York: Guilford Press.

Blatt, S.J., & Zuroff, D.C. (2005). Empirical evaluation of the assumptions identifying evidence based treatments in mental health. *Clinical Psychology Review, 25,* 459-486.

Belfer, M.L. (2008). Child and adolescent mental disorders: The magnitude of the problem across the globe. *The Journal of Child Psychology and Psychiatry, 3,* 226–236.

Belford, A. (2010). Mental health crisis strains Cambodia. *VOANews.com, April 15, 2010.*

Borkum, J. M. (2010). Chronic headaches and the neurobiology of somatization. *Current pain and headache reports*, *14*(1), 55-61.

Bowlby, J. (1977). The making and breaking of affectional bonds. I. Aetiology and psychopathology in the light of attachment theory. An expanded version of the Fiftieth Maudsley Lecture, delivered before the Royal College of Psychiatrists, 19 November 1976. *The British Journal of Psychiatry, 130*(3), 201-210.

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*, 77-95.

Bordin, E. S. (1979). The generalizability of the psychoanalytic concept of the working alliance. *Psychotherapy: Theory, research & practice, 16*(3), 252-260.

Bordin, E. S. (1983). A working alliance based model of supervision. *The Counseling Psychologist, 11*, 35-42.

Breuer, J. & Freud, S. (1895) *Studien über Hysterie*. Reprinted (1957) as *Studies on Hysteria* (trans. and ed. J. Strachey). New York: Basic Books.

Browne, K. (2005). Snowball sampling: Using social networks to research nonheterosexual women. *International Journal of Social Research Methodology*, *8*, 47-60.

Budd, R., & Hughes, I. (2009). The Dodo Bird Verdict—controversial, inevitable and important: a commentary on 30 years of meta-analyses. *Clinical psychology & psychotherapy*, *16*(6), 510-522.

Butler, A.C., & Beck, J.S. (2001). Cognitive therapy outcomes: A review of metaanalysis. *Tidsskrift for Norsk Psykologforening*, *38*, 698-706

Butler, A.C., Chapman, J.E., Forman, E.M., & Beck, A.T. (2006). The empirical status of cognitive-behavioral therapy: A review of meta-analyses. *Clinical Psychology Review, 26*, 17-31.

Carroll, L. (1865). *Alice's Adventures in Wonderland: Through the Looking-Glass*. London, UK: Macmillian.

Central Intelligence Agency. (2009). *World Fact Book - Vietnam*. Washington, DC: Author.

Chambless, D.L., & Hollon, S.D. (1998). Defining empirically supported therapies. *Journal of Consulting and Clinical Psychology, 66*, 7–18.

Chang, D.F., Tong, H., Shi, Q., & Zeng, Q. (2005). Letting a hundred flowers bloom: Counseling and psychotherapy in the People's Republic of China. *Journal of Mental Health Counseling*, *27*, 104–116.

Ciechanowski, P., Sullivan, M., Jensen, M., Romano, J., & Summers, H. (2003). The relationship of attachment style to depression, catastrophizing and health care utilization in patients with chronic pain. *Pain*, *104*(3), 627-637.

Clark, D. A. (2004). *Cognitive-behavioral therapy for OCD*. New York, NY: Guilford Press.

Clark, D. A., & Beck, A. T. (2011). *Cognitive therapy of anxiety disorders: Science and practice*. New York, NY: Guilford Press.

Cloninger, C. R. (1994). Somatoform and dissociative disorders. In G. Winokur, & P. J. Clayton, (Eds.), *The Medical Basis of Psychiatry*, (2nd ed.) (p. 169). Philadelphia, PA: WB Saunders, Co.

Conrad, A., & Roth, W. T. (2007). Muscle relaxation therapy for anxiety disorders: It works but how?. *Journal of anxiety disorders*, *21*(3), 243-264.

Cook, C.R., Gresham, F.M., Kern, L., Barreras, R.B., Thornton, S., & Crews, S.D. (2008). Social skills training

with secondary EBD students: A review and analysis of the meta-analytic literature. *Journal of Emotional and Behavioral Disorders, 16,* 131–144.

Corsini, R.J. & Wedding, D. (2008). *Current psychotherapies* (8th ed.). Belmont, CA: Thomson Brooks/Cole.

Dang, H.M., & Weiss, B. (2011). Mental health education and training in Vietnam: The role of clinical psychology in Vietnam. In N. Taylor, M. Littledyke, F. Quinn, & R. Coll (Eds.), *Health education in context: An international perspective of the development and implementation of health education in schools and local communities*. Rotterdam, The Netherlands: Sense Publishers

David, D., Szentagotai, A., Eva, K., & Macavei, B. (2005). A Synopsis of Rational-Emotive Behavior Therapy (REBT); Fundamental and Applied Research. *Journal of Rational Emotive and Cognitive Behavior Therapy, 23*, 175-221

de Jong, J. T., Komproe, I. H., Van Ommeren, M., El Masri, M., Araya, M., Khaled, N., et al. (2001). Lifetime events and posttraumatic stress disorder in 4 post conflict settings. *Journal of the American Medical Association, 286*, 555–562

Deacon, B.J., & Abramowitz, J.S. (2004).Cognitive and behavioral treatments for anxiety disorders: a review of meta-analytic findings. *Journal of Clinical Psychology, 60*, 429-441

Deale, A., Chalder, T., Marks, I., & Wessely, S. (1997). Cognitive behavior therapy for chronic fatigue syndrome: a randomized controlled trial. *American Journal of Psychiatry*, *154*(3), 408-414.

DeRubeis, R. J., Brotman, M. A., & Gibbons, C. J. (2005). A conceptual and methodological analysis of the nonspecifics argument. *Clinical Psychology: science and practice*, *12*(2), 174-183.

DeRubeis, R.J., & Crits-Christoph, P. (1998). Empirically supported individual and group psychological treatments for adult mental disorders. *Journal of Consulting and Clinical Psychology, 66*, 37–52.

DiGiuseppe, R. A., Miller, N. J., & Trexler, L. D. (1977). A review of rational-emotive psychotherapy outcome studies. *Counseling Psychologist, 7,* 64-72.

Diner, M. J., Hilsenroth, M. J., & Weinberger, J. (2007). Therapist affect focus and patient outcomes in psychodynamic psychotherapy: A meta-analysis. *American Journal of Psychiatry, 164*, 936-941.

DuPont, R. L., Rice, D. P., Miller, L. S., Shiraki, S. S., Rowland, C. R., & Harwood, H. J. (1996). Economic costs of anxiety disorders. *Anxiety*, *2*(4), 167-172.

Eells, T. D. (1997). Psychotherapy case formulation: History and current status. In T. D. Eells (Ed.), *Handbook of psychotherapy case formulation* (pp. 1–25). New York: Guilford Press.

Eells, T. D., Kendjelic, E. M., & Lucas, C. P. (1998). What's in a case formulation?: development and use of a content coding manual. *The Journal of psychotherapy practice and research*, *7*(2), 144.

Eells, T.D., Lombart, K.G., Kendjelic, E.M., Turner, L.C., & Lucas, C.P. (2005). The quality of psychotherapy case formulations: A comparison of expert, experienced, and novice cognitive-behavioral and psychodynamic therapists. *Journal of Consulting and Clinical Psychology, 73*, 579-589.

Engels, G.I., Garnefski, N., & Diekstra, R.F.W. (1993). Efficacy of rational-emotive therapy: A quantitative analysis. *Journal of Consulting and Clinical Psychology, 61*, 1083–1090.

Epstein, R.M. & Hundert, E.M. (2002) Defining and assessing professional competence. *Journal of the American Medical Association, 287*, 226–235.

Escobar, J. I., Gara, M. A., Diaz-Martinez, A. M., Interian, A., Warman, M., Allen, L. A., ... & Rodgers, D. (2007). Effectiveness of a time-limited cognitive behavior therapy–type intervention among primary care patients with medically unexplained symptoms. *The Annals of Family Medicine*, *5*(4), 328-335.

Eysenck, H.J. (1952) The effects of psychotherapy: An evaluation. *Journal of Consulting Psychology, 16*, 319-324.

Fabrikant, B. (1984). Psychotherapy. In R. J. Corsini (Ed.), *Encyclopedia of psychology, 3*, 184-186.

Falender, C.A., & Shafranske, E.P. (2004). *Clinical supervision: A competency-based approach*. Washington, DC: American Psychological Association.

Fergusson, D. M., John Horwood, L., & Ridder, E. M. (2005). Show me the child at seven: the consequences of conduct problems in childhood for psychosocial functioning in adulthood. *Journal of child psychology and psychiatry*, *46*(8), 837-849.

Ferrari, A. J., Charlson, F. J., Norman, R. E., Patten, S. B., Freedman, G., Murray, C. J., ... & Whiteford, H. A. (2013). Burden of depressive disorders by country, sex, age, and year: findings from the global burden of disease study 2010. P*LoS medicine*, *10*(11), e1001547.

Ferrari, A. J., Somerville, A. J., Baxter, A. J., Norman, R., Patten, S. B., Vos, T., & Whiteford, H. A. (2013). Global variation in the prevalence and incidence of major depressive disorder: a systematic review of the epidemiological literature. *Psychological medicine*, *43*(03), 471-481.

Fishers, J., Morrow, M., Nhu, N.N., et al. (2004). Prevalence, nature, severity, and correlates of postpartum depressive symptoms in Vietnam. *International Journal of Obstetrics and Gynaecology, 111*, 1353-1360.

Fonagy, P. (2010). The changing shape of clinical practice: Drive by science or pragmatics? *Psychoanalytic Psychotherapy, 24*, 22-43.

Fonagy, P. & Kurtz, A. (2002). Disturbance of conduct. In P. Fonagy, M. Target, D. Cottrell, J. Phillips, & Z. Kurtz (Eds.). *What works for whom: A critical review of treatments for children and adolescents*, (pp.106–192). New York: Guilford Press

Fonagy, P., Roth, A., & Higgitt, A. (2005). Psychodynamic psychotherapies: evidence-based practice and clinical wisdom. *Bulletin of the Menninger. Clinic, **69**,* 1–58.

Fonagy, P. & Target, M. (1996). Predictors of outcomes in child psychoanalysis: A retrospective study of 763 cases at the Anna Freud Centre. *Journal of the American Psychoanalytic Association, 44*, 27-77.

Fordyce, W. E. (1976). *Behavioral methods for chronic pain and illness* (Vol. 1). St. Louis: Mosby.

Forgatch, M. S., & Patterson, G. R. (2010). Parent Management Training—Oregon Model: An intervention for antisocial behavior in children and adolescents. In Weisz, J. R., & Kazdin, A. E. (Eds), *Evidence-based psychotherapies for children and adolescents* (2nd Ed.), (pp. 159-178). New York: NY: Guildford Press.

Forness, S.R. (2005). The pursuit of evidence-based practice in special education for children with emotional and behavioral disorders. *Behavioral Disorders, 30,* 311-330.

Frank, J. D. (1971). Therapeutic factors in psychotherapy. *American Journal of psychotherapy, 25(3),* 350-361.

Fraser, J.S., & Solovey, A.D. (2007). *Second-order change in psychotherapy.* Washington, D.C.: American Psychological Association.

Friedman, R.C., Garrison, W.B., Bucci, W., & Gorman, B.S. (2005). Factors affecting change in private psychotherapy patients of senior psychoanalysts: An effectiveness study. *The Journal of the American Academy of Psychoanalysis and Dynamic Psychiatry, 33,* 583-610.

Gabriele, A. (2006). Social services policies in a developing market economy oriented towards socialism: The case of health system reforms in Vietnam. *Review of International Political Economy, 13,* 258–289.

Gaffan, E.A., Tsaousis, I., & Kemp-Wheeler, S.M. (1995). Researcher allegiance and meta-analysis: The case of cognitive therapy for depression. *Journal of Consulting and Clinical Psychology, 63*, 966–980.

Galatzer, R.M., Bachrach, H., Skolnikoff, A., & Waldron, S. (2000). *Does psychoanalysis work?* New Haven: Yale University Press.

Gonzalez, J.E., Nelson, J.R., Gutkin, T.B., Saunders, A., Galloway, A., & Shwery, C.S., (2004) Rational Emotive Therapy with children and adolescents: a meta-analysis. *Journal of Emotional and Behavioural Disorders*, *12*, 222-235.

Gossette, R. & O'Brien, R.M. (1992). The efficacy of rational-emotive therapy in adults: Clinical fact or psychometric artifact? *Journal of Behavior Therapy and Experimental Psychiatry, 23*, 9–24.

Gossette, R.L., & O'Brien, R.M. (1993). Efficacy of rational emotive therapy (RET) with children: a critical re-appraisal. *Journal of Behavior Therapy & Experimental Psychiatry, 24*, 15-25.

Gottdiener, W.H. (2006). Individual psychodynamic psychotherapy of schizophrenia: Empirical evidence for the practicing clinician. *Psychoanalytic Psychology, 23,* 583-589.

Grawe, K. Donati, R., & Bernauer, F. (1998). *Psychotherapy in transition*. Seattle: Hogrefe & Huber.

Greenberg, P. E., Kessler, R. C., Birnbaum, H. G., Leong, S. A., Lowe, S. W., Berglund, P. A., et al. (2003).

The economic burden of depression in the United States: How did it change between 1990 and 2000? *Journal of Clinical Psychiatry, 64*, 1465-1475.

Greenberg, P. E., Sisitsky, T., Kessler, R. C., Finkelstein, S. N., Berndt, E. R., Davidson, J. R., Ballenger, J. C., & Fyer, A. J. (1999). The economic burden of anxiety disorders in the 1990s. *Journal of Clinical Psychiatry, 60*(7), 427-435.

Grencavage, L. M., & Norcross, J. C. (1990). Where are the commonalities among the therapeutic common factors?. *Professional Psychology: Research and Practice*, *21*(5), 372.

Gresham, F.M., Cook, C. R., Crews, S.D., & Kern, L. (2004). Social skills training for children and youth with emotional and behavioral disorders: Validity considerations and future directions. *Behavioral Disorders, 30*, 32-46.

Gresham, F. M., Sugai, G., & Horner, R. H. (2001). Interpreting outcomes of social skills training for students with high-incidence disabilities. *Exceptional Children*, *67*(3), 331-344.

Griffin, A., & Christie, D. (2008). Taking the psycho out of psychosomatic: using systemic approaches in a paediatric setting for the treatment of adolescents with unexplained physical symptoms. *Clinical child psychology and psychiatry*,*13*(4), 531-542.

Gureje, O., Simon, G. E., Ustun, T. B., & Goldberg, D. P. (1997). Somatization in cross-cultural perspective: a World Health Organization study in primary care. *American Journal of Psychiatry, 154*(7), 989-995.

Haaga, D.A.F., & Davison, G.C. (1989). Slow progress in rational-emotive therapy outcome research: Etiology and treatment. *Cognitive Therapy and Research, 13,* 493-508.

Haaga, D.A.F., & Davison, G.C. (1991). Disappearing differences do not always reflect healthy integration: An analysis of cognitive therapy and rational-emotive therapy. *Journal of Psychotherapy Integration, 1*, 287-303.

Hammond, R.T., & Nichols, M.P. (2008). How collaborative is structural family therapy? *The Family Journal: Counseling and Therapy for Couples and Families*, 16, 118–124.

Hersen, M., & Rosqvist, J. *(2005). Encyclopedia of behavior modification and cognitive behavior therapy. Vol. 1. Adult clinical applications.* Thousand Oaks, CA: Sage Publications.

Heymann-Mönnikes, I., Arnold, R., Florin, I., Herda, C., Melfsen, S., & Mönnikes, H. (2000). The combination of medical treatment plus multicomponent behavioral therapy is superior to medical treatment alone in the therapy of irritable bowel syndrome. *The American journal of gastroenterology*,*95*(4), 981-994.

Hill, C. E., & O'Grady, K. E. (1985). List of therapist intentions illustrated in a case study and with therapists of varying theoretical orientations. *Journal of Counseling Psychology, 32*, 3– 22.

Hollon, S.D., DeRubeis, R.J., Evans, M.D., Wiemer, M.J., Garvey, M.J., Grove, W.M. & Tuason, V.B. (1992). Cognitive therapy and pharmacotherapy for depression: Singly and in combination. *Archives of General Psychiatry, 49*, 774-781.

Hollon, S. D., & Ponniah, K. (2010). A review of empirically supported psychological therapies for mood disorders in adults. *Depression and anxiety, 27*(10), 891-932.

Hollon, S. D., Thase, M. E., & Markowitz, J. C. (2002). Treatment and prevention of depression. *Psychological Science in the Public Interest, 3*(2), 39-77.

Hope, D. A., Heimberg, R. G., & Turk, C. L. (2010). *Managing social anxiety: A cognitive-behavioral therapy approach: Therapist guide*. New York, NY: Oxford University Press.

Hong, K.M., Yamazaki, K., Banaag, C.G., & Yasong, D. (2004) Systems of care in Asia. In H. Remschmidt, M. Belfer M., & I. Goodyer (Eds.), *Facilitating pathways: Care, treatment and prevention in child and adolescent mental health* (pp. 58–70). Berlin: Springer.

Hudley, C., & Graham, S. (1993). An attributional intervention to reduce peer-directed aggression among African-American boys. *Child Development, 64*, 124–138.

Ibeziako, P. I., & DeMaso, D. R. (2012). The Somatoform Disorders. In W.M. Klykylo, & J. Kay, (Eds.), *Clinical Child Psychiatry, (3rd Ed),* (pp. 458-474). Hoboken, NJ: Wiley-Blackwell.

Institute of Medicine. (2001). *Crossing the quality chasm: A new health system for the 21st century*. Washington, D.C.: National Academies Press.

Jackson, S.W. (1999). Care of the psyche: A history of psychosocial healing. New Haven, CT: Yale University Press.

Jacobson, N. S., Dobson, K. S., Truax, P. A., Addis, M. E., Koerner, K. Gollan, J. K., et al. (1996). A component analysis of cognitive-behavioral treatment for depression. *Journal of Consulting and Clinical Psychology, 64*, 295-304.

Jorm, A. F., Christensen, H., Griffiths, K. M., Parslow, R. A., Rodgers, B., & Blewitt, K. A. (2004). Effectiveness of complementary and self-help treatments for anxiety disorders. *Medical Journal of Australia*, *181*(7), 29-46.

Kanter, J. W., Bowe, W. M., Baruch, D. E., & Busch, A. M. (2011). Behavioral Activation for Depression. *Treatment of Depression in Adolescents and Adults: Clinician's Guide to Evidence-Based Practice, 4*, 113.

Kazdin, A.E. (1991). Effectiveness of psychotherapy with children and adolescents. *Journal of Consulting and Clinical Psychology, 39*, 785-798.

Kazdin, A. E. (1997). Parent management training: Evidence, outcomes, and issues. *Journal of the American Academy of Child & Adolescent Psychiatry,36*(10), 1349-1356.

Kazdin, A. E. (2010). Problem-solving skills training and parent management training for conduct disorder. In A. E. Kazdin, & J. R. Weisz, (Eds.). *Evidence-based psychotherapies for children and adolescents* (2nd Ed.), (pp. 211-226). New York: Guildford Press.

Kazdin, A. E. (2012). *Behavior modification in applied settings* (7th ed.). Belmont, CA: Waveland Press.

Kerr, D. C., Lopez, N. L., Olson, S. L., & Sameroff, A. J. (2004). Parental discipline and externalizing behavior problems in early childhood: The roles of moral regulation and child gender. *Journal of abnormal child psychology*, *32*(4), 369-383.

Kessler, R. C., & Greenberg, P. E. (2002). The economic burden of anxiety and stress disorders. In K.L. Davis, D. Charney, J.T. Coyle, & C. Nemeroff (Eds.), *Neuropsychopharmacology: The fifth generation of progress* (pp. 981-992). Baltimore, MD: Lippincott Williams & Wilkins

Kessler, R. C., Petukhova, M., Sampson, N. A., Zaslavsky, A. M., & Wittchen, H. U. (2012). Twelve-month and lifetime prevalence and lifetime morbid risk of anxiety and mood disorders in the United States. *International journal of methods in psychiatric research, 21*(3), 169-184.

Kessler, R. C., & Walters, E. E. (1998). Epidemiology of DSM-III-R major depression and minor depression among adolescents and young adults in the national comorbidity survey. *Depression and anxiety, 7*(1), 3-14.

Khan, A. A., Khan, A., Harezlak, J., Tu, W., & Kroenke, K. (2003). Somatic symptoms in primary care: etiology and outcome. *Psychosomatics, 44*(6), 471-478.

King, M., Davidson, O., Taylor, F., Haines, A., Sharp, D., & Turner, R. (2002). Effectiveness of teaching general practitioners skills in brief cognitive behaviour therapy to treat patients with depression: randomised controlled trial. *Bmj*,*324*(7343), 947.

Klosko, J. S., & Sanderson, W. C. (1999). *Cognitive-behavioral treatment of depression*. Lanham, MD: Jason Aronson.

Knight, R.P. (1941). Evaluation of the results of psychoanalytic therapy. *American Journal of Psychiatry, 98*, 434.

Kozlowska, K., Rose, D., Khan, R., Kram, S., Lane, L., & Collins, J. (2008). A conceptual model and practice framework for managing chronic pain in children and adolescents. *Harvard review of psychiatry, 16*(2), 136-150.

Krueger, R. F., Markon, K. E., Patrick, C. J., & Iacono, W. G. (2005). Externalizing psychopathology in adulthood: A dimensional-spectrum conceptualization and its implications for DSM-V. *Journal of abnormal psychology, 114*(4), 537.

Lambert, M. J. and Bergin, A. E. (1994). 'The Effectiveness of Psychotherapy'. In A. E. Bergin and S. L. Garfield (Eds.), *Handbook of Psychotherapy and Behavior Change* (143-189). New York: John Wiley and Sons.

Leichsenring, F. (2001). Comparative effects of short-term psychodynamic psychotherapy and cognitive-behavioral therapy in depression: A meta-analytic approach. *Clinical Psychology Review, 21,* 401-419.

Levy, K.N., Clarkin, J.F. Yeomans, F.E. Scott, L.N., Wasserman, R.H., & Kernberg, O.F. (2006) The mechanisms of change in the treatment of borderline personality with transference-focused psychotherapy. *Journal of Clinical Psychology, 62,* 481-501.

Levy, R. L., Jones, K. R., Whitehead, W. E., Feld, S. I., Talley, N. J., & Corey, L. A. (2001). Irritable bowel syndrome in twins: heredity and social learning both contribute to etiology. *Gastroenterology, 121*(4), 799-804.

Lewinsohn, P. M. (1974). A behavioral approach to depression. In R.J. Friedman & M.M. Katz (Eds), *The psychology of depression: Contemporary theory and research* (pp. 157-185). Washington, DC: Winston-Wiley.

Lewinsohn, P. M., Biglan, A., & Zeiss, A.S. (1976). Behavioral treatment of depression. In P. O. Davidson (Ed.) *The behavioral management of anxiety, depression, and pain*. (pp.91-146). New York: Brunner/Mazel.

Lewinsohn, P. M., & Clarke, G. N. (1999). Psychosocial treatments for adolescent depression. *Clinical Psychology Review, 19,* 329 – 342.

Lewinsohn, P. M., & Graf, M. (1973). Pleasant activities and depression. *Journal of Consulting and Clinical Psychology, 41,* 261-268.

Lewinsohn, P. M., & Lebit, J. (1972). Pleasant events, activity scheduling, and depressions. *Journal of Abnormal Psychology, 79,* 291-295.

Lochman, J. E. (1992). Cognitive-behavioral interventions with aggressive boys: Three-year follow-up and preventive effects. *Journal of Consulting and Clinical Psychology, 60,*426–432.

Lochman, J. E., Boxmeyer, C. L., Powell, N. P., Barry, T. D., & Pardini, D. A. (2012). Anger Control Training for Aggressive Youths. In Weisz, J. R., & Kazdin, A. E. (Eds), *Evidence-based psychotherapies for children and adolescents* (2nd Ed.), (pp. 227-242). New York: NY: Guildford Press.

Loeber, R. (1990). Development and risk factors of juvenile antisocial behavior and delinquency. *Clinical Psychology Review, 10*(1), 1-41.

Loeber, R. (1991). Antisocial behavior: More enduring than changeable? *Journal of the American Academy of Child & Adolescent Psychiatry, 30*(3), 393-397.

Loeber, R., Burke, J. D., Lahey, B. B., Winters, A., & Zera, M. (2000). Oppositional defiant and conduct disorder: a review of the past 10 years, part I. *Journal of the American Academy of Child & Adolescent Psychiatry*, *39*(12), 1468-1484.

Loeber, R., & Hay, D. (1997). Key issues in the development of aggression and violence from childhood to early adulthood. *Annual review of psychology*, *48*(1), 371-410.

Luborsky, L., Singer, B., & Luborsky, L. (1975). Comparative studies of psychotherapies: Is it true that "everyone has won and all must have prizes"?, *Archives of General Psychiatry, 32*, 995–1008.

Lynam, D. R., Loeber, R., & Stouthamer-Loeber, M. (2008). The stability of psychopathy from adolescence into adulthood the search for moderators. *Criminal Justice and Behavior*, *35*(2), 228-243.

Lynch, P. M., & Zamble, E. (1989). A controlled behavioral treatment study of irritable bowel syndrome. *Behavior Therapy, 20*(4), 509-523.

Lyons, L. C., & Woods, P. J. (1991). The efficacy of rational-emotive therapy: A quantitative review of the outcome research. *Clinical Psychology Review, 11*, 357-369.

Maag, J. W. (2005). Social skills training for youth with emotional and behavioral disorders and learning disabilities: Problems, conclusions, and suggestions. *Exceptionality, 13*, 155-172.

Maione, P. V., & Chenail, R. J. (1999). Qualitative inquiry in psychotherapy: Research on the common factors. In M.A. Hubble, B.L. Duncan & S.D. Miller (Eds.), *The heart and soul of change: What works in therapy* (pp. 1-19). Washington, D.C.: American Psychological Association.

Martell, C. R., Addis, M. E., & Jacobson, N. S. (2001). *Depression in Context: Strategies for Guided Action*. New York: Norton & Co.

Martin, D.J., Garske, J.P., Davis, M.K. (2000). Relation of the therapeutic alliance with outcome and other variables: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, *68(3)*, 438-450.

Mathers, C., Fat, D.M, Boerma, J.T. (2008). Global Burden of Disease 2004 Update. World Health Organization Press: Geneva, Switzerland.

Maughan, B., & Rutter, M. (1998). Continuities and discontinuities in antisocial behavior from childhood to adult life. In *Advances in clinical child psychology*(pp. 1-47). Springer US.

McGovern, T., & Silverman, M. (1984). A review of outcome studies on rational emotive therapy. *Journal of Rational-Emotive Therapy, 2*, 7-18.

McMahon, R. J., & Forehand, R. L. (2005). *Helping the Noncompliant Child: Family-Based Treatment for Oppositional Behavior*, (2nd ed). New York, NY: Guilford Press.

McMahon, R. J., Wells, K. C., & Kotler, J. S. (2005). Conduct problems. In E. J. Mash & R. A. Barkley (Eds.), *Treatment of childhood disorders: Third edition* (pp. 137–268). New York: Guilford Press.

Meredith, P., Ownsworth, T., & Strong, J. (2008). A review of the evidence linking adult attachment theory and chronic pain: Presenting a conceptual model. *Clinical psychology review*, *28*(3), 407-429.

Meredith, P. J., Strong, J., & Feeney, J. A. (2006). The relationship of adult attachment to emotion, catastrophizing, control, threshold and tolerance, in experimentally-induced pain. *Pain*, *120*(1), 44-52.

Meredith, P. J., Strong, J., & Feeney, J. A. (2007). Adult attachment variables predict depression before and after treatment for chronic pain. *European Journal of Pain*, *11*(2), 164-170.

Meshvara, D. (2002). Mental health and mental health care in Asia. *World Psychiatry, 1*, 118-120.

Michael, K. D., & Crowley, S. L. (2002). How effective are treatments for child and adolescent depression: A meta-analytic review. *Clinical Psychology Review, 22*, 247–269.

Mikulincer, M., & Florian, V. (1998). The relationship between adult attachment styles and emotional and cognitive reactions to stressful events. In Simpson, J. A., & Rholes, W. S. (Eds), *Attachment theory and close relationships*, (pp. 143-165). New York: NY: Guildford Press.

Ministry of Health (MOH). (2005). Survey assessment of vietnamese youth. Vietnam Ministry of Health, Hanoi.

Ministry of Health Vietnam. (2000). Health Statistics Yearbook. Hanoi: Statistics, Information-Planning and Finance Department.

Ministry of Health Vietnam. (2005). Health Statistics Yearbook. Hanoi: Statistics, Information-Planning and Finance Department. Moffitt, T.E. (2005). Genetic and environmental influences on antisocial behaviors: evidence from behavioral–genetic research. *Advances in genetics*,*55*, 41-104.

Moscovitch, D. A., Antony, M. M., & Swinson, R. P. (2009). Exposure-based treatments for anxiety disorders: Theory and process. In M. M. Antony, & M. B. Stein, (Eds.), *Oxford handbook of anxiety and related disorders* (pp. 461-475). New York: NY: Oxford University Press.

Mowrer, O. H. (1939). A stimulus-response analysis of anxiety and its role as a reinforcing agent. *Psychological Review*, *46*(6), 553.

Mowrer, O. H. (1947). On the dual nature of learning—a re-interpretation of" conditioning" and" problem-solving. *"Harvard Educational Review*, *17*, 102-148.

Mowrer, O. H. (1960). *Learning theory and behavior*. Hoboken, NJ: Wiley & Sons.

Murray, C.J., & Lopez, A.D. (1996). *The Global Burden of Disease: A Comprehensive Assessment of Mortality and Disability from Diseases, Injuries, and Risk factors in 1990 and Projected to 2020*, Harvard University Press, Cambridge, Massachusetts.

National Institute for Health and Clinical Excellence. (2014). *Anxiety disorders*. Retrieved from http://www.nice.org.uk/Guidance/qs53 on July 21, 2014.

National Institute of Mental Health. (2014). *Anxiety Disorders*. Retrieved from http://www.nimh.nih.gov/health/publications/anxiety-disorders/index.shtml?ct=39988 on July 21, 2014.

Neff, D. F., & Blanchard, E. B. (1987). A multi-component treatment for irritable bowel syndrome. *Behavior Therapy*, *18*(1), 70-83.

Niemi, M., Thanh, H.T., Tuan, T. & Falkenberg, T. (2010). Mental health priorities in Vietnam: a mixed-methods analysis. *BMC health services research, 10*(1), 257

Newman,C.F., & Beck, A.T. (2009). Cognitive therapy. In R. M. Kaplan & B. J. Saddock (Eds.), *Comprehensive textbook of psychiatry (9th ed.,* pp. 2857–2873). Baltimore, MD: Lippincott, Williams, & Wilkins.

Nezu, A. M., & Maguth Nezu, C. (2005). Comments on "evidence-based behavioral medicine: what is it and how do we achieve it?": the interventionist does not always equal the intervention—the role of therapist competence. *Annals of Behavioral Medicine*, *29*(1), 80.

Nnamdi, P. & Jones, E.E. (1998). The talking cure revisited: Content analysis of a two-year psychodynamic psychotherapy. *Psychotherapy Research, 8*, 171-189.

Norcross, J. C. (2002). Empirically supported therapy relationships. In J. C. Norcross (Ed.), *Psychotherapy relationships that work: Therapist contributions and responsiveness to patients* (pp. 3–16). London: Oxford University Press.

Norcross, J. C. (2010). The therapeutic relationship. In B. L. Duncan, S. D. Miller, B. E. Wampold, & M. A. Hubble (Eds.), *The heart and soul of change: Delivering what works in therapy* (2nd ed.) (pp.113-141). Washington, D.C.: American Psychological Association.

Norcross, J. C. (Ed.). (2011). *Psychotherapy relationships that work* (2nd ed.). New York, NY: Oxford University Press.

Norcross, J. C., Karpiak, C. P., & Santoro, S. O. (2005). Clinical psychologists across the years: the division of clinical psychology from 1960 to 2003. *Journal of Clinical Psychology*, *12*, 1467–83.

Norcross, J. C., Strausser, D. J. & Missar, C. D. (1988). The processes and outcomes of psychotherapists' personal treatment experiences. *Psychotherapy, 25*, 36-43.

Norcross, J. C., & Wampold, B. E. (2011). Evidence-based therapy relationships: Research conclusions and clinical practices. *Psychotherapy, 48(1),* 98-102.

National Psychiatric Hospital No 1 (NPHNo1). (2002). National epidemiology mental disorder survey by National Psychiatric Hospital No 1 – unpublished report submitted to WHO in Vietnam.

O'Donohue, W., Buchanan, J. A., & Fisher, J. E. (2000). Characteristics of empirically supported treatments. *Journal of Psychotherapy Practice Research, 9*, 69 –74.

Olatunji, B. O., Cisler, J. M., & Tolin, D. F. (2007). Quality of life in the anxiety disorders: a meta-analytic review. *Clinical psychology review*, *27*(5), 572-581.

Olfson, M., & Marcus, S.C. (2010). National trends in outpatient psychotherapy. American *Journal of Psychiatry, 167*, 1456-1463.

Orlinsky, D., Ambühl, H., Rønnestad, M., Davis, J., Gerin, P., Davis, M., ... & SPR Collaborative Research Network. (1999). Development of psychotherapists: Concepts, questions, and methods of a collaborative international study. *Psychotherapy Research*, *9*(2), 127-153.

Osnos, E. (2011, January 10). Letter from China, "Meet Dr. Freud." *The New Yorker*, p. 54.

Patterson, G. R. (1982). *Coercive family process* (Vol. 3). Castalia Publishing Company.

Phillips, M.R., Zhang, J., Shi, Q., Song, Z., Ding, Z., Pang, S., et al. (2009). Prevalence, treatment, and associated disability of mental disorders in four provinces in China during 2001-05: an epidemiological survey. The *Lancet, 373*, 2041– 2053.Prince, R.H. (1980). Variations in psychotherapeutic procedures. In H. C. Triandis & J. G. Draguns (Eds.), *Handbook of cross-cultural psychology. Volume 6. Psychopathology* (pp. 291-350). Boston: Allyn & Bacon.

Plomin, R. (2005). Genetics and developmental psychology. *Merrill-Palmer Quarterly, 50*(3), 341-352.

Prieto, L. R., & Scheel, K. R. (2002). Using case documentation to strengthen counselor trainees' case conceptualization skills. *Journal of Counseling & Development*, *80*(1), 11-21.

Prins, J. B., Bleijenberg, G., Bazelmans, E., Elving, L. D., de Boo, T. M., Severens, J. L., van der Wilt, G. J., Spinhoven, P., & Van der Meer, J. W. (2001). Cognitive behaviour therapy for chronic fatigue syndrome: a multicentre randomised controlled trial. *The Lancet*, *357*(9259), 841-847.

Prochaska, J. O., & Norcross, J. C. (2010). Systems of psychotherapy: A transtheoretical analysis. Belmont, CA: Brooks/Cole.

Qian, M., Smith, C. W., Chen, Z., & Xia, G., (2002). Psychotherapy in China: A review of its history and contemporary directions. *International Journal of Mental Health, 30*, 49-68.

Quinn, M. M., Kavale, K. A., Mathur, S. R., Rutherford, R. B., & Forness, S. R. (1999). A meta-analysis of social skill interventions for students with emotional or behavioral disorders. *Journal of Emotional and Behavioral Disorders*, *7*, 54-64.

Rachman, S.J. (2004). Fear of contamination. *Behaviour Research and Therapy*, *42*, 1227-1255.

Reaves, R. (2004, April). *The history of licensure of psychologists in the United States and Canada*. Paper presented at the Third International Congress on Licensure, Certification, and Credentialing of Psychologists, Montreal, Quebec.

Rehm, L. P., & DeMers, S. T. (2006). Licensure. *Clinical Psychology: Science & Practice*, *13*, 249–25.

Reicherts, M. (1998). Gesprachspsychotherapie. In U. Baumann, & M. Perrez (Eds.), *Lehrbuch klinische psychologie* (2nd ed.). Bern: Hans Huber.

Reinecke, M. A., Ryan, N., & DuBois, D. L. (1998). Meta-analysis of CBT for depression in adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry, 37,* 1006-1007.

Rice, D. P., & Miller, L. S. (1997). Health economics and cost implications of anxiety and other mental disorders in the United States. *The British journal of psychiatry. Supplement,* (34), 4-9.

Rief, W., Martin, A., Rauh, E., Zech, T., & Bender, A. (2006). Evaluation of general practitioners' training: how to manage patients with unexplained physical symptoms. *Psychosomatics, 47*(4), 304-311.

Rivera, S. (2012). Schools. In J. A. Cohen, A. P. Mannarino, & E. Deblinger (Eds), *Trauma-focused CBT for children and adolescents: Treatment application.*

Rodolfa, E., Bent, R., Eisman, E., Nelson, P., Rehm, L., & Ritchie, P. (2005). A Cube Model for Competency Development: Implications for Psychology Educators and Regulators. *Professional Psychology: Research and Practice, 36*(4), 347. New York, NY: Guildford Press.

Rogers, C. R. (1957). The necessary and sufficient conditions of therapeutic personality change. *Journal of counselling psychology,* 21(2), 95-103.

Rogers, C. R. (1959). A theory of therapy, personality and interpersonal relationships, as developed in the client-centered framework. In S. Koch (ed.), *Psychology: A study of science* (pp. 184-256). New York, NY: McGraw Hill.

Rosenzweig, S. (1936). Some implicit common factors in diverse methods of psychotherapy. *American Journal of Orthopsychiatry, 6*(3), 412.

Rost, K., Kashner, T. M., & Smith Jr, G. R. (1994). Effectiveness of psychiatric intervention with somatization disorder patients: improved outcomes at reduced costs. *General Hospital Psychiatry*, *16*(6), 381-387.

Roth, A. & Fouagy, P. (1996). *What works for whom? A critical review of psychotherapy research.* New York: Guilford Press.

Rutter, M., Macdonald, H., Couteur, A., Harrington, R., Bolton, P., & Bailey, A. (1990). Genetic factors in child psychiatric disorders—II. Empirical findings. *Journal of Child Psychology and Psychiatry, 31*(1), 39-83.

Schmitz, S., Fulker, D. W., & Mrazek, D. A. (1995). Problem behavior in early and middle childhood: An initial behavior genetic analysis. *Journal of Child Psychology and Psychiatry, 36*(8), 1443-1458.

Shadish, W.R., Matt, G.E., Navarro, A.M., Siegle, Gl., Crits-Cristoph, P., et al., (1997). Evidence that therapy works in clinically representative conditions. *Journal of Consulting and Clinical Psychology, 65*, 355-365.

Shakow, D., & Rapaport, D. (1964). *The influence of Freud on American psychology*. New York: International Universities Press.

Sharf, J., Primavera, L. H., & Diener, M. J. (2010). Dropout and therapeutic alliance: A meta-analysis of adult individual psychotherapy. *Psychotherapy: Theory, Research, Practice, Training*, *47*(4), 637-645.

Sharpe, M., Hawton, K., Simkin, S., Surawy, C., Hackmann, A., Klimes, I., Peto, T., Warrell, D., & Seagroatt, V. (1996). Cognitive behaviour therapy for the chronic fatigue syndrome: a randomised controlled trial. *British Medical Journal*, *312*(7022), 22-26.

Shaw, D. S., Gilliom, M., Ingoldsby, E. M., & Nagin, D. S. (2003). Trajectories leading to school-age conduct problems. *Developmental psychology*, *39*(2), 189.

Shaw, R. J., & DeMaso, D. R. (2006). Somatoform disorders. In R. J. Shaw, & D. R. DeMaso, (Eds.), *Clinical Manual of Pediatric Psychosomatic Medicine* (pp. 143-168). Washington, DC: American Psychiatric Publishing Inc.

Shapiro, D. A., & Shapiro, D. (1982). Meta-analysis of comparative therapy outcome studies: A replication and refinement. *Psychological Bulletin, 92*, 581-604.

Silber, T. J. (2011). Somatization disorders: diagnosis, treatment, and prognosis. *Pediatrics in Review*, *32*(2), 56-64.

Smith, G. R., Monson, R. A., & Ray, D. C. (1986a). Patients with multiple unexplained symptoms: their characteristics, functional health, and health care utilization. *Archives of internal Medicine*, *146*(1), 69-72.

Smith, G. R., Monson, R. A., & Ray, D. C. (1986b). Psychiatric consultation letter in somatization disorder. *New England Journal of Medicine, 314*, 1407-1413.

Smith, M.L, & Glass, G.V. (1977). Meta-analysis of psychotherapy outcome studies. *American Psychologist, 32*, 752-760.

Smith, M.L., Glass, G.V., & Miller, T.I. (1980). *Benefits of psychotherapy*. Baltimore, MD: Johns Hopkins University Press.

Smith, S. W., & Travis, P. C. (2001). Conducting social competence research considering conceptual frameworks. Behavioral Disorders, 26, 360-369.

Spiegel, D. (ed). (1999). Efficacy and Cost-Effectiveness of Psychotherapy. Washington, D.C., American Psychiatric Press.

Steketee, G. (1993). Social support and treatment outcome of obsessive compulsive disorder at 9-month follow-up. *Behavioural Psychotherapy, 21*, 81-95.

Stern, L.M. (1998). *The Vietnamese Communist Party's agenda for reform: A study of the eighth national party congress*. Jefferson, N.C.: McFarlane.

Sumathipala, A., Hewege, S., Hanwella, R., & Mann, A. H. (2000). Randomized controlled trial of cognitive behaviour therapy for repeated consultations for medically unexplained complaints: a feasibility study in Sri Lanka. *Psychological medicine, 30*(04), 747-757.

Thieme, K., Gromnica-Ihle, E., & Flor, H. (2003). Operant behavioral treatment of fibromyalgia: a controlled study. *Arthritis Care & Research, 49*(3), 314-320.

Thornton, T. N., Craft, C. A., Dahlberg, L. L., Lynch, B. S., & Baer, K. (2000). *Best Practices of Youth Violence Prevention: A Sourcebook for Community Action*. Atlanta: Centers for Disease Control and Prevention.

Timulak, L. (2008). Research in Psychotherapy and Counselling. London: Sage.

Tran, T., Pham, T.L, Harpham, T., Nguyen, T.H., Tran, D.T., Tod, B., ... Nguyen, T.V.H. (2003). *Young Lives preliminary country report: Vietnam*. London, England: Southbank University.

Tuan, N.A., Le, Q.C., Allebeck, P., et al., (200). Knowledge attitudes and practice toward epilepsy among adults in Bavi, Vietnam: first report from the population-based EPIBAVI study. *Epilepsia, 48(10),* 1914-1919.

Van Dulmen, A. M., Fennis, J. F. M., & Bleijenberg, G. (1996). Cognitive-behavioral group therapy for irritable bowel syndrome: effects and long-term follow-up. *Psychosomatic Medicine, 58*(5), 508-514.

Van Etten, M. L., & Taylor, S. (1998). Comparative efficacy of treatments for post-traumatic stress disorder: A metaanalysis. *Clinical Psychology and Psychotherapy, 5*, 126–144.

Vandenhos, G.R., Cummings, N.A., & Deleon, P.H. (1992). A Century of psychotherapy: Economic and environmental influences. In D.K Freidheim (Ed.), *History of psychotherapy. A century of change* (pp. 65-102). Washington, D.C.: American Psychological Association.

Vietnam Health Report 2006. (2006). Vietnam Health Report 2006 – Joint Annual Health Review. Retrieved from http://jahr.org.vn/downloads/Nghien%20cuu/Khac/Vietnam%20National%20Health%20Report%202006.pdf on August 26, 2014.

Vuong, D.A., Ginneken, E.V., Morris, J., Ha, S.T., & Busse, R. (2011). Mental health in Vietnam: Burden of disease and availability of services. *Asian Journal of Psychiatry, 4*(1), 65-70.

Wampold, B.E. (2001). *The great psychotherapy debate: Models, methods, and findings.* Mahwah: NJ: Erlbaum.

Wan, W. (2010, October 11). Freud coming into fashion in China. *The Washington Post.*

Webster-Stratton, C., & Hammond, M. (1997). Treating children with early-onset conduct problems: A comparison of child and parent training interventions. *Journal of consulting and clinical psychology, 65*(1), 93.

Weiss, B. (2007). New light: mental health in Vietnam focus of new program. Vanderbilt University, Peabody College, Available from: http://peabody.vanderbilt.edu/x7564.xml

Weissman, M., Markowitz, J., & Kerman, G. *Comprehensive Guide to Interpersonal Psychotherapy*. 2000: New York: Basic Books.

Weissman, M.M., Verdili, H., Gameroff, M.J., Bledsoe, S.E., Betts, K., Mufson, L., Fitterling, H., Wickramaratne, P. (2006). National survey of psychotherapy training in psychiatry, psychology, and social work. *Archives of General Psychiatry, 63*, 925–934.

Weisz, J.R., Donenberg, G.R. Hans, S.S. & Weiss, B. (1995). Bridging the gap between laboratory and clinic in child and adolescent psychotherapy. *Journal of Consulting and Clinical Psychotherapy, 63*, 688-701.

Weisz, J.R, Hawley, K.M, & Doss. A.J. (2004). Empirically tested psychotherapies for youth internalizing and externalizing problems and disorders. *Child and Adolescent Psychiatric Clinics of North America, 13*, 729-815.

Weisz, J. R., & Kazdin, A. E. (Eds.). (2010). *Evidence-based psychotherapies for children and adolescents* (2nd Ed.). New York, NY: Guilford Press.

Weisz, J.R., Weiss, B., Alicke, M.D, & Klotz, M.L. (1987). Effectiveness of psychotherapy with children and adolescents: A meta-analysis for clinicians. *Journal of Consulting and Clinical Psychology, 55*, 542-549.

White, K. S., & Barlow, D. H. (2002). Panic disorder and agoraphobia. In Barlow, D.H. (Ed.), *Anxiety and its disorders: The nature and treatment of anxiety and panic* (2nd ed). New York: Guildford Press.

Wolpe, J., & Lazarus, A. A. (1966). *Behavior therapy techniques: A guide to the treatment of neuroses.* Elmsford, NY: Pergamon Press.

Woolfolk, R. L., & Allen, L. A. (2014). Somatoform and Physical Disorders. In Barlow, D. H. (Ed), *The Oxford Handbook of Clinical Psychology*, (pp. 339-363). Oxford: Oxford University Press, USA.

World Bank. (2014). *Gross national income per capita 2013*. Washington, DC: Author

World Health Organization (WHO). (2001). *Fact Sheet: The World Health Report 2001*. Geneva: Author.

World Health Organization (WHO). (2005). *Mental Health Atlas 2011*. Geneva: Author.

World Health Organization (WHO). (2006). *The Global Burden of Disease – 2004 update*. Geneva: Author.

World Health Organization (WHO). (2008). *Task shifting : rational redistribution of tasks among health workforce teams*. Geneva: Author.

World Health Organization. (1990). Neurasthenia. In *International statistical classification of diseases and related health problems* (10th ed.). Retrieved from http://apps.who.int/classifications/icd10/browse/2010/en#/F32 on July 21, 2014.

World Health Organization (WHO). (2011). *Mental Health Atlas 2011*. Geneva: Author.

World Health Organization – Assessment Instrument for Mental Health Systems (WHO-AIMS). (2006). *WHO-AIMS Report on Mental Health System in Viet Nam*. Vietnam: Author.

Zeiss, A. M., Lewinsohn, P. M., & Muñoz, R. F. (1979). Nonspecific improvement effects in depression using interpersonal skills training, pleasant activity schedules, or cognitive training. *Journal of Consulting and Clinical Psychology*, *47*(3), 427.

Zigler, E., Taussig, C., & Black, K. (1992). Early childhood intervention: a promising preventative for juvenile delinquency. *American psychologist*, *47*(8), 997.