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## Process Group Vs. Skills Group Modalities In The Treatment Of Individuals Diagnosed With Major Depressive Disorder

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**PROCESS GROUP VS. SKILLS GROUP MODALITIES  
IN THE TREATMENT OF INDIVIDUALS DIAGNOSED WITH MAJOR  
DEPRESSIVE DISORDER**

by

**KIRK DAVID DUNCAN**

**DISSERTATION**

Submitted to the Graduate School

of Wayne State University,

Detroit, Michigan

in partial fulfillment of the requirements

for the degree of

**DOCTOR OF PHILOSOPHY**

2014

MAJOR: COUNSELING

Approved by:

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Advisor

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Date

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## DEDICATION

This study is dedicated to all of my clients: past, present, and future. Without your sharing and growth, I would not have learned to grow within myself. If I have forgotten to mention anyone else, I apologize. Thank you so much, for with your support this research was made possible.

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## CHAPTER 1

### INTRODUCTION

Group therapy has shown positive outcomes when group members feel a connectedness to each other as well as to the group facilitator (Shectman & Toren, 2009). When the facilitator possesses personality traits, such as belief in the group process, personal power, courage, authenticity, and warmth, supportive group cohesiveness is achieved (Shectman & Toren, 2009). Comparing groups with each other could benefit and influence the way treatments are administered when therapeutic services are needed. It has been suggested in the research literature that the group leader's personality has the strongest effect on the group process (Corey & Corey, 2006).

Consequently, if specific facets could be identified that may be most beneficial to the client then perhaps clinicians could identify clients who hold such traits for the betterment of identified change regardless of lecture format in psycho educational skills groups' facilitation or process group treatment. The group process depends on group leadership (Corey & Corey, 2006). Therefore, the ability to command a process group with leadership properties and the therapeutic relationship with group members may be the key factors of successful group therapy. Yalom (1995) suggested that common factors in group therapy include the conditions for catharsis, cohesion, and universality for the group process. When these are present, it allows for group process to occur. Because group treatment has been studied for some time, benefits may vary depending on group demographics.

Group process interventions have been adjusted, analyzed, and studied to understand what may be most effective in the group process treatment (Lipman et al., 2007). Barlow (2009) and Davies, Burlingame, Johnson, and Gleave (2008) found that when comparing groups, those

people in group who received feedback interventions from therapists showed twice as much improvement compared to those that did not receive feedback (improvement defined as decreased symptomology). Group treatment has been used for many years. An example of group utilization comes from Dr. Pratt when he assisted in treatment of tuberculosis patients well over 100 years ago, as he treated some of his patients with group therapy (Barlow, Burlingame, & Fuhriman, 2000). The history of group treatment has shown evidence of beneficence in the medical community as well as other areas of clients with special needs.

Similarly, group treatment has been shown to assist people with many challenges as well as clients with unique needs. Shechtman and Katz (2009) suggested that clients with learning disabilities could also benefit from group treatment. Clients may suffer from problems with aggression, impulse control, and personality disorders; if the group process assists them in appropriate social interaction, then perhaps they could begin to trust and develop healthy relationships that begin to affect symptomology (Shechtman & Katz, 2009). Because group treatment can be used in many settings to treat a variety of illnesses, it is important to discover which treatments and factors are most effective in the treatment of specific populations.

Some of the goals of group process are to increase one's awareness of projection of thought or feeling, also called transference. Markin and Kivlighan, Jr. (2008) suggested that this is an important component of the group process and it takes place when the client will displace past feelings onto the therapist or group members due to distortions of the past and present. This is a powerful process if the client can understand and make the connection to what Yalom (1995) would call the here and now, while working on past issues in the present. The ability for awareness is a very powerful and empowering process that may be the beginning piece for motivation and change in the group process.

Cognitive-Behavioral Therapy (CBT) and Interpersonal Psychotherapy (IPT) may assist with group process, individually or within the group when these distortions are recognized (Rossello, Bernal, & Rivera-Medina 2008). Depression has been treated successfully in Latino adolescents with both CBT and IPT in both individual treatment and group therapy (Rossello et al., 2008). The ability to use interventions and different treatment modalities purposefully becomes an essential component in the group treatment for depressed mood. Because of the research available with groups and CBT, it is essential that we compare modalities to explore which treatments might be most efficacious.

The group therapist needs to be aware of the normal processing speed of the target group. Their ability to understand with comprehension, and auditory understanding decreases, as clients increase in age, therefore, the ability of the facilitator to manage effectiveness for all group members becomes essential (Payne & Marcus, 2008). The facilitator must be aware of the functioning level of aged adults and be able to adjust treatment accordingly to the demographic of the group (Payne & Marcus, 2008), to balance sentence structure, use less complicated terms, while understanding the therapeutic challenges of grief and loss, chronic pain, and depression.

The group becomes a laboratory in which practicing behavior as well as the ability to learn through insight and modeling occur to assist the client in understanding faulty behaviors and thoughts that are not working with a renewed ability to act differently outside the group (Barlow, 2008). The ability to receive help and help, thus at the same time, is a unique piece of the group process. Barlow (2008) suggested that it is beneficial for the group participant to be able to assist others as well as helping themselves in group. This process of projection of helping others may have a benefit in repairing the self as a form of transference.

The relationship to the here and now and the past has been a difficult explanation to accept for those not in the practice of mental health treatment. The mere suggestion of how mommy did not love me brings even those who are considered to be most successful, strong and full of prowess to an uncomfortable place (Markin & Kivlighan, Jr., 2008). This may be due to our early attachment to caregivers that may impact how we define our perception of reality. Markin and Kivlighan, Jr. (2008) suggested that patterns of maladaptive behaviors begin in childhood and continue into adulthood. These adverse behaviors are represented in the group process, observed by the facilitator, explored, confronted, and then perhaps change may take place in the client's ability to see if there might be an alternative solution.

Barlow (2008) suggested that change naturally occurs when one is in an exchange giving and receiving help while in the group process. The ability to use modeling behaviors as an example for the participants reflects the issues of past attachment that may be part of the overall mental health issue that the person faces. In groups where participants feel cared for, understood, and accepted they may start to feel comfortable enough to let their defenses down to explore and understand challenges that have occurred and increase their awareness. This will enhance the client owning deficit behaviors and learning new ways to respond to stressful situations (Barlow, 2008).

Although comparing group treatment with individual treatment is not the goal of the current research study, some research does suggest that group therapy can be as effective as individual treatments in the treatment of certain diagnoses (Davies et al., 2008).

Yalom (1985) suggested that individuals in the field of psychiatry would do best to not ignore the efficaciousness of group therapy. Although most psychiatrists prescribe psychotropic medication due to time constraints, increased demand, and the great need of qualified

professionals (Wasan, Neufeld, & Jayaram, 2008), Yalom encourages those in the medical field to embrace therapy and group treatment and to understand their impact on repairing clients as well as managing symptoms. If psychiatry wishes to stay in the leadership position, it is imperative that the field recognizes and uses the research to continue its effectiveness in treatment, including group therapy treatments (Yalom, 1985). According to Yalom (1985), there has been little impact of this suggestion as therapy is seen by some psychiatrists as non-beneficial or non-efficacious (Yalom, 1985).

Because of the differences in group treatment compared to individual, the direction of change and success will vary due to positive relationships that are formed in process group, client's similar goals, and the group's cohesion with the members (Johnson et al., 2006). Group membership, group demographics, and ability of the group facilitator all seem to be essential pieces when discussing therapeutic change in group therapy. Exploring the facets of the relationship between client and facilitator within group membership may be defined by how the client feels being a group member. Clients bonding with the facilitator and group member cohesiveness are mechanisms that assist the client for the environment of change (Kivilighan & Tarrant, 2001).

A group participant's perception seems to be of great influence on therapeutic change (Kivilighan & Tarrant, 2001). One person's reality and perception of that reality may have a great impact on group success. Clients who were in need of mental health services, and participated in group treatment, may have had outcomes that are affected by their personal perception of the group process, group cohesion, and participant's intervention experience (Lipman et al., 2007). Due many types of group variations, demographics of population, and focus therapeutic group; Lipman et al. (2007) suggested that single mothers, as a demographic,



do not access treatment as frequently as non-single mothers. Because single mothers reported to have higher levels of depressed mood compared to mothers who are in a relationship (Lipman et al., 2007), it is essential to understand client demographics, the process development of depression, and how to treat it effectively.

Cuijpers, Van Straten, Anderson, Schuurmans, and Van Oppen (2010) suggested that when comparing treatments, all therapeutic modalities seemed to work no matter what type of therapy was conducted. Because all therapies have been found to be effective, they have been called Do-Do Bird studies (the discovery of all treatments work) over the last three decades. It is necessary to understand what common factors have been effective and beneficial within the treatment of depression (Cuijpers et al., 2010). The comparison of individual therapies may be applied to group treatment when understanding the common factors of change, healing, and ability to manage mood effectively (Cuijpers et al., 2010).

Feedback was reported in further studies to have a positive impact on treatment. Perhaps, when Davies et al. (2008) did their study they did not account for the relationship of facilitator and critiquing in feedback. Criticism may hurt, therefore, if it is attempted to assist clients in group treatment process group, the group facilitator should be knowledgeable about who can and cannot handle and manage criticism due to low self-esteem and proactive focused coping mechanisms. The hope is that the facilitator is sophisticated enough to understand the reason that the consumer is in group treatment is because they have functioning problems in their world. Consequently, as some treatments are better than others, so are some facilitators.

Cuijpers et al. (2010) suggested that when comparing research using a meta-analysis of different treatment modalities for depression, some fare better than others. Cuijpers et al. (2008) looked at seven types of treatment for mild to moderate depression: cognitive-behavior therapy,

nondirective therapy, interpersonal therapy, behavioral activation treatment, psychodynamic treatment, problem-solving treatment, and social skills training. One treatment was most effective, Interpersonal Psychotherapy (a short term under 20-sessions treatment for depression). The research suggested that the perceived relationship with the facilitator is an asset and a catalyst of change (Cuijpers et al., 2008).

### **The Biological Stress Response: The Reciprocal Relationship to Depression**

Stress and depression are connected in the way they impact the brain. Young adults (adolescents or teenagers etc.) do not possess the coping strategies to manage stress and depressed mood electively; as a young person becomes stressed it affects the neurochemistry of their brain is affected (Field & Seligman, 2004). The monoamine system is responsible for chemicals of the brain that affect depression and mental illness in adolescents. This system includes neurotransmitters such as dopamine, serotonin, norepinephrine, and others (Field & Seligman, 2004).

Depression, due to its chronic nature, may be especially harmful to those who experience constant stress. Licino and Wong (1999) suggested that some 13% to 20% experience some depressive symptoms and that a full 5% of the population in the United States may have major depression at a given time. Because depression is so common, it is imperative that we, as researchers, understand the biological foundations of the stress response and its reciprocal impact on depression and stress due to the negative impact on the human immune system (Licino & Wong (1999).

Depression is a chronic pervasive problem that if left untreated may lead to serious health problems or death. Repeated exposure to perceived stress over time weakens the natural immune

system and makes it more susceptible to infection and disease. NK cells and T cells guard and defend the body on a daily basis in order to maintain homeostasis (Sapolsky, 1992).

Homeostasis is the balance of the body, which regulates good health. If anything is moving the body out of the state of equilibrium, the body tries to adjust keeping stability. Subsequently, the body encounters problems when immune suppression weakens the production of NK and T cell count in the body due to the stress response, thus making it more susceptible to illness and disease (Sapolsky, 1992).

Breslau, Davis, and Andeski (1991) suggested pre-adult stressors (e.g., abuse, neglect, trauma, and depression) have an impact on those that may develop affective disorders or alcohol and drug addictions. The military has been trying to determine if individuals that have had chronic stress or have been abused as children will develop posttraumatic stress disorder (PTSD). Stress may be a precursor to an onset of psychological and medical problems. Some data suggests that individuals that have been abused, or were victims of trauma as children may have additional challenges coping with stress in the future (Breslau et al., 1991). Chronic stress is also responsible for other severe life altering problems. Social psychologists have experimented with dogs to explore learned helplessness and its similarity in humans (Seligman, Maier, & Geer, 1968).

Subsequently, Licino and Wong (1999) suggested that major depression impacts the regulation of immune functioning, thus depression ala the stress response, or chronic stress may affect such diverse bodily functions as cardio vascular function hypertension, inflammation, amongst many other biological processes, and even increased risk of early death.

### **Scope of the Problem**

The Diagnostic and Statistical Manual of Mental Disorders Text Review (DSM-IV-TR) (American Psychiatric Association, 2000) includes this definition for mental disorders: A clinically significant behavioral or psychological syndrome or pattern that occurs in an individual and that is associated with present distress (i.e., a painful symptom) or disability (i.e., an impairment in one or more important areas of functioning) or with a significantly increased risk of suffering death, pain, disability, or an important loss of freedom. The syndrome or pattern must not be merely an expectable and culturally sanctioned response to a particular event. It must currently be considered a manifestation of a behavioral, psychological, or biological dysfunction in the individual (American Psychiatric Association, 2000).

No definition adequately specifies precise boundaries for the concept of mental disorder. This concept is also known as mental health, mental impairment, mental illness, brain illness, and serious brain disorder (American Psychiatric Association, 2000; p. xxi). Mental illness is defined as a health condition that changes a person's thinking, feelings, or behavior (or all three) and that causes the person distress and difficulty in functioning (NIMH.com, 2010). Thus, depressed mood affects a clients' domain on multiple levels: from self to family, work and school, as well as the full capacity of overall well-being and functioning.

Depression is among the most widely diagnosed and costly of all mental illnesses; affecting those who seek services as well as those who do not (Kornrich, 2009). It is most difficult to attempt to try to measure its impact on the global economy, social implications, and perceived loss and torment not to mention loss of actual life in chronological years. Because this is such a global phenomenon, it is the thought of this research to address ways to decreased

symptoms, increase self-efficaciousness, and regain loss of functioning assisting in overall quality of life by implementing such a study.

Depression is considered one of the most severe of all mental illness disorders, easily accounting for the majority of suicides, medical health implications, and loss of full functioning for clients in the United States, with prevalence of this illness increasing yearly (Arean & Chatav, 2003). Because suicide is a serious factor of this mental illness, it is important to understand how to manage this disease more effectively. Arean and Chatav (2003) suggested that upwards of 15% of individuals who are diagnosed with major depression are expected to commit suicide.

Depression may be treated with antidepressant medication and psychotherapy, which is shown to have success (Arean & Chatav, 2003). Although we as a society tend to see physical medical problems as a much more serious concern than mental health Arean and Chatav (2003) suggests that depression is actually second to heart disease in terms of disability, impacting quality of life and despair as a chronic illness. Most may not even conceive of depression as significant problem until compared to the number one killer in the United States, heart disease (Arean & Chatav, 2003).

Clients experiencing severe depression have certain characteristics. These include depressed mood, diminished interest in activities, have weight loss or gain, insomnia or hypersomnia, psychomotor retardation, fatigue or loss of energy, feelings of worthlessness or guilt, difficulty in concentration, and recurrent thoughts of death and/or psychotic symptoms (Arean & Chatav, 2003). The above mentioned symptoms would be compared to the less severe diagnosis called dysthymia, which is poor appetite or over eating, insomnia or hypersomnia, low energy, low self-esteem, poor concentration and feelings of hopelessness (Arean & Chatav,

2003). The differences between the two are duration, intensity and scope. Dysthymia is a chronic form of depression, lasting more than one year compared to major depressive disorder that is much severe and debilitating disease that may kill (Arean & Chatav, 2003).

There are a few main types of depressive disorders: Major depressive disorder that is severe with suicidality, major depressive disorder with psychotic features, major depressive disorder moderate/mild, and dysthymia (American Psychiatric Association, 2000). These make up the majority of depression diagnoses. Depending on the type of depression and severity, a clinician may suggest a certain treatment approach. Gender differences have been found when exploring the impact of depression. Arean and Chatav (2003) suggested that women over the life span will report and treat depression more than men throughout the world. In addition, when compared, African Americans and Caucasians had similar frequency of episodes of Major depression in the United States (Arean & Chatav, 2003).

In the United States of America, it was estimated that in 1999 about 44 million Americans met the diagnostic criteria for some form of mental disorder. According to the National Institute of Mental Health, and 5.6 million of those live with a serious mental illness, like schizophrenia or manic-depression (NAMI, 1999). Mental illness is a global epidemic. Similar to the United States, China reported in 2002 that 1.9 million people sought mental health services indirectly costing nearly one billion U.S. dollars of total cost and loss (989 million U.S. Dollars) (Hu, He, Zhang, & Chen, 2007). Hu et al. (2007) discussed loss as the impact of depression as total costs for 2002. This was due to the direct and indirect effect that depression has on a society (e.g., such as loss of life, loss of work hours, as well as loss of productivity in the workplace and its impact on society).

Adolescents have a special relationship with depression. As a result of not having fully functional brains, they cannot utilize full prefrontal cortex executive functioning, and have an inability to reference earlier information due to lack of experience, depression and events may have a more profound impact on the adolescent brain functioning with regards to depressed mood and suicidality (Barbe, Bridge, Birmaher, Kolko, & Brent, 2004). Their lack of experience and immature use of executive functioning coupled with catastrophic anxieties in the present moment may impact judgment and insight into episodic challenges that are faced daily by teens (Barbe et al., 2004). Without the ability to delay gratification, explore consequences with an adult mind, and the entire peer challenges that youth face today, the torment of a traumatic experience may be perceived as a chronic stressor with no end. This is evidenced by bullying behaviors that are shown all too often in the media about girls and boys bullying their peers to the breaking point.

Barbe et al. (2004) suggested that for adolescent clients that are feeling chronic stress, the inability to cope with the agitation, have a depressed mood and low self-esteem are especially vulnerable to having suicidal ideation and suicidal attempts. The hope of this research is to assist those in pain and assert one's own ability to manage stress, find hope, increase self-esteem, and manage mood more effectively after group treatment (Marmarosh, Holtz, & Schottenbauer, 2005).

Consequently, adolescents may react and have more suicidal ideology than other cohort ages due to the fact of the underdeveloped brain (Barbe et al., 2004). The National Institute for Mental Health (NIMH) is aware of the seriousness of depression and allocates resources in the form of grants yearly to assist those who do the research into finding out the impact of depression on our society. One such grant was given to the doctors who sought to do research

and understand the relationship between “Suicidality and its Relationship to Treatment Outcome in Depressed Adolescents” (Barbe et al., 2004).

Barbe et al. (2004) suggested that the connection with adolescence and suicidality is strong; they also believe that specific forms of treatment might be better suited to address the link between young adults and suicide. Barbe et al. (2004) also argued that comparing treatments to understand the impact of how one treatment might be more efficacious compared to another may impact and assist in the benefit for all youth thus for the betterment of all people.

Comparing results showed that individuals that participated in cognitive-behavioral therapy compared to non-directive-supportive therapy had better outcomes (Barbe et al., 2004). Understanding and comparing treatments gives the researcher the ability to replicate and develop an understanding as to the extent to which treatment might be beneficial to assist individuals who assist those with depressed symptoms.

Posttraumatic stress disorder (PTSD) and its co-morbidity with depression are becoming much more common in the research due to many in our armed forces returning from Iraq and Afghanistan. Veterans who suffer from dual diagnoses or comorbid symptoms with depression were much more likely to utilize more specialty services and cost the Veteran Affairs (VA) health system much more in resources to treat these patients (Chan, Cheadle, Reiber, Unutzer, & Chaney 2009). Developing treatments that could assist the VA in cost containment without reduction of perceived treatment is a serious goal and research opportunity that may be expressed in data from comparison group treatments. Because there will be an increase of veterans needing services in the future, it is imperative that research assist the VA in development of treatments that are cost effective and most beneficial for our returning veterans of all ages and their families.



When addressing a certain demographic, it is essential to understand the client population that is being served. Older individuals are not exempt from the pain of depression, identity or impact on their loved ones. Loss of functioning, age, health, and lost dreams contribute to a conglomerate of issues the elderly face when experiencing depression. Some have suggested that loss of income, loss of employment as well as the loss of purposeful work and career may take a toll on our elderly and their mental health (Kornrich, 2009). Economy plays a significant role in the adjustment of depression. One internist that worked with the elderly suggested that we are in the second great depression as he saw the impact directly on our aged population (Kornrich, 2009).

Consequently, when depression is coupled with other factors, i.e., adolescence due to limited executive brain function, the expression of the mental illness may be exacerbated. In addition, teens that had low socio-economic status, showed rates of suicide and co-morbidity that increased exponentially (Barbe et al., 2004). Individuals that experience PTSD and have depression are more likely to have suicidal behaviors, loss of functioning, and higher utilization of services (Oquendo et al., 2003). In addition, those clients who had PTSD with depression also engaged in aggressive acts and had personality disorders (Oquendo et al., 2003). Because depression has many forms and comorbidities, it is in the researchers' best interest to find cost effective ways to treat clients with depression and stress.

### **Statement of the Problem**

What is the impact of using a process group modality versus a psychoeducation skills group modality in the treatment of individuals diagnosed with major depression? This researcher will explore the dynamic of group treatment and its impact on depressed mood in the population of severe and persistent mental illness. This study is comparing two modalities of treatment:

Cognitive-Behavior Skills Group Treatment vs. Motivational Interviewing Process Group Treatment. Findings may indicate that connectedness to the facilitator impacts the depressive measure. This could assist in understanding the additional component of the therapeutic alliance and how it impacts treatment modalities in the treatment for depression.

The researcher chose depression because of the seriousness of this illness, its cost to society, emotional cost to families, employers, and the early mortality rate. It is estimated that when combining those with bipolar disorder (currently depressed) and individuals with major depression, the impact could range in the United States of America above 50 billion dollars lost in workplace costs annually (Kessler et al., 2006). Decreasing this or preventing this could have a major financial impact on the economy.

Depression is among the most widely diagnosed and costly of all mental illnesses, affecting those who seek services as well as those who do not. Depression affects millions of clients worldwide yearly at a staggering cost to all facets of society measurable and immeasurable (Hu et al., 2007). Due to research, mental health becomes more understood as does the impact on the illness of depression, ways to address mortality with intervention, and early mortality outcomes (Oquendo et al., 2003). Oquendo et al. (2003) found that stigma of medical treatments has been reduced through campaigns and utilization of services. Unfortunately, this has not been the same for mental health care. The stigma of mental illness is still very prominent as social worker Mrs. Green LMSW lectured in a recent Southeast Michigan Community Alliance (SEMCA) training stated “ in the northern states one would rather be considered a drunk than crazy” (Green, 2010). Green (2010) suggested stigma for mental illness still far surpasses even substance abuse in its connotation of absurdity.

Group comparisons to examine treatment have not been viewed to see whether one group treatment is more effective than another, most have looked at group cohesion in group treatment as a process of change (Yalom, 1985). Because group therapy can work therapeutically, it is in the best interest of clients in the field of group psychotherapy to determine which types of treatment are most effective in this cost contained climate and reduction of services from state funding. Group process therapy compared to a skills group therapy will be difficult to measure due to facilitator factors, group cohesion, and other factors affecting client's depressed mood. Because client perception is the deciding factor whether treatment was successful, it is imperative to understand the process of that interpretation (Lipman et al., 2007).

Discussion has been made around the topic of the therapeutic relationship and its impact on treatment outcomes. Pesale & Hilsenroth (2009) suggested that the therapeutic relationship is the essential component to treatment due to alliance strength. Understanding the group treatment process, and therapeutic alliance influence for treatment outcomes is essential to practitioners for treatment of depressed mood measure.

### **Need for the Study**

The outcome for evidence that certain process groups may be more effective than skills groups could impact treatment and improve overall well-being for those in need thus enhancing and helping for the good of all people. The research suggested that depression is not only financially costly, (Hu et al., 2007) but its impact on the clients who are affected are not limited to the diagnosed client, but the entire family, the Medicaid health system as well as private insurance and employers. Kessler et al. (2006) suggested that with the mental health epidemic in the United States impacting the workplace, its impact is estimated to be well over 50 billion dollars U.S. Comparing this to China, and population differences, suggests serious issues for

persons with depression in the United States vs. other large industrial countries (Hu et al., 2007). This problem is too large to ignore and requires additional research when such can be provided. The suffering and torment that people with hopelessness and helplessness incur is at times beyond comprehension (Oquendo et al., 2003). Some who grapple with depression, due to the chronic stress of life, would rather die than live one more day of torment. Some factors may be: poor social skills, lack of career, economic inability, chronic pain, relationship challenges, as well as grief and loss (Oquendo et al., 2003). The client in despair truly believes that this moment will continue forever without hope, as life seems unmanageable and unlivable (Kessler et al., 2006)

The purpose of this study is to compare a motivational interviewing process group treatment modality vs. a cognitive-behavioral skills group treatment modality, in an attempt to measure that has a more beneficial impact on the treatment of depression. To assist and facilitate for that individual either psycho educational skills that impact daily living or a connectedness in a group setting that has been missed in the human experience due to trauma (Chan et al., 2009), family dynamic, or plain and simple bad luck. It is in our best interest within the mental health field to constantly embrace what Tyler (1949) suggested as a fluid curriculum. Embracing client centered treatment as the client will inform us of what works and what does not and to have a say or vote in their own treatment of depression.

The need for this study is imperative in this day and age of quantifiable treatment plan goals, measurable outcomes, and goal targeted focused co-occurring treatments and drug addiction (Present et al., 2008). In simple language the treatment must work, be cost effective and time limited. The need for this study may indicate further research is needed far beyond

Wayne county Michigan and the Detroit metropolitan area, especially those funded by state and federal government.

Description of common factors from effective group therapists could assist when allocating resources for those in group work for maximum benefit of clients in treatment when utilizing CBT/ IPT modalities and focusing on the client therapist relationship (Rossello et al., 2008). The relationship between the facilitator and clients in the group may hold the key to therapeutic outcomes as it does with individual treatments (Hoffman, 2009).

During psycho-educational skills groups the interaction between facilitator and group is a limited exchange. The facilitator directs and explains information much like a lecturer would. In a group process there is an exchange that takes place between the group and the facilitator where the facilitator engages the group and assists in growth of group as a whole in discovery of challenges and ways to cope with problems in the real world such as forgiveness and its impact on depression. This is unlike the psycho-educational skills group where information is presented for the group to work at the time of session (Wade & Goldman, 2006).

The relationship with the facilitator becomes essential due to clients in group taking risks to challenge faulty behaviors and cogitations when client's behavior and thoughts are maladaptive to their goals and dreams (Hoffman, 2009). With appropriate trust in place, the group and the facilitator may 'take off the mask' and begin to confront clients in group, triggering issues long buried in the subconscious. When the relationship is in place, the group facilitator may use the dynamic of the group member's agitation to address the feelings in group where it is safe, thus increasing clients' awareness of their thoughts, feelings, and behaviors (Yalom, 1995).

Clients have long reported that when they did not “like” someone, it was difficult if not impossible to learn, take information, or adapt and type of change behavior due to the client not liking the person who holds the information. Because the relationship is the main component of treatment (Hoffman, 2009), then if the therapeutic relationship is not secure, it may have negative consequences on treatment. Furthermore, when in a group setting if the facilitator is doing more instruction than engagement perhaps the human bond may be difficult to engage, thus making it that much more difficult to transfer information (Yalom, 1985).

Group dynamics of empowerment may have more of an impact if the client has a voice. Tyler (1949) suggested that in his design of an educational curriculum that would be highly effective, one should allow a combination or triad model. This modality would have three entities, each would impact development of a new and perhaps fluid curriculum (adjacent to the model), thus impacting the future of mental health. The relationship within group members would be considered one relationship; the relationship with the group facilitator would be the second, and lastly, the new understanding and relationship with the self as transference moves the client toward greater awareness of triggers and behaviors (Yalom, 1985).

During the psycho-educational treatment, depth of the self and group dynamic may never take place. Thus, its effectiveness may be limited to the ability of the facilitator and person understanding the information; the ability to learn through modeling (Prochaska & Norcrose, 2007). Not true in a group process setting, there are group dynamics such as connection to cohort group members, transference, likeness to the role of birth order in the model of the dysfunctional family, and more therapeutic opportunity to have depth of issues and enlightenment (Yalom, 1985). Lecture type psycho-educational group instruction may be educational to researchers

alike, but to measure the impact of treatment to comparable groups is a more specific challenge (Rossello, et al., 2008).

### **Purpose of the Study**

The purpose of this study is to compare a motivational interviewing process group treatment modality vs. a cognitive-behavioral skills group treatment modality and its effect on participant depression while understanding therapeutic alliance factors. The study seeks knowledge comparing the two modalities where individuals have the ability to bond with the group facilitator (Cuijpers et al., 2008; Davies et al., 2008) as well as other group members (Lipman et al., 2007; Process group), compared to a class setting where participants are in a psycho-educational format (CBT skills group) unable to respond or interact with a group type dynamic. The goal of the research is to assist in piecing out which of the two comparison groups works most effectively with the population of clients who present with clinical depression. The target goal of the research is to understand more comprehensively what dynamics take place in the group setting, how change occurs, as well as client's perceived experience of the skills group/group process experience (Lipman et al., 2007).

Comparing group treatments gives researchers and practitioners the ability to utilize resources that may impact client mood most effectively in this day of managed care. In addition, evidence based practices (Elkin, Parloff, Hadley, & Autry, 1985) ability to replicate, and generalizable practices may assist clinicians in the future when designing curriculum for the distribution and development of group treatment. If this study is successful in understanding some of the characteristics of that change, there could be a positive impact on the mental health community to understand this modality of group more comprehensively and replicate what works in the therapeutic treatment of depression in the group setting (Yalom, 1985).

From the clinician's standpoint, it would be beneficial to have modalities to choose from that would have a positive impact on the client. But what about the client's perspective and client's perceived treatment impact? If the client could perceive benefit, have the support to be independently successful, and, of course, have decreased symptomology, one could report a successful outcome of treatment. Due to the wide array of depressive symptoms, some research suggested that perceptions may be different and success will be different but change even in small measurements could be compared in groups, rated, and measured for outcome success (Elkin et al., 1985; Lipman et al., 2007; Yalom, 1985). Consequently, encouraging clients to take the information learned in group and apply it to their issues in their own lives in the real world could decrease depressive symptoms (Elkin et al., 1985). Understanding the process of what works in treatment in comparison to what does not work as effectively is a necessary tool in the treatment for those with depressive symptomology (Elkin et al., 1985). Lastly, producing data that support treatment regimens to assist clients better themselves in a cost effective manageable way may impact the development of further group research.

### **Research Questions and Hypotheses**

1. What is the difference in outcomes of a Motivational Interviewing Process Group vs. a Cognitive-Behavioral Manualized Skills Group modality for treatment of depressed mood?
2. Is there a difference in the therapeutic alliance among the facilitator and group member that impacts treatment between the two group modalities?

#### *Hypotheses*

The following statements and hypotheses will be examined within this investigation:

1. There will be a difference in decrease of depressive symptoms among individuals that



attend motivational interviewing verbal process group vs. those who attend a cognitive-behavioral skills group.

2. There will be a statistically significant difference in decreased symptomology among Individuals that develop therapeutic alliance with the facilitator compared to those that do not.

### **Limitations**

Some limitations are as follows:

Attendance and absence: as long as the client attends more than 6 sessions, there will be no formal adjustment. For attrition, scores for that person will not be included. The severity of mood disorder: due to depth of severity of clinical issues and multiple symptoms that could impact the study. Previous lack of response to treatment: recurrent issues causing increased treatment resistance. Previous treatment: episodes of past treatment that may have been successful or not. Physical: Chronic medical problems that prevent a client from attending (due to chronic health of certain clients this may significantly impact study). Motivation Challenges: This may vary due to depth or severity of issues, transportation and medical regimen plus social anxiety. Medication adherence or adjustments: medical regimen and taking medications as per doctor recommendations. Transportation issues: clients not being able to access needed services or obtain ways to gain access to services. Previous hospitalizations or during experiment: number of times in the past client has tried to manage mental health at inpatient hospital setting. Economic difficulties and employment challenges: socioeconomic status and inability to gain recourses for survival. Any additional disorders in addition to depressed mood: personality disorders etc.

## **Definitions and Terms**

**Process Group** defined by Yalom (1995) as a process of the “here-and-now” with interactions among the group members, the group therapist, as well the group itself. The group facilitator will assist group members with experiencing and reflection of the “here-and-now” and how this interaction impacts feeling toward other group members, as well feelings toward the facilitator.

**Skills Groups** are defined as groups that offer a supportive and structured environment in which to acquire new skills or focus on task accomplishment (Brown, 1998). The professional can ensure that up-to-date information is provided for the group (Hale & Cowls, 2009).

**Group Facilitator** is defined as one who makes a group process easy. A group process is one in which the group is encouraged to do its own work. This process is not one of control but of understanding. The facilitator assists the group in its understanding and knowledge about a task and is about non-directive leadership (International Association of Facilitators of facilitators) (Schuman, 2010).

**Group Cohesion** is defined as a sense of belonging in a group (Johnson et al., 2006).

**Group Climate** is defined as group member’s perceptions of the group’s therapeutic environment (Johnson et al., 2006).

**Catharsis** Chaplin (1985) states that it is “the release of tensions, and anxieties by reliving and unburdening those traumatic incidents which, in the past, were originally associated with the repression of emotions.”

### **Major Depressive Disorder**

Major Depressive Episode:

A. Five (or more) of the following symptoms have been present during the same 2-week period and represent a change from previous functioning; at least one of the symptoms is either (1)

depressed mood or (2) loss of interest or pleasure.

Note: Do not include symptoms that are clearly due to a general medical condition, or mood-incongruent delusions or hallucinations.

(1) depressed mood most of the day, nearly every day, as indicated by either subjective report (e.g., feels sad or empty) or observation made by others (e.g., appears tearful).

Note: In children and adolescents, can be irritable mood.

(2) markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day (as indicated by either subjective account or observation made by others)

(3) significant weight loss when not dieting or weight gain (e.g., a change of more than 5% of body weight in a month), or decrease or increase in appetite nearly every day.

Note: In children, consider failure to make expected weight gains.

(4) insomnia or hypersomnia nearly every day

(5) psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings of restlessness or being slowed down)

(6) fatigue or loss of energy nearly every day

(7) feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day (not merely self-reproach or guilt about being sick)

(8) diminished ability to think or concentrate, or indecisiveness, nearly every day (either by subjective account or as observed by others)

(9) recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide

- B. The symptoms do not meet criteria for a Mixed Episode.
- C. The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- D. The symptoms are not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition (e.g., hypothyroidism).
- E. The symptoms are not better accounted for by Bereavement, i.e., after the loss of a loved one, the symptoms persist for longer than 2 months or are characterized by marked functional impairment, morbid preoccupation with worthlessness, suicidal ideation, psychotic symptoms, or psychomotor retardation (American Psychiatric Association, 2000).

### **Major Depressive Disorder**

#### Single Episode

- A. Presence of a single Major Depressive Episode
- B. The Major Depressive Episode is not better accounted for by Schizoaffective Disorder and is not superimposed on Schizophrenia, Schizophreniform Disorder, Delusional Disorder, or Psychotic Disorder Not Otherwise Specified.
- C. There has never been a Manic Episode, a Mixed Episode, or a Hypomanic Episode. Note: This exclusion does not apply if all the manic-like, mixed-like, or hypomanic-like episodes are substance or treatment induced or are due to the direct physiological effects of a general medical condition.

#### Recurrent

- A. Presence of two or more Major Depressive Episodes.

Note: To be considered separate episodes, there must be an interval of at least 2 consecutive months in which criteria are not met for a Major Depressive Episode.

B. The Major Depressive Episodes are not better accounted for by Schizoaffective Disorder and are not superimposed on Schizophrenia, Schizophreniform Disorder, Delusional Disorder, or Psychotic Disorder Not Otherwise Specified.

C. There has never been a Manic Episode, a Mixed Episode, or a Hypomanic Episode. Note: This exclusion does not apply if all the manic-like, mixed-like, or hypomanic-like episodes are substance or treatment induced or are due to the direct physiological effects or a general medical condition.

**Specify** (for current or most recent episode):

Severity/Psychotic/Remission Specifiers

Chronic With Catatonic Features

With Atypical Features

With Postpartum Onset

**Specify**

Longitudinal Course Specifiers (With and Without Interepisode Recovery)

With Seasonal Pattern (American Psychiatric Association, 2000).

**Social microcosm theory** is defined as the maladaptive behavior that brought the client into group treatment. This behavior is a script that the client behaves as and the behaviors should be present and evident outside the group as well as inside the group process (Markin & Kivlighan, Jr., 2008).

**Transference** Chaplin (1985) states that “1. in general, any displacement of an affect from one object to another. 2. specifically, the displacement of affect toward the parent to the analyst.”

## CHAPTER 2

### LITERATURE REVIEW

#### **Group Process Treatment History and its Impact on Depression**

The purpose of this study is to compare a motivational interviewing process group treatment modality vs. a cognitive-behavioral skills group treatment modality and its impact on depression while understanding therapeutic alliance factors. Throughout the ages mankind has gathered in groups to socialize, discuss political issues, and have communicative discourse (Barlow, Burlingame, & Fuhriman, 2000). Because we are social creatures, we tend to gather in groups (when healthy) rather than isolate, which is a common criterion for depression. Being able to communicate in a socially-acceptable fashion is an important component of socialization, Understanding from where triggers for agitation stem would be essential for being able to manage our mood on a daily basis (Yalom, 1985).

Barlow et al. (2000) suggested that group work has been researched in the literature and has shown to be empirical in its evidence of success. They also suggested that this ranges from many different settings e.g., hospitals, colleges, and outpatient settings. Group psychotherapy and its challenging past constructs of the mind and body is said to have developed some 100 years ago as originating concepts from Europe then progressively changing and developing into a more complex clinical version due to Americana, western philosophy, and flexibility of the United States democracy (Barlow et al., 2000). It is important to understand the origin and history of an idea to fully comprehend its impact on society.

Yalom (1995) suggested that the process group facilitates the client through stages of the group process and over time, group members will act as if they are in their family of origin, thus, triggering each other as one would do as if the original person of conflict (e.g., mother, father,

brother, sister etc.) are present in another group member agitating said client. The purpose for this type of process group is to allow group members to be themselves in a non-threatening environment where one can be in a safe replica of the family of origin (Yalom, 1995). For the client to gain insight into his or her issues and gain awareness of their triggers, issues, and unresolved conflict it is essential for change to occur (Pesale & Hilsenroth, 2009).

When clients feel understood by the group counselor they perceived a greater sense of therapeutic change and movement. Clients self-report on the Session Evaluation Questionnaire (SEQ) reported that in individual session, clients perceived the most progress when they felt like the therapist understood their challenges and helped them develop insight into these issues (Pesale & Hilsenroth, 2009). This speaks to the literature and the therapeutic relationship Barlow et al. (2000) believes is essential for confronting discrepancy and allowing clients to gain the insight to change their maladaptive ways and begin to identify root causes of identified triggers.

Group change and development were looked at and discussed in an early review of what assists change and change factors (Corsini & Rosenberg, 1955). Corsini and Rosenberg (1955) suggested that the idea for change was linked to the individual change and endorsed later work by Barlow et al. (2000) with empirical data that suggested similar therapeutic factors regarding the group counselor. Past relationship and attachment issues are why people develop “stuck points”, so perhaps with group treatment together we can identify these problems (Yalom, 1995). Kivlighan and Goldfine (1991) suggested that being client centered, understanding the client and what stage of development they are in, accepting their ability to express feeling, and altruism are some of the necessary components of therapeutic change that the group dynamic must have in order to allow the client to feel safe and secure to explore oneself and challenging behaviors.

Because this research is aimed at the adult population, the researcher believed that pointing out differences due to age and development would be important so as to understand the impact of adult group psychotherapy. Literature suggested that within comparison group of adolescents, group activity therapy was more effective than the concept of a Yalom (1995) base of process group therapy (Paone, Packman, Maddux, & Rothman 2008). Because full brain connectivity does not take place until later in adult development, it is suggested that adolescents may not be able to comprehend fully due to lack of moral reasoning in the pre-frontal cortex until adulthood when executive functioning is fully established (Wood & Grafman, 2003).

Research suggested that group therapy is an effective form of treatment for depression, as well as other disorders. (Johnson et al., 2006). Because use of group treatment has been increasing in frequency recently, it is to the advantage of the researcher to understand what benefit specific group procedures could assist practitioners. Humans as social creatures are part of social structures as well as groups. Influence of behavior through social structure has been seen throughout time and continues in one form or another today. Research has shown that group treatment is, and will be, effective as a modality of change (Barlow et al., 2000).

### **Mental Illness and Depression**

There are a few main types of mental illness depressive disorders: Major Depressive Disorder that is severe with suicidality, major depressive disorder with psychotic features, major depressive disorder moderate/mild, and dysthymia (American Psychiatric Association, 2000). These make up the majority of depression diagnoses that one may be diagnosed with due to severity of symptoms and self-report. Depending on the type of depression and severity a clinician may suggest a certain treatment approach. There is also a difference in gender in the percentage of depression. Arian and Chatav (2003) suggested that women over the life span will



report and treat depression more than men throughout the world. In addition, when compared African Americans and Caucasian Americans held similar in episodes for Major depressive disorder (MDD) in The United States (Arian & Chatav, 2003).

Mental illness does not only affect adults but children and adolescents as well. Because it is suggested that there is a genetic linkage to mental illness, one is likely to find some evidence within the family either by heritage, environment or both (Field & Seligman, 2004). We are shaped by many things when we are children from school to socio-economic status. Our family environment plays a critical role in shaping young lives and the expression of mental illness (Field & Seligman, 2004). Field and Seligman (2004) suggested that children are at a lifetime risk of developing depression. In addition, the children of parents with depression had at least a 15% to 45% chance of developing mental illness. With environment and genetic factors colliding, addiction and substance abuse with co-occurring disorders further complicate and impact young lives (Field & Seligman, 2004).

Due to the complex nature of the brain and lack of development by adolescents, one may infer that stress and depressed mood may have implications far into adulthood due to the genetic connectedness to parents and the effect of a depressed parent raising a depressed teenager (Field & Seligman, 2004). Consequently, perceived stress, experience, and genetics influences one's future due to this theory of nature and nurture.

Stress, as a factor of depression, effects old and young alike, but not exactly the same way as Field and Seligman (2004) suggested in managing life's stressors. Children and adolescents experience divorce, death, physical health; problems with bullying behaviors at school, or loss of a natural support as a friend may all affect the young person (Field & Seligman, 2004). Adolescents with depressed parents were far more likely to express depressed

feelings when faced with a life-changing event and these feelings could also impact future self-esteem furthering depressed mood later in life (Field & Seligman, 2004). Subsequently, that which we experience and how we process (internally and externally) may impact mental development, concept of the self and overall wellbeing of our future selves. Stress is a perceived experience, thus, if one internalizes the perceived stress it actually is a stressful event causing the fight or flight response, thus influencing mental health (Sapolsky, 1994).

Internalizing and feeling, young individuals do this on a daily basis. When does the normal process thinking and feeling change to something more profound and significant? Wicks-Nelson and Israel (2003) suggested that psychopathology of depression and its effect on children and adolescents alike, has a direct impact later in life on mental illness for adults with severe psychopathology. When children are impacted with this illness, it may affect their self-esteem by impacting school work, behavior, lack of attention, and poor sleep, while creating substance abuse problems as a self-medicating coping mechanism and furthering the illness (Wicks-Nelson & Israel 2003). Consequently, challenges that children face could be a reciprocal problem throughout the lifespan that affects other mental health challenges as well as genetic factors as the environment furthering the downward spiral of depressed mood in adulthood due to past stress and trauma (Wicks-Nelson & Israel 2003).

### **The Biological Stress Response: The Reciprocal Relationship That Impacts Depression**

Due to stress, which in one of the exacerbating factors of depressed mood, it is essential and imperative to understand this complex biological process of the stress response and how over time the consequence of perceived chronic stress may continue to negatively impact depressed mood. Over time perceived stress depressive mood symptoms may increase and become more serious and life threatening thus, the importance of breaking down this complex system to

understand its components in a way that one may gain enhanced knowledge of the biological factors involved. The biological stress process takes into consideration that the perception, thoughts, and feelings may contribute to the stress response and ultimately adjust and directly impact depressive mood. Gaining insight into this area with increased awareness, may lead to a better understanding of the group process and what it is trying to achieve.

The interpretation or perception of an event determines a person's temporary stress response the body endures. The stress response is a physiological reaction to a threatening situation that helps a person's survival. However, this adaptation, that once saved the human species in the past, could now be the cause of its destruction (Stern, 2003). The more a person is exposed to the chemicals of the stress response, the more damage may be done. In the past, life expectancies were considerably lower so the effects of old age were less visible. Past generations only had to deal with immediate survival. The human race has the ability to thrive in different environments, however this survival was not intended to include outside stress from an infinite amount of lunch choices, mortgages, and exams, etc. (Stern, 2003).

Humans possess what is known as the "fight or flight" response. This response is a process that engages the sympathetic arousal system (Encarta @ World English Dictionary, 2004). When the sympathetic arousal system is engaged, many aspects of the body are altered. One of these effects is the loss of energy storage. There is no longer a need to store energy for later use if there is no tomorrow. In addition, the body halts food digestion. Moreover, food will pass through the system differently because the energy for processing is reallocated to more essential areas (Sapolsky, 1994). The reason for this is that needed energy is devoted to prerequisites of life and survival. Arousal is a physiological reaction to a perceived stressor. A stressor, by definition, is anything that engages the sympathetic arousal system; the event or

thought might be beneficial or harmful (anticipation of an event; Sapolsky, 1994). A stressor could be having a baby, not being able to go to sleep due to worrying about a meeting tomorrow, or even waiting at a traffic light.

This sympathetic arousal system has a two-phase signal. The first deals with a fast neurotransmitting process accomplished by the brain. The other is a slower hormone releasing system that passes through the blood to the adrenal glands. This arousal state oscillates in a feedback loop until it is slowly turned off. Over time, the stress response damages receptors responsible for shutting down the state of arousal. The majority of the reuptake receptors for this transaction are located in the hippocampus (Carlson, 2001).

Chronic stress may have trophic effects on hippocampal neurons. Certain areas of the hippocampus may show atrophy over time due to stress. The 5HT 1A receptor binding within the hippocampus may cause atrophy in the CA3 region of the hippocampus (associated memory impairment; McEwen et al., 1997). A receptor is a cell or group of nerve endings that responds to stimuli.

In addition, a receptor is also a molecular structure on the interior or exterior of a cell that binds with neurotransmitters, hormones, and drugs. Glucocorticoids that modulate the 5HT 1A receptor binding may mediate the effects of stress on serotonin (a neurotransmitter) levels within the hippocampus (Chalmers, Kwak, Mansour, & Watson, 1993). Moreover tianeptine, which decreases serotonin levels within the hippocampus, may block the effect of stress on memory. This consequence may explain the etiology of damage to the hippocampus (McEwen et al., 1997; Wantanabe et al., 1993).

A neuropeptide that has been associated with trophic effects is brain derived neurotrophic factor (BDNF) mRNA (mediates the transfer of genetic information) in the hippocampus

(*Encarta World English Dictionary*, 2004). This effect may be partially related to glucocorticoid release of the serotonin 5HT 2A receptor (Smith et al., 1995). Consequently, the trophic effects of BDNF may suggest that decreased levels of BDNF may result in hippocampal shrinkage or neuron death (Bremner, 2002).

The immediate response to a stressful situation is regulated by the sympathetic arousal system, and the release of norepinephrine and epinephrine (adrenaline and noradrenaline) from the adrenal medulla (*Encarta World English Dictionary*, 2004). This system is called the sympathoadreno-medullary system (SAM). SAM is a fast acting process that increases heart rate, blood pressure, and pulse. An example of this is when one is giving a speech an individual may exhibit nervousness, sweating, dryness of the mouth, and intense sense of arousal (Straub, 2002).

Epinephrine is secreted in response to low blood levels of glucose as well as exercise and stress. It causes the breakdown of the storage product glycogen (a white compound polysaccharide that is stored in the liver and muscles of humans) to sugar glucose in the liver, facilitating the release of fatty acids from adipose (fat) tissue, causing dilation of the small arteries within muscle and increasing the output of the heart. Norepinephrine is secreted by the adrenal gland and acts to narrow blood vessels and raises blood pressure (Medterms.com, 2003).

The second and slower acting stress reaction is turned on by the hypothalamus. The hypothalamic-pituitary-adrenocortical (HPAC) system is the body's response to stress, involving the secretion of corticosteroid hormones from the adrenal cortex (*Encarta World English Dictionary*, 2004). The hypothalamus secretes a chemical called cortico releasing factor (CRF). CRF is utilized in different areas of the brain, and helps produce a startle response, which in turn demonstrates an anxiety type behavior (Vermetten & Bremner, 2002). CRF goes to the anterior pituitary gland and signals the anterior pituitary gland to release adrenal corticol tropin

hormone (ACTH; *Encarta World English Dictionary*, 2004). In addition, glucocorticoids (cortisol) are released by the adrenal cortex (Medterms.com, 2003).

Corticotropin-releasing hormone (CRH) is a hormone made by the hypothalamus, which stimulates the release of corticotropin by the anterior pituitary gland. CRH is chemically classed as a neuropeptide hormone; a protein-like molecule made up of a short chain of amino acids produced in the brain that function as a hormone. CRH is produced in the hypothalamus where the brain regulates temperature, hunger, and thirst. Stimulated by CRH the anterior pituitary releases ACTH, which travels down to the adrenal cortex (the outer part of the adrenal gland), encouraging its growth and its secretion of corticosteroids (cortisone-like hormones). Corticotropin is also called adrenocotocotropic hormone (ACTH) (Medterms.com 2003).

Glucocorticoid is a hormone that primarily affects the metabolism of carbohydrates and, to a lesser extent, fats and proteins. Glucocorticoids are made in the outer portion (the cortex) of the adrenal gland and are chemically classified as steroids. Cortisol is the major glucocorticoid in humans. It is also the primary stress hormone. The adrenal cortex produces steroid hormones, which regulate carbohydrate and fat metabolism, as well as mineralocorticoid hormones that control salt and water balance in the body. The under functioning of the adrenal cortex results in Addison's disease while overfunctioning occurs in the adrenogenital syndrome and is associated with Cushing's syndrome (Medterms.com, 2003).

The stress hormone response increases energy release. When cortisol enters the cells in the bloodstream, it travels through the heart, and then attaches to proteins going to the muscles. This stimulation brings on face flushing, accelerated blood pressure and dilation of the pupils. This process helps facilitate the tapping of energy reserves and directs cells to release stored energy. An analogy similar to the process would be of money in the bank. Over time, humans

store energy, and when it is needed, there is a withdrawal (Stern, 2003). These rerouting changes are necessary to take our energy away from unnecessary areas of use and deliver energy where it is most needed. The stress response shuts down the digestive system, the storage of energy, and reproductive processes of the body to generate the required energy to take action.

An example of the diversion of energy would be on stressful days, such as if one were to consume a large meal while also suffering from considerable stress; the likely result would be excess bloating. This is due to lack of digestion in one's stomach. Food is being passed through the duodenum, small intestine, and large intestine because during the action response the digestive process is turned off. The body cannot differentiate between a simple argument and the threat of life. Therefore, it must react as if every threat is one of a possible loss of life (Stern, 2003).

When the stress response is engaged there is a shutdown of all non-essential functions of the body. During this process the body goes into immunosuppression and the production of testosterone shuts down. Immune suppression over time may cause illness and death (Sapolsky, 1992). Repeated exposure to stress or thinking about potential stressful events over time restricts the production of T cell growth factor, and natural killer cells (NK) (in addition to interleukin-1 and a whole host of other physiological and biochemical processes inhibited by glucocorticoids) (Sapolsky, 1992). Immunosuppression affects the body when it suffers under stress. One may have their own stomach lining worn away due to chronic stress and repeated occasions of the stress response.

An ulcer or tear in the stomach may then act as a trigger thus furthering the stress response due to the upset feeling when digesting a meal. The weakening of the stomach lining may be coupled with bad bacteria, thus which can lead to a stomach ulcer (Dooley, & Cohen,

1988). The bacterium that is associated with ulcers is the *Helicobacter pylori* bacterium (*H.pylori*). *H.pylori* is linked with Gastric Campylobacter-like organisms, gastritis, and peptic ulcers (Dooley, & Cohen, 1988). It still remains unclear exactly how the stress response causes an ulcer, but there is some suggestion that it may occur on many different levels; e.g. acid rebound, acid over production, decrease in blood flow, bacteria, insufficient amounts of prostaglandin's, and stomach contractions (Sapolsky, 1994).

During the “hyper arousal state” of the stress response, one may eventually experience muscle atrophy, diabetes, and even osteoporosis. In addition, stress can cause high blood pressure. Extended exposure to pre-hypertension and hypertension levels of blood pressure (over 120/80) may have troubling consequences. Unknown to the individual it may eventually cause the arteries to slightly wear and rupture. A collection of cholesterol, calcium, and fibrinogen (a protein made in the liver that travels through the bloodstream to repair tissue damage) collects to repair the damage (*Encarta World English Dictionary*, 2004). However, over time, the individual is placing him or herself in an unhealthy position, and may eventually develop arteriosclerosis (a blood clot) or arteriosclerosis (hardening of the arteries). As a consequence, stress and its causal factors of depression can become fatal (Straub, 2002).

If a child is exposed to stressful situations, he or she may be slow to develop. Look at an average classroom in middle class United States. The typical child seems normal, well fed, and fully developed. Now look at height and weight of children who have been severely neglected. One will see a dramatic difference in body size, weight, and cognitive ability. Neglect can support and foster growth hormone suppression over time (Sapolsky, 1994). However, if an intervention is done and neglect has not been implemented for an extended period, the child may rebound back to his or her normal body weight and height. Unfortunately, if the exposure to the



abuse is too great, the child may die or have permanently stunted growth due to chronic stress and suppressed immune function (Sapolsky, 1994).

Over time, 5-HT neurotransmission in the hypothalamus declines by means of acute tryptophan depletion (ATD) and may even be associated with affective mood disorders developing. Thus, serotonin release stimulates cortisol (as an on switch) to the 5-HT<sub>1A</sub> and 5-HT<sub>2</sub> receptors of the hypothalamic areas stimulating the stress response starting the entire cycle (Riedel, Sobczak, Nicolson, & Honig, 2002). In addition, people with this worn stress response system may be twice as likely as others to engage in risky behavior. As example of hazardous behavior that at risk individuals may engage in could be unsafe sex, smoking, drinking, or drug usage (Breslau, et al., 1991).

Many individuals that have had a background of stress or have experienced traumatic events find it more difficult to avoid stressful situations and lack the coping mechanisms necessary to deal with stressors. These individuals are always on guard for what the world may be offering, and appear to be prepared for the worst case scenario. Genetic factors may have a significant effect as to why certain individuals actually develop PTSD. Some studies have shown that children of patients with PTSD were found to have an enhanced capacity for risk compared to others with parents who did not develop PTSD (Davison, Smith, & Kudler, 1989). In addition, these children were at a significantly higher risk for developing other psychiatric disorders (e.g., depression; Davison et al., 1989).

Prior research has shown that persons of advanced age have a harder time physically coping with stress. Over time the system worsens, taking longer to shut down the stress response furthering damage upon the body and mind, thus many avoid stressful situations as a coping mechanism (Vermetten et al., 2002). Prolonged chronic stress (rather than acute instances of

stress) and the aging process are keys to the negative feedback loop resisting extinction. Thus, elevated corticosterone with the down regulation of type II glucocorticoid receptors will assist in neuron loss of the hippocampus. (rather than acute instances of stress; Bertholet, Dournaud, & Sarrieau, 1993; McEwen & Sapolsky 1995; Sapolsky 1985, 1992).

Repeated prolonged exposures to the stress response over time wears the counter measure to the system down, thus impacting the brains ability to manage stressful situation that could impact depressed mood. Continual exposure to the stress response and old age causes the “shut off valve” to lose cells and undergo destruction. Prolonged exposure to stress, chronic cortisol levels rise, but acute cortisol responses to stress or specific serotonergic become blunted as a result of a disturbed cortisol-5HT1A hippocampal receptor feedback, thus causing damage to down-regulated 5HT1A hippocampal receptors. When the stressful occurrence has passed the prefrontal cortex (PFC) processes the events (*Encarta World English Dictionary*, 2004). The amygdala and the hippocampus then slow down the hypothalamus (*Encarta World English Dictionary*, 2004). Over time, this calms the feedback loop and disengages the sympathetic arousal system, aiding the body back into normal function and homeostasis. Because the hippocampus has the highest number of receptor sites for cortisone, it undergoes damage during repeated exposure to the negative feedback looping process. Subsequently, the decreased hippocampal feedback inhibition of glucocorticoid release results in progressive atrophy of the hippocampal neurons (Colman & Flood, 1987; Kerr et al., 1991).

The prefrontal cortex is necessary for higher cognitive skills in homosapiens. Its volume is approximately the same of other primate relatives but it functions at a much more sophisticated level. Human’s store information and it is represented as memories that are specific to neural networks that encode information. Moreover, when stored information is recalled, one

is able to access the conceptualized idea. Processing information operates differently because computational procedures or algorithms may be localized in neural networks that are separate of the stimulus that is being processed. The ventromedial PFC has a neural network that works in reciprocity with emotional processing (amygdala), and memory (hippocampus). The PFC sustains stimulus recognition over time allowing an individual to accomplish long term plans. In addition, the PFC seems to store memory as representations of stimulus (Wood & Grafman, 2003).

The amygdala, however, plays a role in declarative memory in association with emotional experiences. Imaging studies of the brain have found evidence that there is a correlation between amygdala activation during the encoding of a subsequent memory. Individual functional magnetic resonance imaging (fMRI) for each segment was related to subject's report of their feelings toward an unexpected memory test three weeks after scanning. The amygdala showed to be the most emotionally charged. The left amygdala activity was most prevalent and predictive of later memory that was most emotionally charged. These data may show that the amygdala activation reflects moment-to-moment individual emotional experience and this regulation increases memory with respect to the intensity of the emotional experience (Canli et al., 2000).

Animal studies of rats with amnesia (due to an inability to remember when tested) have shown that the hippocampus may hold the key to neural substrates of different memories. Some areas of research have been passed over with the thought that long-term memory is based on information acquisition. This idea may be a contrast to the ability of memory retention in humans (Vnek & Rothblat, 1996). New data suggest that the hippocampus has a relationship with contextual memory retrieval. The exploration is in observing the ramifications of reversible inactivation of the dorsal hippocampus. Some experiments have shown that muscimol (a

GABA<sub>A</sub> receptor agonist) infusion into the dorsal hippocampus formed specific impairment in context-specific expression of extinction. Consequently, these data support findings that coupled with other research paradigms, supply additional information about the role of the hippocampus and contextual memory retrieval (Corcoran & Maren, 2001).

Learned helplessness (a form of depression) is a term also used to describe individuals that have experienced chronic stress to the extent they no longer believe they can accomplish their goal due to their problems, stress depression or situation (Spiegler & Guevremont, 2003). This becomes an obstruction because stress is now a perception that the individual perceives as unchangeable due to cognitive distortion causing depression (Spiegler & Guevremont, 2003). An example of this may be an individual who believes all future hope is lost. This furthers the stress response causing increased tension and more damage to the hippocampus. Consequently, the person may engage in negative depressive rumination (Ciesla & Roberts, 2007).

There are two equivalent techniques to better control stress. The first is an emotional based coping mechanism and the other is a proactive focused coping mechanism (Thomas, 1984). The first works to emotionally analyze the stimulus and attempt to comprehend what can be learned from the event, take the most positive outlook on the problem, and alter negative stressor. The second and a bit more realistic aspect is a proactive focused coping mechanism (Lazarus, 1966; Lazarus & Folkman, 1984). It is the measures taken to compensate for an event or problem that may occur in the future. A well thought out plan may have many revisions but directly copes with the problem rather than disregarding it. Ignoring a problem may worsen the predicament making it more difficult to isolate and resolve. An example of a proactive solution might be a college graduate student who plans for school, or a chess player who thinks moves ahead and who is willing to understand sacrifice to win the game. In addition, individuals who

employ this type of behavior see stressors as challenges and learn from their mistakes (Stern, 2003).

Procrastinators invoke a blunting coping mechanism that shuns the problems but eventually makes matters worse (Bandura, 1977, 1989). A proactive individual will allocate resources (e.g., time, energy etc.) to cope with the perceived threat, and do what is necessary to accomplish the goal. Thus, because of the allotment of resources this individual does not “feel” the level of stress others may feel. Consequently, not getting stressed is the best way of dealing with major and minor problems because it prevents the body’s action system from ever firing up, thus causing no potential damage (Lazarus, 1966; Lazarus, & Folkman, 1984).

Anxiety and depression seem to be linked in a constant myriad of enabling. Many individuals that have been diagnosed with PTSD or stress are also depressed. The more a person is depressed, the more unlikely they will think positive and have an optimistic view of life. Moreover, a depressed person may actually create more strain, thus keeping the two in a constant cycle. Current statistics demonstrate that at least five to twenty percent of people will experience a depressive episode in their lives (Robins et al., 1984). Consequently, treatments (therapeutic or medical) that could assist clients with decreased depression symptomology may indirectly assist with longevity of life and enhance immune function, due to the positive the impact on immune system (Licino & Wong, 1999).

### **Group Treatment and Ancillary Factors**

Whether group alone is the major modality, combination of treatments with group or group with an ancillary such as individual treatment, these factors could hold answers to questions about the effectiveness of group treatment (Barlow et al., 2000). Group success is a combination of clients that have the capacity to want change and factors that contribute to that

change. Change mechanisms that are often overlooked are that of the client's experiences related to the sessions and interventions as well as the client's life experiences of engaging in outside homework not in the control of the group therapist (Dick-Niederhauser, 2009).

Because other factors influence group treatment, including the relationship with the group facilitator and the feeling of getting better to enjoy life and its experiences, the skilled group facilitator assists and takes the relationship into account for the success of treatment (Pesale & Hilsenroth, 2009). The relationship to the counselor seems to be one that is complex yet beneficial if formed to the client's perception of a human connection (Pesale & Hilsenroth, 2009). When connectedness is in place, it appears that clients are then more readily able to facilitate change, accept critiquing, and accepts healthy risks. Pesale and Hilsenroth (2009) also state that, when working with people who have Axis II pathology, research that Cognitive-Behavioral (CB) techniques both work and do not work. Perhaps what Pesale and Hilsenroth (2009) suggested is that when the therapeutic alliance is intact that even clients with Axis II pathology are more receptive to treatment interventions from the counselor. It has also been suggested by previous data to take into account therapeutic styles, attachment, and predicted trajectories of treatment based upon those variables (Silberschatz, 2009). This suggested that if clinicians could pair styles of attachment and alliance with specific clients, there could be a better chance of success for the client.

Change factors have been researched and looked to be replicated due to style format, and therapeutic modality. The research suggested that many different kinds of therapy have been found to be effective in a popular study citing the do-do bird effect where all treatments seem to have a positive effect (Cuijpers et al., 2010). This suggested that all treatments work and all treatments make an impact. Some treatments may not be as effective as others, and all counselors

may not be as effective as others (Cuijpers et al., 2010). Dick-Niederhauser (2009) suggested that some therapists are very effective and others are not effective. Some scholars believed one of the major factors of change is the therapeutic relationship (Hoffman, 2009). The relationship may be significant because of the intimate nature of the therapeutic process. The client becoming vulnerable will allow another person deep into their lives, and reveal all of their short comings, problems, and fears (Hoffman, 2009). Perhaps because information is being transferred, it is more likely that the client would more readily be able to utilize this information if the person who is inputting this new information is respected and liked by the client.

Kivlighan, Jr. and Tarrant (2001) suggested that whomever the group leader is, how the group leader presents, how the facilitator interacts, and the dynamic approach may greatly impact the outcome of group treatment. This may indicate that regardless of either Motivational Interviewing (MI) process group or Cognitive-Behavioral Therapy (CBT) skills group treatment modality, connectedness may be the key component. Therapist variables, client's connectedness to the facilitator, and additional common factors that effective counselors may have impact and could assist in constructing a favorable relationship with the group facilitator and client (Kivlighan, Jr. & Tarrant, 2001). Common factors of counselors and overlap of qualities (similar qualities that these persons possess may overlap and be the actual factor) could influence what kind of outcome the group reports. Barlow et al. (2000) suggested that with growing research in this area, we may find more answers to the questions as to why certain counselors in group treatments possess an almost innate ability to connect with group members and assist them with change thus comparing them to natural born leaders.

### **Counseling and its Impact on Depression**

Many different types of therapy are used in the treatment of depression. Among those, group therapy has been found to work with clients of depression in lengths ranging from short term treatment to long term, inpatient and outpatient settings (Barlow et al., 2000). Understanding what is effective in the treatment for depression gives the clinician the insight to manage what tools to assist clients most effectively. When clients exhibit depressive symptoms, they tend to isolate and decrease socialization (American Psychiatric Association, 2000). Group treatment, although stressful for some, may be an excellent way to approach client's isolative behavior while assisting with group dynamics to assist client with issues.

Depression can be crippling and debilitating. The inability to cope with daily tasks, hopelessness, helplessness, are factors that inhibit life and functioning level. The consistent reflection of past failings, the inability to cope, and obsessive nature of thinking about negative thoughts may be a negative feedback looping system that affects stress, depressed mood and anxious feelings (Stern, 2002; American Psychiatric Association, 2000).

Thoughts and feelings tend to effect behavior, as well as the opposite, when we have negative thoughts it affects our mind, body physiology as well as our judgment. One may think about a situation over and over, thus increasing depressed thoughts and consequences into rumination with a negative cognition (Ciesla & Roberts, 2007). This negative process could also engage the body's sympathetic arousal system and cause additional biological stress (Carlson, 2001). The ability to control one's thoughts is discussed by counselors who use the CBT model of therapeutic interventions. CBT is held as a scientifically evidenced based treatment that has been shown to change thoughts and behaviors in clients whether in group or individual treatment. (Kivlighan, Jr. & Tarrent, 2001). CBT has been shown by the National Institute for



Mental Health to be as effective for depression as medication management (National Institute of Mental Health, 2010).

### **Group Leadership and Change Factors**

Group leadership takes many forms, from assisting clients to take risks, encouragement of client's own behavior, and therapist's ability to understand each client's needs specifically, where they are in the here and now, and what may work more effectively with each client and their unique needs. The ability to see what the client does not see or to be able "to see around corners" in matching intervention technique to assist client could be considered a great advantage to the skilled clinician. When participants were asked on the Session Evaluation Questionnaire (SEQ; Stiles, Gordon, & Lani, 2002) about how the session was experienced by the participant and how the client felt after the session, research indicated that therapists who assisted clients with deeper awareness, those clients felt understood by therapist. When the counselor offered direction and validated feelings, the client reported to feel a deeper depth of the session (Pesale & Hilsenroth, 2009).

The group's climate becomes very important as a change factor. The ability for the group's facilitator to assist the group in becoming a mechanism that is conducive for group interaction and change sets in motion the therapeutic factors needed for the group dynamic (Kivlighan, Jr. & Tarrent, 2001). A facilitator's job is to manage group interaction and allow group members to feed off of each other for growth, confrontation of issues, and support. The unique ability for the facilitator to manage group effectively, assist in the flow of change, and use client's stuck points for a safe learning environment is the tone a good facilitators climate creates in the group therapeutic process (Kivlighan, Jr. & Tarrent, 2001). Kivlighan, Jr. and Tarrant (2001) also indicated that group leadership shows a positive relationship to change when the

group member has a positive relationship to the group facilitator. In addition, the therapist's intentions scale (TSI; Stockton et al., 2004) measurement measure thus direct impact on predictions of climate and outcome within the group (Kivlighan, Jr. & Tarrant, 2001). This was a better predictor than other behaviors of the group therapist. This could mean that, if a certain counselor had an impact agenda with clients of a certain group, his/her ability to adjust and move to embrace that agenda to assist in movement and change could be an excellent indicator of how and why change occurs with certain group therapists (Kivlighan, Jr. & Tarrant, 2001).

### **Therapeutic Relationship Factors**

Investigating what works in therapeutic services can be a difficult task to accomplish. Separating fact from fiction, comparing types of treatment, comparing treatment theoretical orientation, and lastly, the bond of the therapist with the client is the goal of understanding client's success in treatment. Due to the significance of relationship factors, it is not unheard of that at Wayne State University in the Educational Psychology department one professor believes so strongly in the therapeutic relationship vs. technique that he would give the option every semester to his PhD students to accept the question for their qualifying exams yearly (Hoffman, 2009).

Pesale & Hilsenroth (2009) purported that the depth of a session may be related to the therapeutic alliance strength. This seemed that the deeper one is connected to the therapist, the more that person may be able to push, pull, explore, confront, validate, normalize, and assist in the client's awareness and awakening within themselves. This gives a client a greater understanding of the process and belief in their ability to change. Without this ability, therapy would be client talking about things as if the client were not trying to accomplish a goal of change or awareness. In addition it was found that clients rating scale was more accurate than

that of their counselor. Therapists rated depth deeper than clients did and did not have a complete picture of awareness. Clients' rating scales were accurate with their perceived depth of session which was not always the same as the therapist. Thus, ratings showed that the client had a better understanding of what was being accomplished vs. the thought of the therapist (Pesale & Hilsenroth, 2009).

Therapist attachment style has been investigated and there seems to be a connection between the therapist detachment or the devaluing of the relationship with a lower rating with attachment to the therapist (Silberschatz, 2009). This could mean that therapists that value empathic relationships are warm, caring and present genuine concern for their clients may have a better chance at bonding with them. Thus, the main concern could be for a deeper connectedness, better outcomes, and longer client retention regardless of the treatment modality.

If one clinician is more effective in a certain area e.g., psychological testing and its ability to assist in a clinical therapeutic setting, the clinician may consider looking at the testing route as a better fit. If that person is better at therapeutic services, the difference is as if going to a general practitioner vs. a specialist who specifically has an increased likelihood of being successful in their knowledge and ability to treat a specific illness or disorder. Instead of clients going to a one stop shop and having mediocre success (Silberschatz, 2009), the client would have the knowledge who the specific individual was, and what their area of expertise was. There are professionals in the field that either do not like their job, are not good at what they do, or do not truly care about the impact on client's success as this may be reflected by lack of rapport therapeutically (Silberschatz, 2009).

## The Therapeutic Alliance

Since the beginning of psychotherapy, research has discussed the relationship between therapist and client for treatment outcomes. Freud suggested that friendly warm, positive reality based treatment assisted the partnership with the client against the common for which was the neurosis (Horvath & Symonds 1991). Others believed the same, as research, ideas and other theory immersed. Counselors, such as Carl Rogers, coined the term of unconditional positive regard and working alliances, terms that are seen in client centered treatments today that focus sole on the relationship. This “effect” may also be useful in group treatment. The ability to explore or accept new information from the client may depend on how well the facilitator processes information and is accepted with the therapeutic relationship (Cuijpers et al., 2008).

Horvath & Symonds (1991) reported that clients rated outcomes of sessions regarding the relationship were the best indicators compared to therapist or observer. Therefore the client ultimately makes the decision if the therapeutic relationship is intact, if the relationship has been ruptured, or if a therapeutic repair has taken place within a group process that works for the client therapeutically. Horvath & Symonds (1991) suggested that if a client is able to make this connection then information and flexibility derived from the modeling behaviors of the counselor may impact the client to accept slight ruptures. Thus, allowing growth of the relationship, regardless of the modality of group treatment with the internal mechanism of trust which allows the free flow of information and insight for that client (Horvath & Symonds 1991).

Harmon et al. (2007) indicated the challenge for counselors is that they may overestimate their ability, thus affecting further ruptures of the therapeutic alliance causing rifts that damage the relationship that may subsequently go un-repaired. Additional research suggested that poor outcomes may be also associated with counselors that overestimate their connection of the client

counselor relationship, consequently, being incongruent with therapeutic intervention (Horvath & Symonds 1991). Previous research of clients being compliant with treatment could be misunderstood for withdrawal that goes un-repaired, thus, causing a wedge in the relationship with client and therapist impacting treatment in a negative way (Horvath & Symonds, 1991).

### **Alliance Rupture**

Alliance ruptures happen in therapy between the therapist and client. When these ruptures take place and are unaddressed, it could diminish any therapeutic process. Safran, Samstag, Muran, and Stevens (2001) proposed that repairing these ruptures may lead to less strained alliances that may have been detrimental to the process of treatment. Safran et al. (2001) suggested the bond between counselor and client is a special, delicate, relationship if broken it could cause challenges and even an end to treatment. Corrected or repaired ruptures may lead the therapeutic alliance toward a new deeper level of treatment, thus, allowing for more growth and awareness of the client and counselor (Safran et al., 2001).

Because treatment outcomes have many different factors and therapeutic techniques differ from clinician to clinician, it is imperative that all aspects of treatment modality are understood when comparing treatments. The therapeutic alliance has been understood as a major component in the treatment of clients and outcome success in individual treatment (Hoffman, 2009). A significant concern with therapy is when the alliance is ruptured and the connection is broken between counselor and client. Safran & Muran (2006) reported that the therapeutic alliance is the main indicator of treatment outcome and accounts for up to 10% of variance. Due to the fact that a rupture in this alliance is why it impacts treatment outcomes, Safran & Muran (2006) indicated that the unconscious mind is connecting with the counselor's authentic flexibility and a rupture could affect treatments outcomes.

Ruptures may take place in a variety of different ways. Safran & Muran (2006) implied one way may be the client confronting the counselor about concerns in the relationship. Another rupture may be more subtle in that it may look like an alliance contract but actually the client is withdrawing from the conflict and complying with the counselor. In fact the client may be moving away due to the rupture, thus impacting the relationship between client and counselor. Because ruptures are seen as transference-counter transference enactments, there is a percentage of ownership held by both therapist and client (Safran & Muran, 2006).

Safran et al. (2001) also submitted that ruptures and the ability to recover from them may be beneficial in the outcome of treatment as well as the alliance. Without the ability of repair, the relationship may be kept concealed by the client with harboring rumination, thus leading to termination of services due to not feeling understood or respected. The ability to manage a known or unknown ruptured relationship may be difficult for the counselor. Safran et al. (2001), reports that even the seasoned therapist may not be able to perceive or identify such alliance ruptures. When a rupture has taken place, it often ends in termination of treatment, services. Therapists were unaware of the main reasons why clients had ended treatment and clients would not report these factors until treatment was terminated. This evidence suggested that even the skilled professional may not be aware of why a client may terminate the process, the counselor may lack rupture identification, or even misunderstand why a client has left. None of this aids the professional or assists in future ways to repair the alliance due to their being unaware of circumstances (Safran et al., 2001).

Even if the counselor is aware of why the client has had negative feelings, the awareness in itself may be detrimental to the relationship due to rigidity to a specific theoretical model or the defensiveness of the counselor when perceived to be attacked (Safran et al., 2001). Rather

than addressing with motivational interviewing skills or client centered flexibility, the counselor may focus on theoretical training and confront the client when they are not ready to address ruptures in the relationship (Safran et al., 2001). The ability to identify and address the negative feelings, in the relationship is critical to repairing the alliance. If the counselor understands and accepts the client's perception of negative feelings the therapeutic relationship has a good chance of repair. If the counselor does not, and attempts to interpret the transference and is not aware of the weakened alliance, this could then impact on the working alliance, thus ending treatment (Safran et al., 2001).

Safran et al. (2001) suggested that due to the fact that there is so much data that suggested that the therapeutic alliance is such a strong predictor of outcomes, the repair alliance would also be very important to the quality of treatment. Therapists who are able to be flexible, accept the expression of negative feelings toward them and embrace the "tear-and-repair" model of treatment would have the most positive outcomes in treatment (Safran et al., 2001). The ability to manage a session and for it to be about the growth of the client and movement when the client is ready for change is essential for the counselor and client to grow as a team together working through the challenges of the ruptured alliance (Safran et al., 2001).

### **Therapeutic Bond**

Groups vary with age, socio-economic status, ethnicity, and many other factors. When conducting research with adolescent students with learning disabilities, research has detected differences between member-related bonding and therapist-related bonding. The students that were studied had challenges with other behaviors such as social difficulties, impulsive behaviors, hostile and aggressive challenges with relationship difficulties, as well as anxiety and loneliness (Shechtman & Katz, 2009). The research suggested that these students who had high client-

therapist alliance did better than those who did not (Shechtman & Katz, 2009). This was a better indicator than member-related bonding overall due to indicators of therapeutic alliance were minimal attacks and blame, warmth, affirmation as bonding components; while in contrast, perceived harmful treatment was defined as emotionally seductive, rigid, and poor therapist-client match (Shechtman & Katz, 2009).

Shechtman & Katz (2009) suggested that alliance and group therapy research is limited due to the complexity of the group dynamic. The group dynamic consists of the cohesiveness of the group, member relations, and member relations to the facilitator and group climate. Shechtman & Katz (2009) suggested that there are three primary constructs: group climate, group cohesiveness, and alliance which are much more complicated and lack consensus in review of relevant research. The research suggested that the therapeutic bond of therapist and client is still most effective in group settings compared to technique or member alliance. This suggested that without the connectedness to another human being that one may trust, there is no therapy.

The human bond needs to take place to allow the client to let down their guard and allow for information for self-reflection to occur. Shechtman & Katz (2009) suggested if the client had obtained this bond then this is merely a replication to assist the client in their own insight of current challenges. If this bond had never existed, then perhaps the creation of this bond takes the client back to developmental milestones and allows the client in a safe environment to explore their own deficiencies without judgment and allows for change when the client is ready (Shechtman & Katz 2009). The new bond that may occur may be a healthy bond to extract movement in areas that the client is ready to move in while having the support of one whom the client may trust. The bond of trust may be a foreign concept to these clients, but may be readily accepted if the client feels accepted for who they are. Shechtman & Katz (2009) suggested



without this bond, information exchange may take place yet the adolescent client may not be accepting or absorbing the information presented due to a lack of connectedness. This would be as if one turned on their computer but their modem was not connected. Although the information is out there it is unusable due to the disconnection (Shechtman & Katz 2009).

It seems that effective therapists have found a way to find a congruent connection with their clients and their population for clients to pick up on them on a level below the consciousness (Kivlighan, Jr. & Tarrant, 2001). If the therapist is authentic, about what they do and how they truly feel toward someone, maybe this authenticity is understood by the client and welcomed. This then allows for the therapist to disrupt, confront gently, encourage, and assist the client to a new level of awareness (Yalom, 1985).

The relationship as related to change may not be able to be replicated from counselor to counselor. If certain clinicians contain these qualities for change and have better outcomes due to their ability, then cohesiveness with the facilitator is the key (Kivlighan, Jr. & Tarrant, 2001). Research suggested that adolescents with learning disabilities who bonded with the group therapist felt better and group cohesiveness was not as essential as the ability to connect with the facilitator (Shechtman & Katz, 2009). Clients who enter into group treatment have had functioning problems in the world, as they progress in group process these same issues should rear themselves as a form of social microcosm theory (Markin & Kivlighan, Jr., 2008). An example of this is when clients in group start to behave as they would in a dysfunctional way in group, as this behavior is addressed, the encouragement for awareness and enlightenment may assist in producing change (Yalom, 1985).

## Motivational Interviewing

The ability to motivate change is a question that has long been asked by clinicians. Being able to move a client from one place in treatment to a deeper level of insight, awareness, and change, is what counselors, therapists, social workers, and psychologists have been attempting to master for decades. Pesale and Hilsenroth (2009) have suggested that both depth of session and therapeutic alliance strength may be related to each other. They suggested if one has developed a level of trust for the counselor, then and only then might the client be able to be vulnerable to explore real issues. Carl Rogers in his treatment process believed that the counselor (e.g., the client's ability to connect to the counselor) and the client-centered approach were essential to motivating change in session (Miller & Rollnick, 2002).

To motivate change is a difficult task; clients that are concrete or that possess significant ambivalence about change pose a particular dilemma. The cost is change vs. the cost of no change Miller and Rollnick (2002) suggested that this complicated comparison is much more likely than a person having the ability to be 100% motivated to do a change behavior. An example of this might be an alcoholic. The person is sent to counseling due to his third drunk driving offense. On one hand he is motivated by the court system to complete treatment, on the other hand he has been drinking and receiving drunk driving violations for a long period of time and his social network may consist of drinking behaviors. The cost benefit of this is that in order to actually implement change, he will have to change many items of his behavior in order to be successful; however in doing so he may feel the cost is too great, thus staying at the status quo of baseline behavior (Miller & Rollnick, 2002).

Because most people are internally set to do the right thing most of the time, developing change within the discrepancy is a goal of motivational interviewing (Miller & Rollnick, 2002).

Miller and Rollnick (2002) suggested to accomplish this is no small task. The skilled counselor must develop discrepancy between what the client is doing vs. their goal in a form of change talk that consists by discussing:

- Disadvantages of the status quo
- Advantages of change
- Optimism for change
- Intention for change

By addressing these issues the counselor may be able to tap into the client's intrinsic motivation for change, thus, assisting in change talk showing the discrepancy within the ambivalence for the goal compared to the current behavior (Miller & Rollnick, 2002).

To begin to understand this process one must embrace the foundation of motivational interviewing (M.I.) and its spirit of change that is in this style of therapeutic treatment. To embrace M.I., Miller and Rollnick (2002) reported that three main areas are needed for the fundamental approach:

- Collaboration
- Evocation
- Autonomy

Collaboration is the partnership between the counselor and client honoring the client's perspective. Evocation is the collaborative of client and therapist enhancing client's motivation and perception of change. Lastly, autonomy is the client's free will exercised as capacity for self-direction and personal choice to make change or to not change (Miller & Rollnick, 2002).

Evocation is the collaboration between the interviewer and the client, not to be confused with the expert, but as a student would draw information in evocation the interviewer looks for the intrinsic motivation of the client (Miller & Rollnick, 2002).

Autonomy assists the client to obtain free counsel or the independence to take information learned in session or not. This autonomy respects the client's right to choose to take the counseling process or not and for the counselor to respect the decision of the client whilst continuing to motivate internal motivation of the client (Miller & Rollnick, 2002).

Miller and Rollnick (2002) suggested that there are four general principles of motivational interviewing:

- Express empathy.
- Develop discrepancy.
- Roll with resistance.
- Support Self-efficacy.

### **Express Empathy**

The client-centered approach is the basis of motivational interviewing and its spirit of change (Miller & Rollnick, 2002). The origin of client-centered treatment is grounded by the teachings of Carl Rogers and his ability to accept clients for who they were, where they were, and that in itself would constitute the beginning of change (Miller & Rollnick, 2002). Miller and Rollnick (2002) also suggested that with the Rodger's perspective respective listening, being non- critical, non-judgmental, and accepting of where that person is at with change is the fundamental process for change. he client is accepted to be free so that person is free to change when ready (Miller & Rollnick, 2002).

### **Develop Discrepancy**

Discrepancy is the seed to constitute and motivate change within the client's own words, where on one hand the person would like to change a behavior, but the consequence to changing the behavior may have a cost that the client is not ready to pay at this time (Reading, 2010). The direction of development of discrepancy is to resolve the ambivalence and assist the client toward a positive movement showing the difference between where the client is and their particular goals (Miller & Rollnick, 2002). The goal of motivational interviewing and developing discrepancy is to assist the client with internal movement whilst decreasing ambivalence thus increasing the energy of change to overcome stagnant behaviors (Miller & Rollnick, 2002).

### **Roll with Resistance**

To roll with the resistance is to take the path of least desirable situation, having the client argue against the change will cause a rift in the session, thus, possibly pushing the counselor to develop strategies and solutions that the client may argue against (Miller & Rollnick, 2002). Rolling with the resistance, as suggested by Miller and Rollnick (2002), adheres for allowing the client to be who that person is and assisting them to take what they would like and leave the rest, thus inviting change (even moderate) at some level for each problem the way the client seems fit.

### **Support Self-Efficacy**

Self-efficacy is the best indicator of treatment outcome and overall success (Miller & Rollnick, 2002). Clients that are hopeless perceive that all is lost, that there is no chance for change, no future hope, are least likely to benefit from treatment no matter what best techniques and efforts made by the counselor (Miller & Rollnick, 2002). This suggested that the client and counselor would benefit from utilization from the previously mentioned parts of motivational interviewing, thus, increasing client's perception of self-efficaciousness and locus of control.

With that in place, self-efficacy may be increased, thus increasing the client's own ownership of the problem and responsibility for making change (Miller & Rollnick, 2002).

Change and resistance are the opposite sides of the same coin that grapple for control in any given problem (Miller & Rollnick, 2002). This exchange becomes essential when a client presents a problem to the counselor. On one hand they truly do want to change, on the other hand their life has been a certain way and to have that new level one must change to do that but the catch is there is a cost to that level. Changing one's behavior is costly (Reading, 2010). At times, it may be more lucrative to not have change even though there is a desired outcome or level of achievement/success; this is due to the cost of change to possess the desired outcome (Miller & Rollnick, 2002).

Reading (2010) suggested that M.I. is the client-centered way to assist the client in changing when they want to change and when the client can pay the price for change due to their personal readiness. Genden (2010) also suggested that if the client wants to change, they will defend the change if confronted gently about the discrepancy about not changing the behavior. Thus, the client over time will prove to the counselor why change is so important and will ask for the help needed to change to occur. The client will ask for the change? Yes, Genden and Reading (2010) both suggested that over time, confronting discrepancy between goals and current behaviors begins a process such that when a client is ready for the change, the client then will ask for help and want to change. This model looks like a Venn diagram where one has a perceived self, the actual self and the ideal self, and where the client would like to be towards the construct of the ideal self (Reading, 2010).

### **Cognitive -Behavioral Treatment and Psycho-educational Groups**

In the past few decades, research has been done in the area of cognitive-behavioral treatment. It has been compared to medication alone as well as with a medical regimen. Due to the safe nature of CBT, it has been used in multiple settings for many mental health challenges. One area that CBT seems to be successful in is depression and group-psycho-educational treatment (Lewinsohn, Hoberman, & Clarke, 1989). Many studies have shown that CBT has had effectiveness with the treatment of depression. Lewinsohn et al. (1989) suggested that post NIMH collaborative research, CBT has been found to be as effective as anti-depressant medication. Because of the NIMH meta-analysis of 56 studies, it is suggested that CBT in itself, is effective for the treatment of depressed mood. Although there is no magic pill or silver bullet treatment, these data hold hope that clients with clinical depression have viable options to optimal treatment.

The ability to influence thought and change behaviors has been argued for decades. The ability to measure change, manage treatment protocols, and separate therapist factors is difficult when measuring specific treatment regimens. CBT has held as a scientifically evidenced based treatment that has shown effectiveness as to produce change in thoughts and behaviors in group treatment (Kivlighan, Jr. & Tarrent, 2001).

Cognitive behavioral therapy is a dual process that augments cognitions and modifies behavior. A direct and indirect model assists the clinician with modifying cognitions and help changing maladaptive behaviors (Spiegler & Guevremont, 2003). Cognitive-behavior theory is formulated from the teachings of Ellis, Beck, Bandura, Pavlov, Thorndike, Watson, Skinner, Lazarus, not to mention a host of others (Prochaska & Norcross, 2007). Some of the theorists believed that thoughts control behavior, while others believed it was behavior that effected

thoughts, and still others in the field of CBT believed that a combination of the two were at play in reciprocity (Consoli, 2005). Incorporating the cognitive behavioral style, therapy is an example of changing cognitions and modifying behaviors. Although CBT may sound simplistic, it is much more difficult. This is a process in which the corrected social norm behavior can be witnessed and then exhibited by the client (Prochaska & Norcrose 2007).

Changing thought processes, the counselor helps the client understand why a belief may be false or incorrect and assists the client with exploration at times in a deductive fashion, thus increasing awareness of the problematic behavior or cognition (Spiegler & Guevremont, 2003). Spieler and Guevremont (2003) also suggested that the main goal of cognitive behavioral therapy is to focus on the here and now and assist the client with specific problems that may cause diminished functioning or impairment. CBT therapy may be applied to many types of clinical situations. One area is Group therapy as a modality of treatment for depression (Spiegler & Guevremont, 2003).

Psychoeducational groups or skill groups facilitate a function where the facilitator is comparable to one who lectures in a class or instructs as a professor would in college (Barlow, Burlingame, & Fuhriman, 2000). This person will supply the group with information about a specific topic and perhaps will answer questions regarding the topic. The facilitator may assign homework, in session assignments, break out groups, and/or request additional reading materials outside of the group function.

The main premise for the psycho-educational group is to convey information for the participant to use later. It is not the function of the skills group to encourage in depth process of feelings between group members or to do therapy with clients in this setting. A danger of this is that an unskilled facilitator could start a process in which the class would not be able to stop for



questions, thus being detrimental to the client becoming aware of issues and not having any forum for process and discussion feeling worse and disconnected.

One way to prevent this is to set up psycho-educational goals, group norms, and group rules for the specific skills group so the group understands what is to be expected and what the scope of the work may be. Eight to 12 week sessions are common with manualized treatment programs. The ability to convey specific information in a group setting has its advantages compared to a classroom setting.

### **Group Process and Motivational Interviewing**

Barlow, Burlingame, and Fuhriman (2000) suggested the process of group therapy has been studied with empirical evidence for well over 100 years. Group psychotherapy has been compared unsuccessfully to a group of students that are in a psychology class. This notion has been blurred at times believing that they were comparable. On the contrary, change and the process in which change takes place in a process group is a complicated and integrated process which has multiple components of steps and depth (Barlow et al., 2000). Kivlighan, Jr. and Areseneau (2009) suggested that: Self-Disclosure, Vicarious learning, Acceptance, Altruism, Catharsis, Guidance, Hope, Understanding, Interpersonal Interactions, and Universality are the necessary components for change, these factors are the mechanisms of change in a closed process group that holds significance.

Individuals in therapy may be aware of challenging behaviors that need to be confronted, adjusted, and managed more effectively, while those in a class setting may not be aware of any challenging issues, not want to work on any significant problems, nor feel the class setting an appropriate place to discuss personal matters. Process groups that does work on challenging behavior specifically will address clients in group, confront dysfunctional behaviors, and become

a catalyst of change. Both settings address two specific needs and functions but are at times confused as the same. Non-clinicians could easily mistake the two. Clients in class settings may move toward wanting to discuss personal issues, and at times individuals in a group discovery setting will want instruction and concrete direction. These functions go against what each domain is trying to accomplish.

In the spirit of change, motivational group treatment hopes to assist clients with changing behavior and establishing change talk within the client in modifying a behavior (Vader, Walters, Houck, Prabhu, & Field, 2010). Change talk is an important component of group motivational interviewing (MI) when approaching resistant clients that have substance abuse issues. Vader et al. (2010) suggested that when working in a group, motivational interviewing assists the group facilitator in the change process in challenging gently the resistance of the client to motivate the client's own change talk and become more aware of their ambivalence. Motivational interviewing in the substance abuse field suggested that the spirit of MI could be beneficial in a whole host of areas to manage resistant clients and to help aid them in the change process.

Other factors could inhibit the flow of information in the group class setting and in the group process setting. Clients who are not ready for the information that is exposed to them may be very resistant to change which conflicts with their belief system. The American Society for Addictive Medicine (ASAM) has a scale it uses to measure where a person with regards to change. Clients may be in many domains at the same time depending on their challenges. The trans-theoretical stages of change: Pre-contemplation, Contemplation, Preparation, Action, and Maintenance. This scale is a good rating that assists the clinician where a person is, where they would like to be, and find ways of assisting them with movement in areas that are needed vs. areas that are being currently managed or managed (Mee-Lee, 2010).

- ← Pre-Contemplation:
- ← Contemplation:
- ← Preparation:
- ← Action:
- ← Maintenance:

A client may be in aware of issues and challenges with drug addiction and be in NA, have years of being sober and clean, and continue working the program (Maintenance), while feeling bummed out and not having awareness into their personal struggle with depression (Pre-Contemplation). The skilled group facilitator would be able to understand where each client is on each challenge they hold and assist with insight enlightenment (Mee-Lee, 2010).

Group climate has been suggested as an additional factor associated with change for group members. When cohesiveness has taken place, group members feel a warmth, unconditional acceptance and support from other group members. They tend to have better outcomes than groups with less cohesion and less success (Kivlighan, Jr. & Tarrant, 2001). This could mean that when members feel more comfort and support (things that lacked in attachment when growing up), they may feel more open to go deeper, confront more challenging behaviors, and accept more critiquing than when in a less cohesive group, in which they did not feel comfortable.

#### **Advantages of Using CBT and MI Modalities VS. Other Modalities for the Treatment of Individuals with Severe Depression.**

CBT and MI modalities have been used in a variety of settings and have demonstrated usefulness across domains. CBT has been endorsed by the NIMH and has been used for years as a staple in the treatment for mental health as well as whole host of other needed areas (National Institute of Mental Health 2010). Motivational Enhancement Treatment (MET) has been used

recently for co-occurring disorders as well as substance abuse treatments. Some of the specific advantages to using CBT and MET suggest they may be used as umbrella of integrative and eclectic service approaches to assist the counselor in treating individuals with depression and as well as a wide array of co-occurring disorders (Cornelius et al., 2011).

Hundt, Mignogna, Underhill, and Cully (2013) suggested that CBT impacts depression due to skill building and because of the research that has been well-established CBT was chosen as a comparison treatment. Concluding when working with resistant clients motivational enhancement techniques could be of great importance to the counselor in moving the client through barriers and with communicative discourse intensify the therapeutic alliance (Hundt et al., 2013). In addition, David and Szentagotai (2006) indicated that an integrative model of CBT would be better suited to enhance efficaciousness. The rationale for this study of Motivational Interviewing and CBT as a comparison model is to improve the overall treatment outcomes while looking at the therapeutic alliance factors.

## CHAPTER 3

### METHODOLOGY

#### Research Design

A pretest posttest two treatment modalities (Behavioral Manualized Skills Group vs. Motivational Interviewing Process) layout will be used, as depicted below:

R	O <sub>1</sub>	X <sub>1</sub>	O <sub>2</sub>
R	O <sub>3</sub>	X <sub>2</sub>	O <sub>4</sub>

Where R = randomized, O<sub>1</sub> and O<sub>3</sub> = pretests, O<sub>2</sub> and O<sub>4</sub> = posttests, X<sub>1</sub> = behavioral manualized skills intervention, and X<sub>2</sub> = motivational interviewing process intervention.

#### Setting

The study took place at a Community Mental Health Outpatient clinic (CMHC) in the metropolitan area of a large Midwest City. Participants in the study were diagnosed with major depressive disorder and received one of two group therapeutic modalities through random assignment. The two treatment modalities were Evidenced-based Cognitive-Behavioral skills group from Munoz et al. (1993) manualized modality (Callaghan, 2001) and Evidenced-based Motivational Interviewing group process (Arkowitz, Westra, Miller, & Rollnick, 2008). A survey will be used for data collection.

The study setting was at a community mental health outpatient facility in the metropolitan area of a large Midwest City. Research took place in an outpatient health clinic in an adult unit suite group room for those individuals who met the diagnostic criteria for major depressive disorder. Other professionals who provided services to these individuals included psychiatrists, general practitioners (as their primary care doctors off site), nurses, social workers, psychologists, limited and licensed psychotherapists, counselors, and substance abuse counselors as needed.

### **Research Protocols**

Some variables that were controlled for, but not limited to, include:

- Participants diagnosis of depression
- Participants volunteering for study
- Random assignment
- Self-report responses pretest, posttest on premises
- Attendance of sessions reported
- Report of participation
- Facilitator/Instructor self-report

The diagnosis of depression was reviewed in the clients chart before participants qualified to participate in the study (volunteered or recruited). Random assignment was conducted by computer-generated randomization with all participants having equal opportunity to be in either group treatment modality. Survey pre and posttests were monitored by facilitator. Clients who missed more than three out of eight sessions were excluded from the posttest. The facilitator conducted self-report after each session for compliance standard after each treatment session.

### **Population**

The participants for this study consisted of clients already registered in CMHC outpatient services at the clinic. These individuals were receiving outpatient mental health services to manage their mental illness of severe depression. The criteria for participation and inclusion in this study included: (a) individuals who meet the criteria for major depressive disorder (with duration of illness) as suggested by American Psychiatric Association DSM IV-TR (2000) criteria: 296.31-296.34, (b) were a registered client in outpatient CMHC clinic facility, and (c)

volunteered to participate in the study. They also could be receiving additional services such as individual therapy, other group treatment modalities, medication management, case management, nursing, as well as other community supports during treatment. The Community Mental Health Outpatient clinic (CMHC) in the metropolitan area of a large Midwest City requested, and was granted permission from the county to use the facility. The Agency approved the researcher to conduct research after proposed guidelines had been met.

1. After screening participants for diagnosis, the researcher called each prospective client and discussed group treatment, commitment, and basic survey requirement.
2. Participants were given information and if willing to participate, they each signed informed consent form with the ability to continue or discontinue research at any time, confidentiality was discussed, each were given a copy of consent, and any questions were discussed at that time.
3. A maximum of 30 participants were randomly assigned into one of the two treatment modalities to adhere to research experimental clinical design (with at least a minimum of eight people in each group).
4. Participants completed a pretest (Beck II/ WAI; Horvath, 1984) prior to starting their treatment modality.
5. Participants received treatment once a week, for eight weeks, which consisted of an hour and a half of group therapeutic session of either treatment modality (M.I. Process Group or CBT Skills Group).
6. Participants completed the posttest after conclusion of eight weeks of treatment sessions.
7. Participants were given a secure phone number to call if they wanted to find out the

conclusion of the study results.

### **Sampling Plan**

Sampling to obtain participants was conducted at the intake process, during current treatment from case managers, doctors, therapists, nurses, or supervisors, as well as investigator referral of clients with above mentioned depressed mood diagnosis. Prospective participants were screened for depression diagnosis, signed informed consent to do the research, the local county and the agency approved the research to be conducted on site, and the weekly treatment session were facilitated weekly for eight sessions.

Due to the nature of ongoing treatments for clients with mental illness and the likelihood that most have either been in some sort of treatment from either primary care physicians, self-medicating symptomology with alcohol or drugs, current treatment modalities, it was unlikely to find participants who had little or no exposure to treatments. Subsequently, it was important to find participants who were willing to participate in this study without persuasion. Participants both willing and unwilling to respond to pretest and posttest surveys were addressed and explored in the results.

### **Instruments**

#### **Measuring Depression Survey Instrument: The Beck Depression Inventory-II**

The Beck Depression Inventory-II (BDI-II) 21 self-report item scale was used to measure depression in pretest-posttest administration. This scale measured the degree to which participants have or have not changed in their depressed mood before and after treatment modalities (Gallagher, Nies, & Thompson, 1982).

#### **Instrument reliability and validity.**

The Beck Depression Inventory (BDI) has been used for the measurement of depression



in research since 1961 (Gallagher, Nies, & Thompson, 1982). Gallagher et al. (1982) reported that the BDI is a 21-item self-report scale that measures the intensity of symptoms of depression. The 1992 revised edition of the Beck Depression Inventory (BDI-II) was used due to better factor structure, a stronger instrument overall, and a Cronbach alpha (CA) for psychiatric patients at .86 and from non-psychiatric patients at .81 (Dozois, Dobson, & Ahnburg, 1998). Dozois et al. (1998) suggested that the measures for the BDI-II was found to demonstrate high internal consistency (CA = .93 among college students, CA = .92 among outpatients). Due to these findings Dozois et al. (1998) suggested that adequate validity has been met with consistency in the BDI-II, as well as its continuous demonstration with diagnostic discrimination for therapeutic purposes.

### **Measuring Working Alliance Survey Instrument: The Working Alliance Inventory**

The Working Alliance Inventory (WAI), a 36 self-report item scale, was used to measure the quality of working alliance in pretest posttest administration. This inventory measured the degree to which participants have or have not changed in their quality of working alliance before and after treatment modalities (Horvath & Greenburg, 1989).

The Working Alliance Inventory (WAI) was the instrument that was used to measure the quality of the alliance between counselor and client (from the client's perspective; Horvath & Greenburg, 1989). Horvath and Greenburg (1989) suggested that the scale was designed to measure attachment and unconscious projection from the client as a form of transference, and for the counselor to team up with the client as a form of bond assisting the client and identifying self-defeating behaviors.

Pilot studies indicated that when the WAI was tested by 29 graduate students in a counseling psychology program, reliability estimates for the final instrument were CA = .93 for

the client version (Horvath & Greenburg, 1989). Horvath and Greenburg (1989) reported that individual treatment was less than 15 sessions and that counselors reported to have client-centered, analytic, Jungian, behavioral or cognitive backgrounds, and the clients were adults from 19-65.

### **Statistical Hypotheses**

The null hypothesis was that there is no statistically significant difference in depressive symptoms post scores between individuals that attend a motivational interviewing verbal process group and those who attend a cognitive-behavioral skills group, using depressive symptoms pre scores as the covariate.

### **Independent and Dependent Variables**

#### **Independent Variables**

1. Type of Group Treatment: CBT Group vs. M.I. Process Group
2. Individuals who identify or bond with facilitator (bond/like facilitator-instructor) vs. those who do not that identify or bond with facilitator (bond/like facilitator-instructor).

#### **Dependent Variables**

1. Depressive Mood Measure
2. Therapeutic Alliance

#### **Data Analysis**

Participant responses were coded numerically to import them into SPSS for analysis. Descriptive statistics were presented to summarize the data. Demographic characteristics of the sample were reported using frequencies and percentages. The statistical analysis will be conducted using the IBM SPSS Statistic version 19. Statistical analysis of collected data will include multivariate analysis of covariance (MANCOVA).

The nominal alpha level will be set to 0.10. The reason for this higher Type I error rate compared to a conventional level due to the expected small sample of participants and the ability to generate more statistical power to attempt detection of significant differences.

## CHAPTER 4

### RESULTS OF DATA ANALYSIS

The research design, protocols, description of the participants, research questions, statistical hypotheses and analyses, and results are presented in this chapter.

#### **Criteria for Participant Inclusion**

The criteria for participation and inclusion in this study included: (a) individuals who met the criteria for major depressive disorder (with duration of illness) as suggested by DSM IV-TR criteria (296.31-296.34), and (b) the registered clients in an outpatient CMHC clinic facility. Participation was voluntary. Clients may also have received additional services such as individual therapy, other group treatment modalities, medication management, case management, nursing, as well as other community supports during treatment. The Quality Improvement Director at the CMHC requested permission from the county to use the county CMHC consumers for this study, and subsequently gave approval to conduct the research after the guidelines were agreed to as discussed.

After screening participants for diagnosis, each prospective client was called, the persons group treatment, commitment, and the research survey requirements were discussed. Participants were given information about the study, and then signed informed consent forms that indicated their ability to continue or withdraw at any time without prejudice. Confidentiality was discussed at first session, and, each participant was given a copy the of consent form.

The original sample consisted of  $N = 30$  volunteer participants who were randomized into two groups of  $n_1 = n_2 = 15$  each. They were clients who were registered in CMHC outpatient services at the clinic. They received outpatient mental health services at the time of the research to manage their severe mental illness of depression.

Participants administered a pretest (Beck II/ WAI) prior to treatment, and then were given the treatment once a week for eight weeks. The treatment consisted of an hour and a half of group therapeutic session of either treatment modality (MI Process Group or CBT Skills Group). Participants were then given the posttest (Beck II/WAI) after conclusion of eight weeks of treatment sessions. Participants also were given agency phone number to call if they wished to find out conclusion of study results.

### **Demonstration of Baseline Equality**

Of the initial 30 clients who indicated interest in the study, 18 signed and returned consent forms. Of those,  $n_1 = 10$  were in the experimental group treatment and  $n_2 = 8$  were in the comparison group. The 12 remaining participants were randomized, but never attended orientation or first treatment session. To ensure the randomization process was carried out successfully, a series of hypothesis tests were conducted to demonstrate there was baseline equality between the two groups on various demographic variables.

#### **Age**

Descriptive statistics regarding the age of the two groups are compiled in Table 1. All 18 participants indicated their ethnicity as White. A t-test for two independent samples was conducted on the mean age of the participants in the two groups. Levene's test for homogeneity of variance was not statistically significant ( $F = .42, p = .53$ ), indicating that underlying assumption was not violated. The t-test on the difference in mean age was not statistically significant ( $t = -.26, df = 16, p = .80$ ), indicating baseline equality in terms of age at the beginning of the study.

Table 1

*Mean Age for Participants Comparison and Experimental Groups*

Group	Number	Mean	Std. Deviation	Median
Comparison	8	47.75	6.94	47.50
Experimental	10	48.80	9.48	50.00

**Gender**

The breakdown based on gender is compiled in Table 2. A chi-square test of independence indicated the proportion of females to males was not statistically significantly different in the two groups (Chi-squared = 1.8, df = 1, p = .18), also indicating baseline equality at the pretest stage.

Table 2

*Gender Breakdown for Participants in Both Comparison and Experimental Groups*

Group	<u>Gender</u>			
	<u>Female</u>		<u>Male</u>	
	n	%	n	%
Comparison	4	33.3	4	66.7
Experimental	8	66.7	2	33.3
Total	12	100.0	6	100.0

**Marital Status**

The breakdown for marital status is compiled in Table 3. The Chi-square test was not statistically significant ( $\chi^2 [3] = 4.50$ , p = .21), indicating the marital status was of approximately the same proportions for the two groups at the beginning of the study.

Table 3

*Marital Comparison of Both Groups*

	Marital Status									
	Married		Divorced		Separated		Single		Total	
	n	%	n	%	n	%	n	%	N	%
Comparison	1	20.0	3	60.0	0	0.0	4	66.7	8	44.4
Experimental	4	80.0	2	40.0	2	100.0	2	33.3	10	55.6
Total	5	100.0	5	100.0	2	100.0	6	100.0	18	100.0

**Education Level**

The breakdown of education level is compiled in Table 4. The Chi-square test was also not statistically significant ( $\chi^2 [4] = 5.04, p = .28$ ), indicating baseline equality.

Table 4

*Education Comparison of Both Groups*

Group	Educational Level											
	< High School		High school/ GED		Some College		Bachelor Degree		Master Degree		Total	
	n	%	n	%	n	%	n	%	n	%	n	%
Comparison	2	40.0	1	20.0	2	40.0	1	100.0	2	100.0	8	44.4
Experimental	3	60.0	4	80.0	3	60.0	0	0.0	0	0.0	10	55.6
Total	5	100.0	5	100.0	5	100.0	1	100.0	2	100.0	18	100.0

**Employment Status**

The breakdown of employment status of those who responded is compiled in Table 5. The Chi-squared test was not statistically significant ( $\chi^2 [6] = 4.95, p = .55$ ), also indicating baseline equality.

Table 5

*Employment Comparison of Both Groups*

Group	<u>Employment Status</u>							
	<u>Retired</u>		<u>Disabled</u>		<u>Unemployed</u>		<u>Total</u>	
	n	%	n	%	n	%	n	%
Comparison	0	0.0	4	44.4	4	50.0	8	44.4
Experimental	1	100.0	5	55.6	4	50.0	10	55.6
Total	1	100.0	9	100.0	8	100.0	18	100.0

**Instruments**

The *Beck-Depression Inventory* (BDI-II), a 21 item questionnaire, was administered to the 18 participants. For the purposes of reliability estimation, N = 17 responses were considered, because one participant left an item blank. Cronbach alpha, a measure of internal consistency reliability, was  $r = .95$ , which indicates a high level of homogeneity of content on the BDI-II. The reliability was recalculated when the missing value was replaced with the mean response for that participant, but  $r$  remained .95.

The *Form C* (WAI) is a 36-item inventory pertaining to the feelings a client may have about the therapist. For the purposes of reliability, N = 14 participants' responses were considered, because four participants left items blank. Cronbach alpha was .91, which is also a high level of internal consistency. The mean scores were not substituted to recalculate the correlation, because it is a questionable procedure when 22.2% of the respondents leave at least one item blank.

**Statistical Hypotheses**

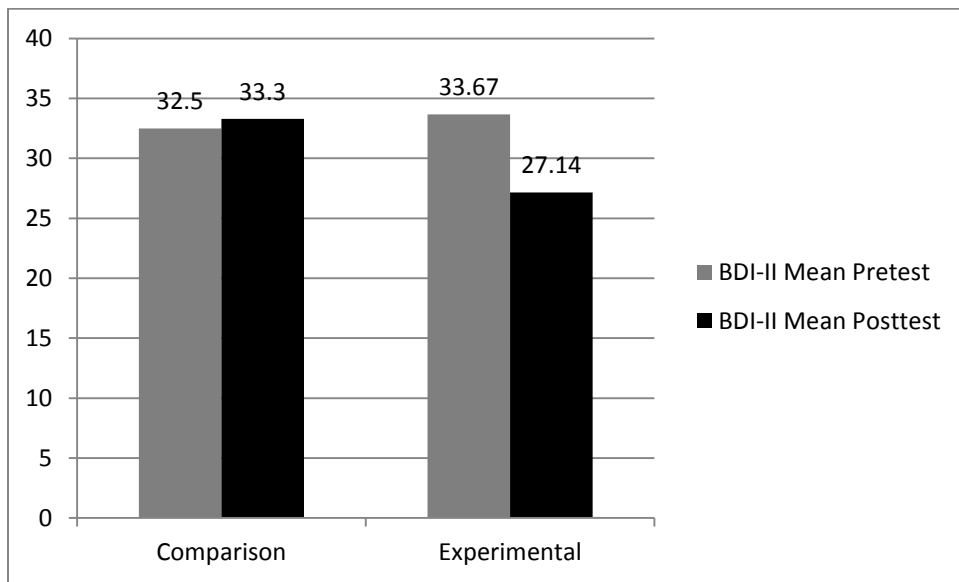
$H_{01}$ : There is no difference in depressive symptoms among individuals who attended motivational interview verbal process group vs. individuals who attended a cognitive-



behavioral skills group.

$H_{a1}$ : There will be a difference in depressive symptoms among individuals who attended motivational interview verbal process group vs. individuals who attended a cognitive-behavioral skills group.

Descriptive statistics are indicated in Figure 1 below. Note that the comparison and experimental groups had similar means at the pretest level, and the comparison group's mean remained approximately the same at the posttest level. However, the experimental group's posttest mean showed some difference on the depression scale.

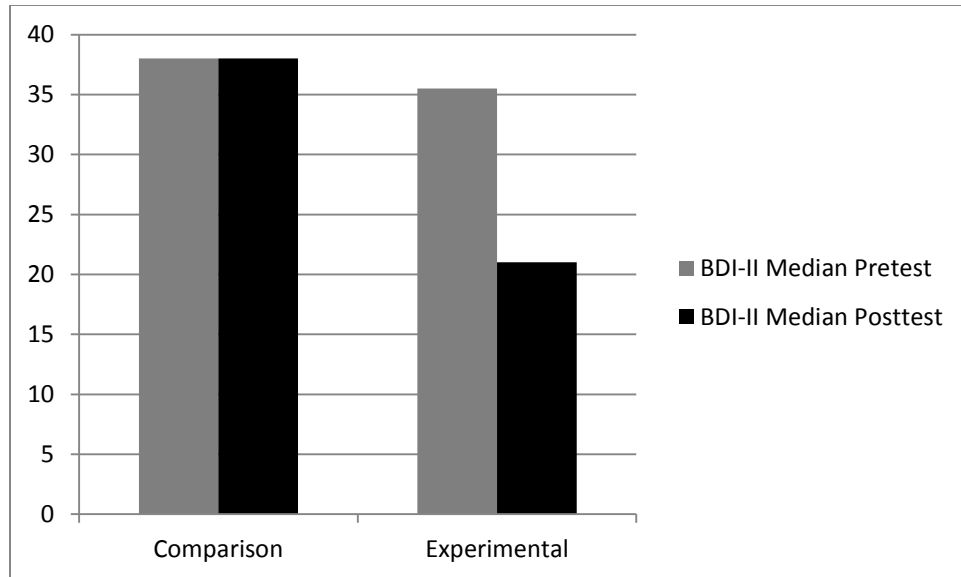


*Figure 1: BDI Mean Pretest and Posttest*

An analysis of covariance (ANCOVA) was conducted on the BDI-II posttest scores, with the pretest scores serving as the covariate and the group membership as the independent variable. Levene's test for homoscedasticity, the underlying assumption of population homogeneity of variance, was not violated,  $F(1, 8) = 4.10$ ,  $p = .08$ . Although visually there was a desired decrease in depression scores, the result was not statistically significant,  $F(1, 7) = 1.30$ ,  $p = .29$ .

The more robust median was also charted, as noted in Figure 2 below. The decrease in

median depression scores is even more marked than was the decrease in means. However, none of the nonparametric two independent samples tests (i.e., Moses, Wilcoxon Rank Sum, Wald-Wolfowitz, Kolmogorov-Smirnov) were statistically significant, again most likely due to the small sample size.



*Figure 2: BDI-II Median Pretest and Posttest*

### Summary of the Beck II Analysis

Hence, the conclusion on the first research hypothesis is that the motivational interviewing process group lowered the depression scores, but not statistically for the given sample size.

$H_{02}$ : There is no difference in symptomology between individuals who develop therapeutic alliance with the facilitator based on those who attended motivational interview verbal process group vs. individuals who attended a cognitive-behavioral skills group.

$H_{a2}$ : There will be a difference in symptomology between individuals who develop therapeutic

alliance with the facilitator based on those who attended motivational interview verbal process group vs. individuals who attended a cognitive-behavioral skills group.

As a first step, a correlation matrix was computed between the three subscales of Task, Bond, and Goal. The results are compiled in Table 6 below. In a well-defined instrument, the subscales should not be highly correlated. Note for this sample, however, the Task and Goal subscales are highly correlated with a significance.

Table 6

*Pearson Product Moment Correlations: Working Alliance Inventory Subscales*

Subscales	Bond		Task		Goal	
	r	p	r	p	r	p
Bond	–					
Task	.04	.90	–			
Goal	-.25	.39	.87	<.01	–	

A series of ANCOVAs were conducted with the posttest subscales (i.e., Bond, Task, & Goal) as the dependent variable, the pretest subscales as the covariate, and the grouping variable being the comparison vs the experimental study condition. None of the ANCOVAs were statistically significant:

Table 7

*Multivariate Analysis of Covariance: Working Alliance Inventory Subscales*

Scale	Subscale	F	df	p
	Bond	0.62	1, 8	.47
	Task	3.00	1, 9	.13
	Goal	2.49	1, 8	.18
WAI Total		0.21	1, 8	.67

Another approach was to analyze the three subscales simultaneously via a multivariate analysis of covariance (MANCOVA). Box's test of sphericity was not statistically significant, indicating this condition was not violated ( $\chi^2 [5] = 8.2, p = .20$ ). Results indicated there was no statistically significant difference when taking all three subscales simultaneously. (See Table 8)

Table 8

*Between Subjects Effects of Working Alliance Inventory Subscales*

	Wilk's Lambda	F	Hypothesis df	Error df	Sig.
Covariates					
Bond	0.14	2.06	3	1	.46
Task	0.01	22.96	3	1	.15
Goal	0.01	31.90	3	1	.13
Group	0.03	9.88	3	1	.23

A series of between-tests were conducted as before, but this time, only on those participants who have a complete pretest and posttest on all three WAI subscales. This further limited the analysis to  $n_1 = 3$  for the comparison group and  $n_2 = 5$  for the experimental group. The means for this reduced sample size are compiled in Table 9.

Table 9

*Descriptive Statistics: Working Alliance Inventory*

WAI Subscale	<u>Group</u>								
	<u>Comparison</u>			<u>Experimental</u>			<u>Total</u>		
	N	M	SD	N	M	SD	N	M	SD
Bond	3	66.00	12.77	5	70.20	7.60	8	68.63	9.18
Task	3	56.67	22.19	5	75.00	9.72	8	68.13	16.87
Goal	3	88.33	27.39	5	66.00	6.20	8	74.38	19.23

Levene's test for equality of error variances was not statistically significant for the Task and Goal subscales ( $F = .45$ ,  $df = 1,6$ ,  $p = .53$  and  $F = 1.37$ ,  $df = 1,6$ ,  $p = .29$ ), respectively. However, the test for this underlying assumption was statistically significant for the Bond subscale ( $F = 9.4$ ,  $df = 1,6$ ,  $p = .02$ ). Therefore, results reported for the WAI Bond subscale must be interpreted with caution. Despite the extremely reduced sample size, there were statistically significant results with nominal alpha set to 0.10, as noted in Table 10 below.

Table 10

*Tests of Between-Subjects Effects of WAI subscales*

Dependent Variable	Sum of Squares	df	Mean Square	F	Sig.	$\eta^2$	Noncent. Parameter	Observed Power <sup>d</sup>
Task	89.03	1	89.03	5.91	.09	.66	5.91	.39
Bond	718.59	1	718.59	27.16	.01	.90	27.16	.92
Goal	764.84	1	764.84	6.59	.08	.69	6.59	.43

Hence, in terms of the second hypothesis, including all of the original small sample there was not statistical significance taken as a series of univariate dependent variables or taken as a single multivariate dependent variable. However, in the latter analysis, the even further reduced sample size of the between groups tests for only those participants who had subscale scores for

all three parts of the WAI indicated that Bond ( $p = .01$ , although note the test for error variances was significant), Goal ( $p = .08$ ), and Task ( $p = .09$ ) were statistically significant. This is evidence that based on this reduced sample size that the motivational interviewing process group had greater working alliance with their therapist than did those who only participated in the cognitive-behavior manualized skills group on those three subscales.

### **Summary of the WAI Analysis**

Initially, there were 30 participants selected. Eighteen completed the consent forms, with 12 deleted prior to beginning the treatment. Univariate pretest-posttest analyses between the comparison and experimental groups indicated there were no statistically significant differences whether conducted by individual subscale or as a total score. The multivariate analysis of analyzing all three subscales simultaneously also resulted in no statistically significant difference. However, in that analysis, it was noticed that only eight participants (comparison group = 3, experimental group = 5) completed the entire pretest and posttest on all three subscales. Hence, analyses were repeated for just those  $N = 8$  participants, and all three subscales, individually, were statistically significant favoring the experimental group.

## CHAPTER 5

### CONCLUSION

Chapter 5 summarizes the results and methodology of the intervention study. Summaries, conclusions, limitations of the study and alternative explanations along with recommendations for future research for group interventions are discussed.

This study was conducted to compare group treatment modalities and explain differences in depressive measures for those with clinical depression. Because depression affects millions across the United States and impacts people throughout their life span, it is essential that treatment modalities are developed to address this issue (Licino & Wong 1999). The purpose of this study was to compare two separate group treatment modalities while examining the therapeutic alliance between the group facilitator and clients receiving treatment. The rationale of this research was to compare motivational enhancement within the process group treatment modality vs. a manualized cognitive-behavioral therapy (CBT) skills group treatment modality and its effectiveness on participant depression while examining therapeutic alliance factors.

The Beck Depression Inventory-II (BDI-II) 21 self-report item scale was used to measure depression in pretest-posttest administration to measure before and after treatment effects (Gallagher, Nies, & Thompson, 1982). The Working Alliance Inventory (WAI), a 36 self-report item scale, was also used in pretest posttest administration to measure the quality of working alliance. This instrument has three subscales, task, bond, and goal, which measure the degree to which participants changed in their quality of working alliance before and after treatment modalities (Horvath & Greenburg, 1989). The group facilitator's influence on therapy outcomes was compared (Cuijpers et al., 2008; Davies et al., 2008). Further, group members' feelings toward the facilitator were measured and outcomes reported (Lipmen et al., 2007).

## Summary

The two modalities that were compared were motivational enhancement group vs. a CBT skills group. This was compared to a didactic class setting where participants are in a psycho-educational format (CBT skills group) unable to respond or interact with a group type enhanced interaction dynamic. Stress as a factor of depression affects old and young alike, but not exactly the same way as Field and Seligman (2004) suggested in managing life's stressors. Children and adolescents experience divorce, death, and physical health issues; problems with bullying behaviors at school, or loss of a natural support as a friend may all impact the young person (Field & Seligman, 2004).

Thirty individuals met the inclusion criteria for the study. Of this number, 18 began the study. However, the final number of individuals who completed study as well as posttest measures was  $n = 3$  for comparison group and  $n = 5$  for experimental group.

The participants in the two groups were compared by age, gender, marital status, education, and employment to determine the statistical equivalence of the two groups. The results of the analysis provided support that no statistically significant differences were found on the demographic indicating baseline equality at the beginning of the study.

## Research Questions and Hypotheses

### Research question 1.

$H_{a1}$ : There will be a difference in decrease of depressive symptoms among individuals that attend motivational interviewing verbal process group vs. those who attend a cognitive-behavioral skills group.

$H_{o1}$ : There is no difference in depressive symptoms among individuals who attended motivational interview verbal process group vs. individuals who attended a



cognitive-behavioral skills group.

A one-way analysis of covariance (ANCOVA) was used to determine if the BDI-II posttest scores differed between the experimental and control groups. The pretest scores for depression were used as the covariate. The results of this analysis were not statistically significant. While the motivational interviewing process group had lower scores than the CBT group, the differences were not statistically significant. Due to the small sample sizes, the nonparametric statistical analyses (i.e., Moses, Wilcoxon Rank Sum, Wald-Wolfowitz, Kolmogorov-Smirnov) were used to compare the two groups. None of the tests for independent samples were statistically significant, resulting in a retention of the null hypotheses.

While the samples may have been too small to obtain statistical significance, the change in depression scores may speak to the efficacy of the treatment modalities. Table 11 presents the cut scores on the BDI-II.

Table 11

Cut Scores for the BDI-II

Scores	Level of Severity
0 to 10	These ups and downs are considered normal
11 to 16	Mild mood disturbance
17 to 20	Borderline clinical depression
21 to 30	Moderate depression
31 to 40	Severe depression
Over 40	Extreme Depression

(Beck, Epstein, Brown, & Steer, 1988).

When comparing the mean difference at posttest on the Beck II, the depression mean for the experimental group changed from 33.67 (severe depression) to 27.14 (moderate depression), indicating that the experimental group had a mean difference change in the anticipated direction.

The comparison group was very similar at the pretest level ( $M = 32.50$ ), compared to the posttest mean of 33.33, indicating no change due to treatment in mean scores. In comparing the experimental group with the control group, the change in scores becomes important. The experimental group decreased their scores from pretest to posttest substantially (mean change of 6.53 points), while the scores from pretest to posttest for the control group increased (mean change of 0.83 points).

The more robust median scores also were examined. The decrease in median depression scores from pretest to posttest was even greater than was the decrease in means for the experimental group. Interestingly, the median scores for the comparison group did not change from pretest to posttest. However, none of the nonparametric tests for two independent samples (i.e., Moses, Wilcoxon Rank Sum, Wald-Wolfowitz, Kolmogorov-Smirnov) were statistically significant, again most likely due to the small sample size.

### **Research Question 2**

$H_{a2}$ : There will be a difference in symptomology between individuals who develop therapeutic alliance with the facilitator based on those who attended motivational interview verbal process group vs. individuals who attended a cognitive-behavioral skills group.

$H_{o2}$ : There is no difference in symptomology among individuals who develop therapeutic alliance with the facilitator based on those who attended motivational interview verbal process group vs. individuals who attended a cognitive-behavioral skills group.

The three subscales compared the WAI simultaneously between the two groups using a multivariate analysis of covariance (MANCOVA). The results indicated there was no statistically

significant difference when taking all three subscales simultaneously. Subsequently, in terms of the second hypothesis, the results were not statistically significantly different. However, the between groups tests for participants who had subscale scores for all three parts of the WAI indicated that the subscale, bond, was statistically significant. The null hypothesis was rejected at this time. In comparing the mean scores for the three subscales on the WAI, the participants in the experimental group had higher scores than the control group.

Although the sample was small, the indicator of how the relationship with the facilitator and client affects overall treatment was enhanced by combining the scales rather than looking at the individual scales. The motivational interviewing process group had a greater working alliance with their therapist that did those who participated in the cognitive-behavior manualized skills group. As a consequence to these findings the null hypothesis was rejected, but with caution, due to the small sample size.

### **Discussion**

Due to the small sample size, discussing some of the results may be difficult. Participants in the experimental group, who may have felt the facilitator understood, heard, or cared for them, had the greatest decrease in depressive symptoms when compared to those in the manualized group who learned specific skills, but may not have felt they were given a voice. This finding may suggest that individuals diagnosed with depression who are given a forum that encourages them to communicate and express themselves could connect better with the facilitator. They may also feel that they were not alone in their challenges with their illness of depression. Those who attended the skills group may have had additional attrition because they did not feel change occurred fast enough and may have not been able to connect with the group members. Cuijpers et al. (2010) suggested that when comparing treatments, all therapeutic modalities seemed to

work no matter what type of therapy was conducted. Because all therapies have been found to be effective to some extent, they have been called Dodo bird studies (outcomes seem to be the same across theoretical approaches) over the last three decades (Cuijpers et al., 2010). Understanding the common factors that have been effective and beneficial within the treatment of depression is important (Laska, Gurman, & Wampold, 2013). The comparison of individual therapies may be applied to group treatment to understand common factors associated with change, healing, and ability to manage mood effectively (Cuijpers et al., 2010).

Research has indicated that therapists who assisted clients with deeper awareness felt understood by therapist (Stiles, Gordon, & Lani, 2002). This research may explain when clients felt understood, a bond occurs that may improve client's depressive symptoms. This connectedness to the therapist may actually be the therapy in itself, depending on level of facilitator bond. As the counselor offers direction and validates the client's feelings, the client reports a deeper depth of the session (Pesale & Hilsenroth, 2009). A deeper level of clinical relationship results when the client is part of the process and is engaged in a relationship with the counselor. This relationship assists in understanding the change process and motivation regarding treatment for depression.

The unique ability of the facilitator to manage group effectively, assist in the flow of change, and use clients' stuck points for a safe learning environment is the tone a good facilitator creates in the group therapeutic process (Kivlighan, Jr. & Tarrent, 2001). This relationship process also could be demonstrated in coaching the military and business environments to motivate change and acceptance. Kivlighan, Jr. and Tarrant (2001) indicated that when a group member has a positive relationship with the group facilitator, positive change for the client can occur to decrease depression. In other domains, if relationship building is a form of leadership,

this cohesion may impact the role of supervisor, both as an authority figure, as well as a colleague and friend assisting in developing an awareness of goals and objectives and decreasing work-related stress and depression.

Pesale and Hilsenroth (2009) stated that the depth of a session may be related to the strength of the therapeutic alliance. This alliance indicates that the deeper that clients are connected to the therapist, the more that they may be able to work through insight awareness and overcome mental obstacles, while increasing their awareness within themselves. The closer the relationship, a client may be able to take more risk, endure more pain, defer more comforts and withstand the uneasiness of change that can influence a client's overall depressed mood. This may explain the closeness and bond inside the human relationship that enables a person to withstand long periods of uncertainties, as well as take risks.

Freud suggested that friendly, warm, positive reality-based treatment assisted the therapist to bond with the client against the enemy of the fear and anxiety (Horvath & Symonds 1991). Counselors, such as Carl Rogers, coined the term of unconditional positive regard and working alliances, terms that are seen in client-centered treatments that focus on the relationship as the treatment (Cuijpers et al., 2008). This effect may also be effective in-group treatment. The ability to explore or accept new information from the client depends on how well the facilitator processes information and is accepted within the therapeutic relationship (Cuijpers et al., 2008). This leadership is not one of power and control, but one of understanding that is linked with client care affecting client's overall well-being.

While allowing growth of the relationship, regardless of the modality of group treatment, the internal mechanism of trust encourages the free flow of information and insight for that person (Horvath & Symonds 1991). This bond speaks to a non-authoritarian horizontal

leadership model of inclusiveness, rather than an older vertical authoritarian model of black and white thinking. This model also treats the human as a person, an integrative part of the process, who work together as a team. When replicated, this model seems to have a strong possibility of cooperation and connectedness toward a common goal of minimizing undo stress, rather than micro-managing power, As a result, depression and anxiety can be decreased among participants.

The group dynamic consisted of the cohesiveness of the group, member relations, and member relations to the facilitator and group climate. Shectman and Katz (2009) suggested that there are three primary constructs: group climate, group cohesiveness, and alliance. A possible explanation for the experimental group success may have been the retention of more group members. Group process therapy compared to a skills group therapy will be difficult to measure due to facilitator factors, group cohesion, and other factors affecting client's depressed mood. Because client perception is the deciding factor in determining the success of treatment, understanding the process of that interpretation is important (Lipman et al., 2007). Retention of experimental group members may have been a result of cohesion within the group thus, solidifying group dynamics and fostering change in depression symptomatology.

Group process interventions have been adjusted, analyzed, and studied to understand what may be effective in the group process treatment (Lipman, 2007). Davies (2008) found that when comparing groups, people in groups who received feedback interventions from therapists showed twice as much improvement when compared to those individuals who did not receive feedback (improvement defined as decreased symptomatology).

The group process depends on group leadership (Corey & Corey, 2006). Therefore, the ability to command a process group with leadership properties and the therapeutic relationship with group members may be the key factors of successful group therapy. Yalom (1995)

suggested that common factors in group therapy include the conditions for catharsis, cohesion, and universality for the group process. When these factors are present, the group process can occur. Because group treatment has been studied for some time, benefits may vary depending on group demographics.

Group treatment gives the investigator a wide range of treatment impact, in a short amount of time due to sheer numbers of people being treatment simultaneously. Comparing group treatments provides researchers and practitioners with the ability to employ resources that may influence client mood effectively in this period of managed care. In addition, evidence-based practices, ability to replicate, and generalizable practices may assist clinicians in the future when designing curriculum for development and delivery of group treatment (Elkin, Parloff, Hadley, & Autry, 1985).

The purpose of this research was to understand some of the characteristics of that change that could help the mental health community understand the modality of group therapy comprehensively and replicate successful group modalities in the therapeutic treatment of depression (Yalom, 1985). Studies with a complex treatment modality compounded with difficult access to this type of population are a continued struggle for this type of research study.

Any interpretations or implications that are inferred from this research should be viewed with caution due to the small sample size. Despite the statistical significance and differences in the findings, additional research with a greater number of participants is needed to validate the interaction the impact of therapeutic modalities for group treatment of depression. Developing evidence-based motivational enhancement modalities to increase efficacy may positively influence outcomes because of the nature of bonding with another human while the group counselor implements other strategies and evidenced based interventions to decrease the

depressive measure.

Previous research indicated the complexities of progress in treatment when clients self-report. However, clients in the present study perceived the most progress when they felt the therapist understood their challenges and helped them develop insight into their issues (Pesale & Hilenroth, 2009). This finding was supported when examining data from the WAI and the connectedness with individuals who attended the experimental group utilizing Motivational Interviewing.

### **Limitations**

This study was associated with several limitations that affected the generalizability to the population of individuals diagnosed with depression. Perhaps the most important limitation was sample size. While the sample initially had 30 participants, by the time the study was started, 12 potential participants had dropped out for a variety of reasons. The 18 remaining participants started the therapy sessions, but during the course of the eight weeks, an additional 10 members (5 from each group) did not complete all sessions or the posttests. Some clients may have dropped out due to increased stress, depressive symptoms, or chronic health. Transportation, inclement weather, family commitments, time commitment, social anxiety, agitation with facilitator or group members, or interest in depression group treatment are some, but not all possible explanations for attrition during the study.

Another limitation was the use of a single agency from which the participants were drawn. The sample was all Caucasian and drawn from similar geographic and socioeconomic areas. A broader sample that included participants from other ethnic and racial groups, as well as from different socioeconomic backgrounds may have resulted in different results.

The timing of the study during the holiday season also may have been a limitation of the



study and also may have contributed to the dropout rate. Participants may have had difficulty in attending the meetings because of other social engagements in November and December. In addition, the weather may have had an effect on attendance. Many people have difficulty in leaving their homes during inclement weather.

### **Implications of the Study**

Therapy is a difficult construct. Group therapy, while more challenging, may affect many consumers and cover a wider base. Understanding that how the client feels toward the facilitator who conducts the treatment is important in the understanding how people receive, process, accept, and implement information as well as how they feel about themselves. Exploring the connectedness that people feel when being cared for with sincerity and respect in the process of being heard and understood may hold key aspects of a therapeutic environment that fosters and encourages change. Group treatment modality research attempts to answer the question of clinical interface and efficaciousness of treatment modalities as well as the human factor.

Because depression is a serious illness that affects a substantial number of people in the world, clinically trained professionals need to understand which treatment modalities can provide assistance in many domains (e.g., education, business, career enhancement, as well as medical and military alike). Similarities in the human connection, respect, and empathy, with genuine Rogerian positive regard is a timeless tool that in conjunction with other techniques and theory can have benefits that extend far beyond the realm of mental health and depression.

### **Recommendations for Further Study**

After careful discussion with members of faculty, this study was a good introduction for future research. However, an experiment of this nature may take require than one semester to understand the implications of group treatment modalities and therapeutic relationships.

Additional studies may include the use of several participant groups to control for the high attrition rate for this population. Using several groups in different locations may also provide results that can be inferred to all people diagnosed with depression.

The study should also be conducted for more than eight weeks. Eight weeks may not be sufficient time to elicit change in a population of individuals diagnosed with depression. Developing group cohesiveness and trust in the facilitator and other members may require additional time.

Consider scheduling group therapy programs during spring and summer months to assure that weather and holiday scheduling does not interfere with the sessions. Being out in good weather may encourage participants to attend, resulting in better and more consistent attendance at therapy sessions.

The study should also be replicated using participants diagnosed with other mental illnesses (e.g., borderline personality disorder, bipolar disorder, etc.) to determine if the treatment modalities are successful with other types of mental disorders.

Research is needed on the types of treatment modalities that work best with individuals diagnosed with different types of mental illnesses. A meta-analysis of previously published studies may be a viable way to compare different types of therapy to determine which provides the best outcomes.

## APPENDIX A

### MOTIVATIONAL INTERVIEWING PROCESS GROUP

The Motivational Interviewing (MI) process group will be divided into 8 sessions 1 ½ hour each once a week. Sessions will be divided into 8-1 ½ hour sessions. Pretest (demographic, Beck-II, and WAI), group rules with introduction of groups members and why they are in treatment. After the end of session 8 clients will be given posttest (Beck-II, and WAI). During the 8 week sessions, MI techniques in the spirit of Motivational Interviewing will be used in a process group format in the treatment of depression.

The MI group process will allow each of the 8- 12 person group to speak about why they are feeling down or depressed and with MI techniques motivate change with clients while understand what stage of change the client is in.

Collaborative working rather than directive with honoring the client's autonomy and self-direction will be the spirit of MI that will be used in processing and interaction within the group dynamic. Some MI techniques will be used over the 8 weeks sessions. OARS: These are client-centered interviewing techniques that are supportive and provide a safe environment in which the client may explore their ambivalence. This process involves open-ended questions that affirm the client's experience reflects and summarizes their feeling, with the proficiency of reflective listening.

Open ended questions will be used so the client may explain their feeling without a dichotomy of forced choice that a yes or a no would entail, allowing the full expression of the feeling. An example might be the group therapist asking a client to "say more about that" when a client is discussing some specific issues that are causing the current depression. "What about your depression makes life difficult for you?" This example allows a client to expand on what

the client feels attributes to the depression and how it is unmanageable. “What concerns might you have regarding your lack of energy and feelings of being overwhelmed?” Another example of allowing the client to self-report more information that the client may not be able to do if a more simplistic question is asked such as: “Are you feeling depressed?” This process should allow group members to support each other, confront discrepancies, express freely, and gain insight as well as identify triggers that are barriers impacting their depression.

The five principles of MI are the ability to express empathy, develop the discrepancy between what the client is thinking/doing compared to where the client would like to be at, avoid arguments, roll with the resistance, and supporting the clients’ self-efficacy. Developing discrepancy is gently confronting the client thoughts or actions as a technique of MI that assists in moving the client through stages of change. Avoiding arguments with the alliance and rolling with the resistance keeps the client in experiencing unconditional positive regard. The group therapist in allowing expression with client-centered understanding self-efficacy, and avoids tears in the relationship while rolling with the client’s ambivalence.

The goal is to motivate clients through stages of change the American Society for Addictive Medicine (ASAM) scale. The scale rates from: Pre-contemplation, Contemplation, Preparation, Action, and Maintenance. This scale aids the group therapist to aid the client where the client would like to be, assist the client in gaining insight into issues, and with MI techniques motivate change through the stages at the clients own pace.

## APPENDIX B

### COGNITIVE BEHAVIORAL MANULIZED GROUP

For the Cognitive Behavioral Group the Munoz manual will be divided into 8 sessions 1 ½ hour each once a week. Sessions will be divided into three modules. Pretest (demographic, Beck-II, and WAI), group rules and thoughts section will be 3 weeks (weeks 1, 2, & 3) of treatment. Activities section will be 2 weeks (weeks 4 & 5) of treatment. Contacts with other people and posttest (Beck-II, and WAI) with group conclusion will be the last 3 weeks (weeks 6, 7, & 8) of treatment.

- 1- How thoughts affect your mood. (4 sections)
- 2- How your activities affect your mood. (4 sections)
- 3- How contacts with other people affect your mood. (4 sections)

The 8-12 person group will be given pretest and group rules at 1<sup>st</sup> session as stated from manual on a separate piece of paper. Group will be given posttest after 8<sup>th</sup> session of treatment.

Week 1: This will begin with clarification of session time and duration, group rules, pretest, instruction of how we think about depression, how thoughts feelings and actions interact as well as the cycle of depression and mood. Worksheet for goals will be given to each group client as well as daily homework mood sheet for self-report. Both will be discussed and explained in group as well as questions that may be asked regarding information regarding depression, worksheet for goals and homework self-report sheet.

Week 2: This will begin with the review of homework and depression, asking what a thought is and discussing, depressed thinking, non-flexible, judgmental, differences between what we do what we are, hope for change and with examples and discussion. Increasing thoughts that

produce a better mood, decreasing thoughts that make you feel bad, Talking back to your thoughts in an A-B-C-D model (Activating event/Belief of thought/Consequence or feeling of thought/Dispute of thought) worksheet will be given. Homework will be discuss and continued with the adding of positive and negative thoughts to compare and contrast with the addition of practicing the ABCD model.

Week 3: This will begin with instruction of review of homework, daily mood scale, and the common thoughts that make us depressed. Practice with the ABCD model with discussion. Homework will be more about your thoughts, ABCD model and daily mood scale.

Week 4: This will begin with review of homework and instruction of how activities affect us, purpose of this module, review of group rules, and our picture of depression and how to treat it. Group will discuss clinical depression, how we understand depression, discussion of pleasurable activities and its impact, discussing the vicious cycle, as well as new homework for listing pleasant activities (handout) as well as mood scale. Clients will track daily activities per day, thoughts, being with people, and actions that affect our mood. Clients will discuss implementing more pleasurable activities, pleasure predicting, making a contract of goals for the day and discussing upcoming homework. Homework will be daily mood scale, keep track of activities on list, making contracts with self (handout) and pleasure predicting.

Week 5: This will begin with review of the homework and discussion of how to create a plan to overcome depression (clear vs. unclear goals), realistic goals with a plan; you can learn to influence your mood with healthy management of reality. In group exercises to understand time, control, as well as perception when we are depressed. Group will discuss of the mental trap,

reality, exercises and the impact on our mood when we feel out of control. Homework with daily activities and mood, plan for the week and goals

Week 6: This will begin with review of the homework and instruction of module how people affect our mood and how to treat depression. The goals will be to make feelings less intense, make depression time shorter, learns ways to prevent depression, and to feel more control in our lives. The group will discuss how thoughts actions and feelings influence each other and how to learn to use your thoughts and actions to have more control over your feelings. Three areas of focus will be: Being alone, Being with others, and Feeling good about what you do in life. Areas of attention in group discussion will be focused on: Thoughts, expectations, behavior, and feelings. Homework will be daily mood scale, weekly activity sheets, contact with people, and the +/- qualifier for the experiences with people.

Week 7: This will begin with review of the homework and instruction of how your thinking affects your mood, your mood affects what you think and do, you can change your thoughts and actions to help yourself overcome feelings of depression. Group will discuss contact with other people and its impact, your thoughts about others, your behavior around others, your feelings around others and after being around others. Homework will be daily mood scale, weekly activity schedule, new contacts with people and +/-, practicing and thing differently about someone outside the group, and write down some problems from which you would like advice from the group.

Week 8: This will begin with review of the homework and discussion why people are important for our mood, rewarding experiences with people, they can support our values, they can provide companionship and stability, and reflect back to us what we see in ourselves that is most important. Compare and contrast relationships to cars and maintenance that is needed. Review of self-assertiveness and conclusion of 8 week session with posttest.

### **GROUND RULES FOR GROUP THERAPY (Taken Directly from Munoz Manual)**

#### COME ON TIME

- \*do not keep others waiting.

#### COME EVERY WEEK

- \*make a commitment to the group.
- \*call the clinic (\*\*\*-\*\*\*\*) if you can't make it.

#### BE SUPPORTIVE TO EACH OTHER

#### BE CONSTRUCTIVE

- \* avoid criticism, give constructive feedback.
- \* help each other find the good side of things.
- \* be caring, thoughtful.
- \* don't put pressure on each other (no "shoulds").

#### EQUAL TIME FOR ALL

- \* give everyone a chance to talk.
- \* one person at a time talks, no side conversations.

#### KEEP IT PRACTICAL

- \*focus on solutions, not on how bad things are.

#### DO THE HOMEWORK!!



\*practice what you learn.

\*these methods can help you control your depression, only if you practice.

#### CONFIDENTIALITY

\*do not discuss personal things with people outside of the group.

\*you can discuss what you are learning about depression with others.

\*do not talk about other people who are in group with you.

#### TELL US IF YOU ARE UNHAPPY!!

\*bring concerns up in the group.

\*we want to work with you.

\*don't stay mad at the group without letting us know.

#### COME BACK TO THE GROUP.

\*don't drop out.

\*let us know if you feel upset or have concerns, we can work things out.

Weekly format from Munoz Manual for 8 week 1 ½ hour sessions

1. How Thoughts Affect Your Mood - Session 1 of 4
2. How Thoughts Affect Your Mood - Session 2 of 4
- How Thoughts Affect Your Mood- Session 3 of 4
3. How Thoughts Affect Your Mood- Session 4 of 4
4. Working With Daily Activities Affect Your Mood - Session 1 of 4
- Working With Daily Activities Affect Your Mood - Session 2 of 4
5. Working With Daily Activities Affect Your Mood - Session 3 of 4
- Working With Daily Activities Affect Your Mood - Session 4 of 4

6. How Contacts With People Affect Your Mood - Session 1 of 4  
How Contacts With People Affect Your Mood - Session 2 of 4
7. How Contacts With People Affect Your Mood - Session 3 of 4
8. How Contacts With People Affect Your Mood - Session 4 of 4

## APPENDIX C

**NOTICE OF FULL BOARD APPROVAL FROM WAYNE STATE UNIVERSITY  
INSTITUTIONAL REVIEW BOARD WITH BEHAVIORAL RESEARCH  
INFORMED CONSENT**

WAYNE STATE  
UNIVERSITY

IRB Administration Office  
87 East Canfield, Second Floor  
Detroit, Michigan 48201  
Phone: (313) 577-1628  
FAX: (313) 993-7122  
<http://irb.wayne.edu>

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NOTICE OF FULL BOARD APPROVAL

To: Kirk Duncan  
College of Education

From: Dr. Scott Mills or designee *S. Mills*  
Chairperson, Behavioral Institutional Review Board (B3)

Date: July 19, 2013

RE: IRB #: 047713B3F

Protocol Title: Process Group vs. Skills Group Modalities in the Treatment of Individuals Diagnosed with Major Depressive Disorder

Funding Source:

Protocol #: 1306011978

Expiration Date: May 15, 2014

Risk Level / Category: Research not involving greater than minimal risk

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The above-referenced protocol and items listed below (if applicable) were **APPROVED** following Full Board Review by the Wayne State University Institutional Review Board (B3) for the period of 07/19/2013 through 05/15/2014. This approval does not replace any departmental or other approvals that may be required.

- Revised Protocol Summary Form (received in the IRB Office 6/15/2013)
- Protocol (received in the IRB Office 4/29/2013)
- Behavioral Research Informed Consent (dated 5/13/2013)
- Data Collection Tools: Duncan's Demographic Questionnaire, Working Alliance Inventory, Beck Depression Inventory, and Group Therapy Manual

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Federal regulations require that all research be reviewed at least annually. You may receive a "Continuation Renewal Reminder" approximately two months prior to the expiration date; however, it is the Principal Investigator's responsibility to obtain review and continued approval **before** the expiration date. Data collected during a period of lapsed approval is unapproved research and can not be reported or published as research data.

All changes or amendments to the above-referenced protocol require review and approval by the IRB **BEFORE** implementation.

Adverse Reactions/Unexpected Events (AR/UE) must be reported on the appropriate form within the timeframe specified in the IRB Administrator Office Policy (<http://www.irb.wayne.edu/policies-human-research.php>).

**NOTE:**

1. Upon notification of an impending regulatory site visit, field notification, and/or external audit, the IRB Administration Office must be contacted immediately.
2. Forms should be downloaded from the IRB website at each visit.

**WAYNE STATE  
UNIVERSITY**

IRB Administration Office  
87 East Canfield, Second Floor  
Detroit, Michigan 48201  
Phone: (313) 577-1628  
FAX: (313) 993-7122  
<http://irb.wayne.edu>

**NOTICE OF FULL BOARD APPROVAL**

**To:** Kirk Duncan  
College of Education

**From:** Dr. Scott Millis or designee *S. Millis, PhD*  
Chairperson, Behavioral Institutional Review Board (B3)

**Date:** July 19, 2013

**RE: IRB #:** 047713B3F

**Protocol Title:** Process Group vs. Skills Group Modalities in the Treatment of Individuals Diagnosed with Major Depressive Disorder

**Funding Source:**

**Protocol #:** 1305011978

**Expiration Date:** May 15, 2014

**Risk Level / Category:** Research not involving greater than minimal risk

**FILE**

The above-referenced protocol and items listed below (if applicable) were **APPROVED** following *Full Board Review* by the Wayne State University Institutional Review Board (B3) for the period of 07/19/2013 through 05/15/2014. This approval does not replace any departmental or other approvals that may be required.

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1. Upon notification of an impending regulatory site visit, hold notification, and/or external audit the IRB Administration Office must be contacted immediately.
2. Forms should be downloaded from the IRB website at each use.

PROCESS GROUP VS. SKILLS GROUP MODALITIES IN THE TREATMENT OF  
INDIVIDUALS DIAGNOSED WITH MAJOR DEPRESSIVE DISORDER

**Behavioral Research Informed Consent**

Title of Study:

PROCESS GROUP

VS.

SKILLS GROUP MODALITIES

IN THE TREATMENT OF INDIVIDUALS DIAGNOSED WITH MAJOR  
DEPRESSIVE DISORDER

Principal Investigator (PI): Kirk David Duncan MS MA LLP CAADC  
Counseling Education  
734-785-7705 ext. 7278

**Purpose**

You are being asked to be in a research study that compares different ways to treat individuals with your diagnosis. This study is being conducted at The Guidance Center Southgate MI. The estimated number of study participants to be enrolled at The Guidance Center is 16-24. **Please read this form and ask any questions you may have before agreeing to be in the study.**

This research study is designed to measure the outcomes of two different approaches to group treatment. We are trying to learn which approach will have the most beneficial impact on participants' symptoms. This is an eight week program that will meet once a week for eight weeks. The group will be about 1 ½ hrs long. At the beginning of the treatment there will be a couple surveys and one at the end.

**Study Procedures**

If you agree to take part in this research study, you will be assigned to one of two approaches for treating individuals with your diagnosis. You are asked to be on time, attend the group once a week for eight weeks, and complete the surveys regarding the treatment. At the beginning of the treatment session one please allow for more time as there will be a couple forms and surveys to complete and one at the end. The group will be about 1 ½ hrs long per session plus additional time needed to fill out forms and surveys from session 1. The last session will be just a bit longer due to the last surveys.

1. You are being asked to be in a research study of depression because you meet criteria for the diagnosis. This study is being conducted by a clinician who is a student at Wayne State University and the treatment will be conducted here at The Guidance Center. The estimated number of study participants to be enrolled at Wayne State University study here is 16 being divided into two therapy treatment groups.

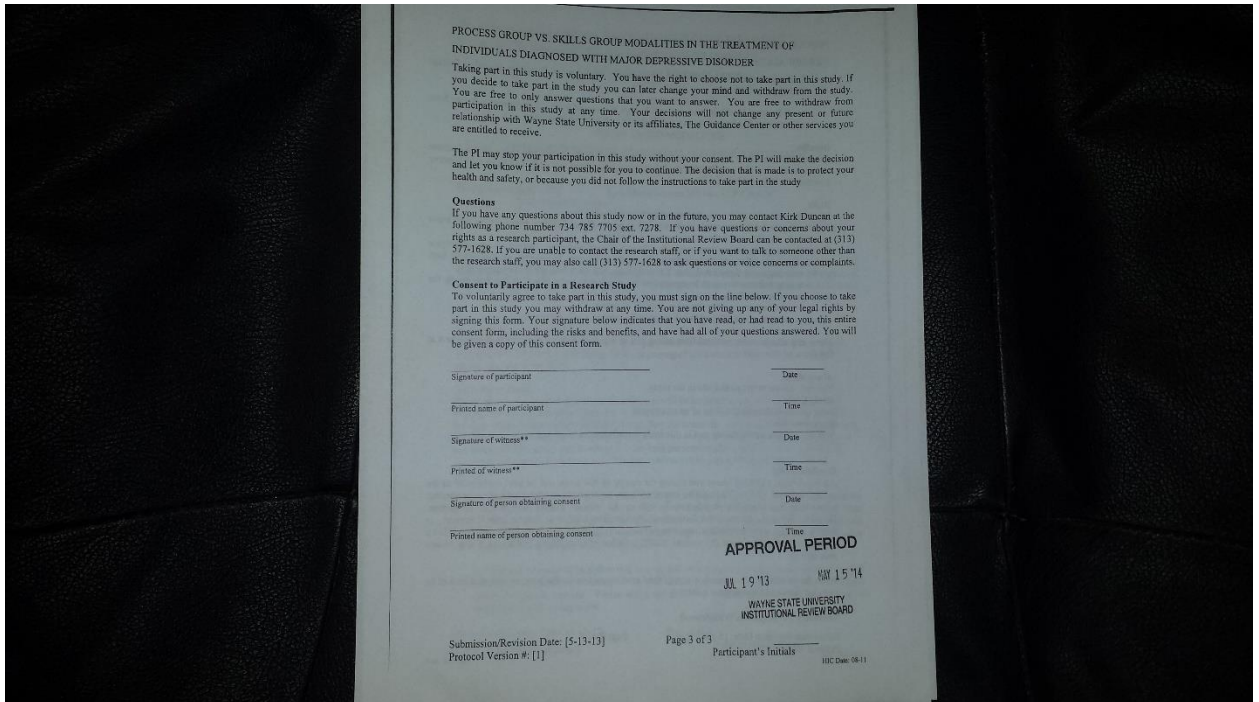
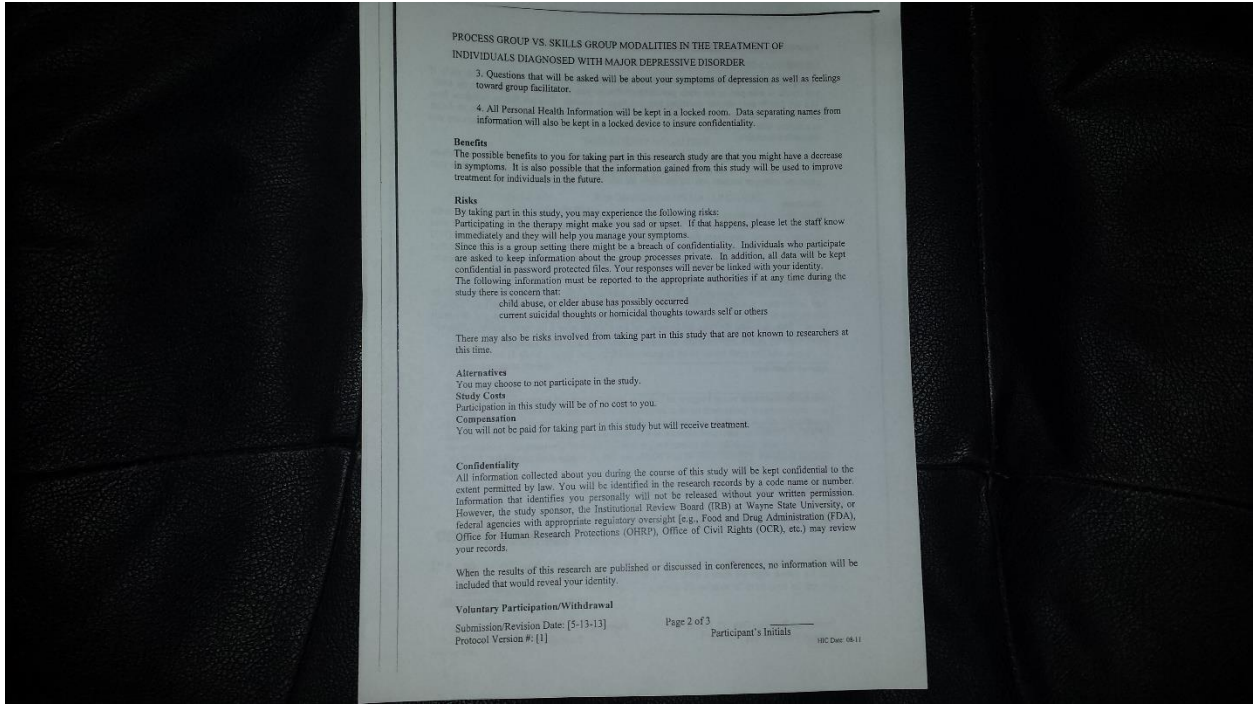
2. You will be asked to complete two surveys before the eight week treatment and two surveys after the conclusion of treatment. You will attend once a week for eight weeks, a 1 ½ hour group therapeutic session. Please allow for about 20 minutes of extra time on day one of treatment as well as day eight.

Submission/Revision Date: [5-13-13]  
Protocol Version #: [1]

Page 1 of 3

Participant's Initials \_\_\_\_\_

IBC DWR 08-11



**APPENDIX D****LIMITED COPYRIGHT PERMISSION TO USE WAI****AND PERMISSION TO USE BECK II**

SIMON FRASER UNIVERSITY  
THINKING OF THE WORLD

Mr. Kirk Duncan  
Counseling Education  
Wayne State University  
314 E. 12 Mile RD  
Royal Oak MI  
48073  
The United States of America

May 23, 2012

LIMITED COPYRIGHT LICENSE (ELECTRONIC) # 2012235.51

Dear Mr. Kirk D. Duncan MS MA LLP CAADC Duncan

You have permission to use the Working Alliance Inventory (WAI) for the investigation: "Process Group Vs. Skills Group Modalities In The Treatment Of Individuals Diagnosed With Major Depressive Disorder"

This limited copyright release extends to all forms of the WAI for which I hold copyright privileges, but limited to use of the inventory for not-for-profit research, and does not include the right to publish or distribute the instrument(s) in any form.

I would appreciate if you shared the results of your research with me when your work is completed so I may share this information with other researchers who might wish to use the WAI. If I can be of further help, do not hesitate to contact me.

A handwritten signature in black ink, appearing to read 'Adam Horvath'.

Dr. Adam O. Horvath  
Professor  
Faculty of Education and  
Department of Psychology  
Ph# (778) 782-3624  
Fax: (778) 782-3203  
e-mail: horvath@sfu.ca  
Internet: <http://www.educ.sfu.ca/alliance/allianceA>

On Thursday, May 24, 2012 9:54 AM, HAS-SAT Shared Dist. and Licensing On Thursday, May 24, 2012 9:54 AM, HAS-SAT Shared Dist. and Licensing <[pas.Licensing@pearson.com](mailto:pas.Licensing@pearson.com)>wrote:

Dear Mr. Duncan,

Permission to use a Pearson assessment is inherent in the qualified purchase of the test materials in sufficient quantity to meet your research goals. In any event, Pearson has no objection to you using the Beck Depression Inventory-II (BDI-II) and **you may take this email response as formal permission from Pearson to use the test in its as-published formats in your student research.**

The BDI-II is a sensitive clinical assessment that requires a high degree (B Level, Q1 or Q2) to purchase, administer, score and interpret. It also represents Pearson copyright and trade secret material. As such, Pearson **does not permit photocopying or other reproduction of our test materials by any means and for any purpose when they are readily available in our catalog. Consequently, you may not simply reproduce the BDI-II test forms.**

To qualify for and purchase a BDI-II Kit or other test materials, please visit the following link to the product page in our online catalog:

<http://psychcorp.pearsonassessments.com/HAIWEB/Cultures/en-us/Productdetail.htm?Pid=015-8018-370&Mode=summary>

I recommend you simply purchase one BDI-II Kit – which includes the Manual and 25 Record Forms/Questionnaires – enough to administer the BDI-II to up to 25 test subjects. The BDI-II Kit is just 120.00 plus shipping/handling and any applicable sales taxes. I further recommend you take advantage of Pearson's Research Assistance Program (RAP) that will, if approved, allow a 50% discount on your test material purchases. If you do not yet meet the purchase qualifications, your professor or faculty supervisor may assist you by lending their qualifications.

The computer link to the Research Assistance Program is:

<https://psychcorp.pearsonassessments.com/pai/ca/support/rap/ResearchAssistanceProgram.htm>

Finally, because of test security concerns, permission is not granted for appending tests to theses, dissertations, or reports of any kind. You may not include any actual assessment test items, discussion of any actual test items or inclusion of the actual assessment product in the body or appendix of your dissertation or thesis. You are only permitted to describe the test, its function and how it is administered and discuss the fact that you used the Test, your analysis, summary statistics, and the results.

That said, we have prepared a couple of sample test items that you may include in your dissertation results and I have attached them herein for your possible use.

Regards,

**William H. Schryver**

Senior Licensing Specialist

Clinical Assessment

Pearson

19500 Bulverde Road



San Antonio, TX 78259  
T: [\(210\) 339-5345](tel:(210)339-5345)  
F: [\(210\) 339-5059](tel:(210)339-5059)  
E: [pas.licensing@pearson.com](mailto:pas.licensing@pearson.com)

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**APPENDIX E**

**RESEARCH STUDY PROPOSAL**

**The Guidance Center**

**Quality Improvement/Client Research Proposal**

**PROCESS GROUP VS. SKILLS GROUP MODALITIES**

**IN THE TREATMENT OF INDIVIDUALS DIAGNOSED WITH MAJOR**

**DEPRESSIVE DISORDER**

**Kirk D. Duncan MS MA LLP CAADC**

8.28.2013

This study is required research for the completion of doctoral dissertation in counseling. The purpose of this study is to understand and measure the impact of a motivational interviewing process group vs. a cognitive behavioral skills group, while measuring therapeutic alliance factors on the impact of depression. Process Group: athealth (2010) defines a process group: "A process group typically consists of eight individuals who agree to meet regularly for a specific period of time, depending on the kind of group being hosted. Rules and expectations are agreed upon prior to the beginning of the group, and maybe discussed by members during the group if and when the need arises. A common purpose among those individuals who join a process group is in their wanting to find out more about who they are and, what it is perhaps they would like to see change with-in their personal lives and in their relationships with others. In essence, a process group is expected to increase emotional awareness and relational understanding between self and others. The work of putting emotional experiences into words can give an individual the cognitive and emotional tools that lend to self-learning, insight and the potential to function with an increased sense of freedom, and with increased sophistication."

Cognitive-behavioral therapy: (CBT) medical-dictionary.thefreedictionary.com (2012) reported "is an action-oriented form of psychosocial therapy that assumes that maladaptive, or faulty, thinking patterns cause maladaptive behavior and "negative" emotions. (Maladaptive behavior is behavior that is counter-productive or interferes with everyday living.) The treatment focuses on changing an individual's thoughts (cognitive patterns) in order to change his or her behavior and emotional state. Skills Groups are defined as groups that offer a supportive and structured environment in which to acquire new skills or focus on task accomplishment (Brown, 1998). The study seeks knowledge comparing the two modalities where individuals have the ability to bond with the group facilitator as well as other group members as compared to a class setting where participants are in a skills class format."

The therapeutic alliance: amhd.org/About/ClinicalOperations/MISA/Training (2012) suggests "is a more encompassing term for therapy that emphasizes the collaborative nature of

the partnership between counselor and client. This partnership incorporates client preferences and goals into treatment and outlines methods for accomplishing those goals. The therapeutic alliance is an alliance based on listening to the client without being judgmental or giving unwarranted advice. Some research indicates that perhaps the therapeutic alliance is the overall treatment. Without a positive working relationship between counselor and client, there is unlikely to be any treatment progress or significant change.”

The goal of the principal investigator (PI) in this research is to determine which of the two comparison groups works most effectively with a population of persons who present with depressed mood symptomology. The target goal of the research is to understand more comprehensively what dynamics take place in the group setting, how change occurs, as well as client’s perceived experience of the manualized CBT skills group/group process experience. The final factor that will be explored is therapeutic alliance and its impact on depressive symptomology e.g., the relationship between client and therapist.

A. 1. The PI is a therapist who has facilitated group treatment for over five years with conducting four groups per week in both Wayne and Macomb counties. Case managers will be the primary source of recruitment as they normally refer clients to group treatment modalities. They will ensure that clients of TGC have the correct diagnosis and this will be confirmed by PI. Individuals will be referred to participate by other clinical staff such as psychiatrists, supervisors, and nursing staff who work at TGC. They will be then referred to PI. PI will discuss time commitment and basic requirement for the study with participants on the phone. PI will also discuss with these persons that if they are interested in the study we will meet at TGC facility to discuss and obtain consent to treatment prior to treatment. After consent has been established random assignment will take place into one of the two groups.

2. The benefit: specific immediate benefit is to the clients receiving treatment. The secondary benefit is to see which modalities work best to assist client’s growth and health over time. The implication is for future treatment and measuring what would work best and why in the client’s point of view regarding treatment modalities.

3. The benefits far outweigh the risks. Clients who receive either modality have either had some sort of therapeutic/medication intervention in the past. Thus, clients have recognition of what treatment is and are here at TGC seeking assistance and wanting help. Some risks may include emotional distress, anxiety, depression, and anger. These risks are not different than other clients receiving therapeutic modalities at the agency during the same time frame.

4. The Guidance Center is the sponsor of the research site and may benefit from the knowledge and understanding what types of groups benefit clients, the process of change, and best therapeutic practice when assisting clients in healthy change.

5. Each perspective participant will be told:

“You are being asked to be in a research study of depression because you meet criteria for the diagnosis. This study is being conducted by me, a clinician who is also a student at Wayne State University and the group treatment will be conducted here at The Guidance Center. The estimated number of study population to be enrolled here is 16-24 participants being divided into two therapy treatment groups. Please read this form and ask any questions you may have before

agreeing to be in the study.”

6. The participants for this study consisted of clients already registered at TGC CMHC outpatient services at the clinic. These individuals receive outpatient mental health services to manage their severe mental illness of depression. The criteria for participation and inclusion in this study included:

- 1) Individuals that meet criteria for major depressive disorder (with duration of illness) as suggested by DSM IV-TR criteria: 296.31-296.34,
- 2) are a registered client in outpatient CMHC clinic facility, and
- 3) participate voluntarily. They may also be receiving additional services such as individual therapy, other group treatment modalities, medication management, case management, nursing, as well as other community supports during treatment. The Guidance Center will request permission from Wayne County to utilize county consumers for proposed research (after proposal defense). Clinic will then approve the researcher to conduct research after proposed guidelines have been discussed.

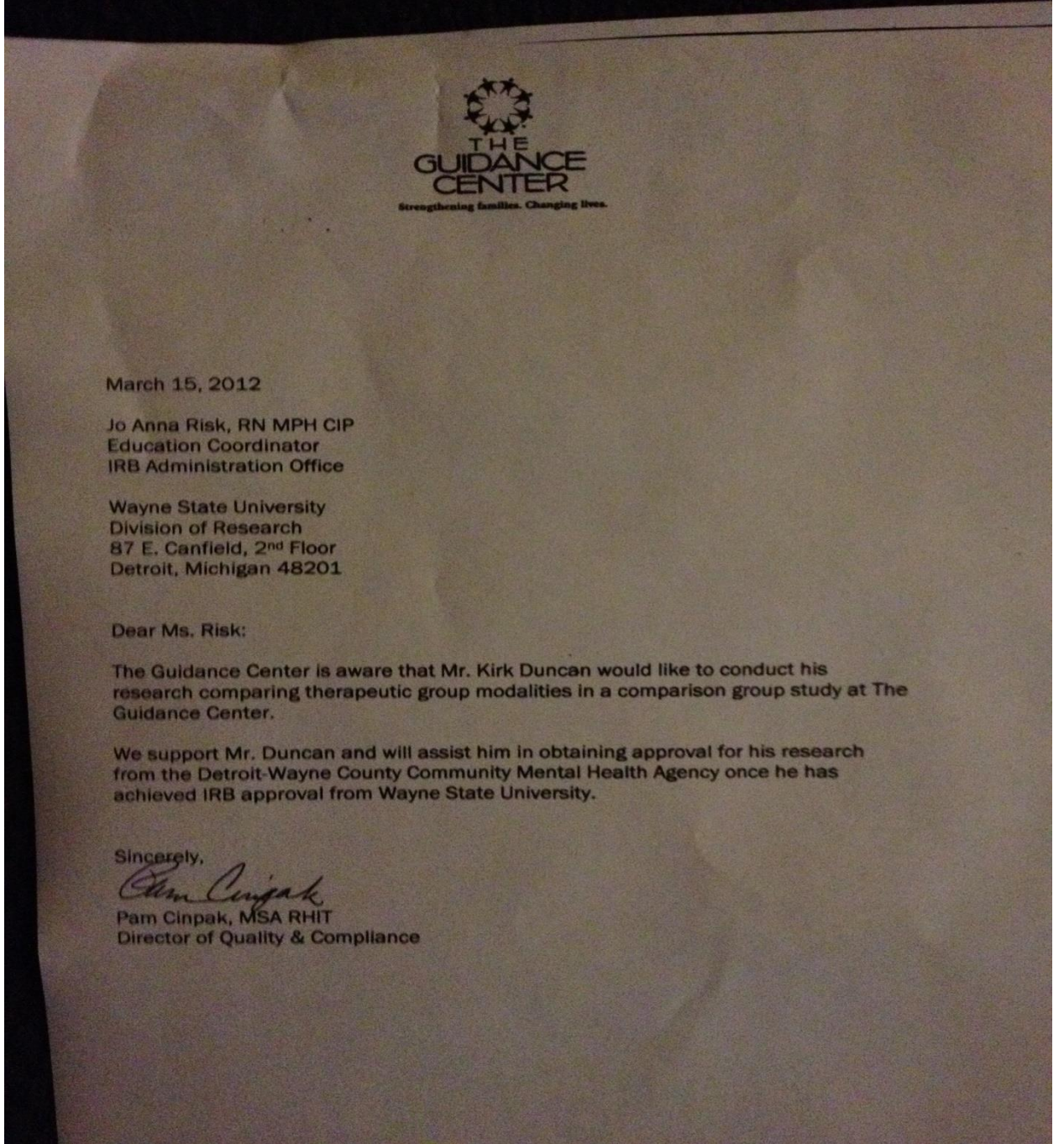
Participants may also be receiving additional services such as individual therapy, other group treatment modalities, medication management, case management, nursing, as well as other community supports during treatment. The Guidance Center will request permission from Wayne County to utilize county consumers for proposed research (after proposal defense). Clinic will then approve the researcher to conduct research after proposed guidelines have been discussed. After screening participants for diagnosis, the researcher will call each perspective client and discuss group treatment, commitment, and basic survey requirement.

Participants will be given information and, if willing to participate, will sign informed consent with the ability to continue or discontinue research at any time, discuss confidentiality, given a copy of consent, and discuss any questions they may have at this time. Sixteen participants will be randomly assigned into one of the two treatment modalities to adhere to research experimental clinical design (8 persons in each group). Participants will be given a pretest (Beck II/ WAI; Horvath, 1984) prior to treatment modality. Participants will be given the treatment once a week, for eight weeks; this consists of an hour and a half of group therapeutic session of either treatment modality (M.I. Process Group or CBT Skills Group).

Participants will be given the posttest after conclusion of eight weeks of treatment sessions. Participants will be given a secure phone number to call if they wish to find out conclusion of study results. Clients that feel additional distress will be referred to case manager or therapist in case of crisis. If neither is available a crisis number and FQHC pamphlet will be provided for additional care.

APPENDIX F

APPROVAL BY THE GUIDANCE CENTER FOR RESEARCH STUDY



## APPENDIX G

## INSTRUMENTS

## THE BECK DEPRESSION INVENTORY-II

<b>BDI-II</b>		Date: _____
Name: _____		Marital Status: _____
Occupation: _____		Age: _____ Sex: _____
Education: _____		
<p><b>Instructions:</b> This questionnaire consists of 21 groups of statements. Please read each group of statements carefully, and then pick out the <b>one statement</b> in each group that best describes the way you have been feeling during the <b>past two weeks, including today</b>. Circle the number beside the statement you have picked. If several statements in the group seem to apply equally well, circle the highest number for that group. Be sure that you do not choose more than one statement for any group, including Item 16 (Changes in Sleeping Pattern) or Item 18 (Changes in Appetite).</p>		
<p><b>1. Sadness</b></p> <p>0 I do not feel sad.</p> <p>1 I feel sad much of the time.</p> <p>2 I am sad all the time.</p> <p>3 I am so sad or unhappy that I can't stand it.</p> <p><b>2. Pessimism</b></p> <p>0 I am not discouraged about my future.</p> <p>1 I feel more discouraged about my future than I used to be.</p> <p>2 I do not expect things to work out for me.</p> <p>3 I feel my future is hopeless and will only get worse.</p> <p><b>3. Past Failure</b></p> <p>0 I do not feel like a failure.</p> <p>1 I have failed more than I should have.</p> <p>2 As I look back, I see a lot of failures.</p> <p>3 I feel I am a total failure as a person.</p> <p><b>4. Loss of Pleasure</b></p> <p>0 I get as much pleasure as I ever did from the things I enjoy.</p> <p>1 I don't enjoy things as much as I used to.</p> <p>2 I get very little pleasure from the things I used to enjoy.</p> <p>3 I can't get any pleasure from the things I used to enjoy.</p> <p><b>5. Guilty Feelings</b></p> <p>0 I don't feel particularly guilty.</p> <p>1 I feel guilty over many things I have done or should have done.</p> <p>2 I feel quite guilty most of the time.</p> <p>3 I feel guilty all of the time.</p>	<p><b>6. Punishment Feelings</b></p> <p>0 I don't feel I am being punished.</p> <p>1 I feel I may be punished.</p> <p>2 I expect to be punished.</p> <p>3 I feel I am being punished.</p> <p><b>7. Self-Dislike</b></p> <p>0 I feel the same about myself as ever.</p> <p>1 I have lost confidence in myself.</p> <p>2 I am disappointed in myself.</p> <p>3 I dislike myself.</p> <p><b>8. Self-Criticalness</b></p> <p>0 I don't criticize or blame myself more than usual.</p> <p>1 I am more critical of myself than I used to be.</p> <p>2 I criticize myself for all of my faults.</p> <p>3 I blame myself for everything bad that happens.</p> <p><b>9. Suicidal Thoughts or Wishes</b></p> <p>0 I don't have any thoughts of killing myself.</p> <p>1 I have thoughts of killing myself, but I would not carry them out.</p> <p>2 I would like to kill myself.</p> <p>3 I would kill myself if I had the chance.</p> <p><b>10. Crying</b></p> <p>0 I don't cry any more than I used to.</p> <p>1 I cry more than I used to.</p> <p>2 I cry over every little thing.</p> <p>3 I feel like crying, but I can't.</p>	
Subtotal Page 1		<b>Continued on Back</b>
<b>PEARSON</b>		<b>PsychCorp</b>
<small>Copyright © 1996 Aaron T. Beck. All rights reserved.          Pearson Executive Office, 5601 Green Valley Drive, Bloomington, MN 55437          800-637-7221 • www.pearson.com</small>		

**11. Agitation**

- 0 I am no more restless or wound up than usual.
- 1 I feel more restless or wound up than usual.
- 2 I am so restless or agitated that it's hard to stay still.
- 3 I am so restless or agitated that I have to keep moving or doing something.

**12. Loss of Interest**

- 0 I have not lost interest in other people or activities.
- 1 I am less interested in other people or things than before.
- 2 I have lost most of my interest in other people or things.
- 3 It's hard to get interested in anything.

**13. Indecisiveness**

- 0 I make decisions about as well as ever.
- 1 I find it more difficult to make decisions than usual.
- 2 I have much greater difficulty in making decisions than I used to.
- 3 I have trouble making any decisions.

**14. Worthlessness**

- 0 I do not feel I am worthless.
- 1 I don't consider myself as worthwhile and useful as I used to.
- 2 I feel more worthless as compared to other people.
- 3 I feel utterly worthless.

**15. Loss of Energy**

- 0 I have as much energy as ever.
- 1 I have less energy than I used to have.
- 2 I don't have enough energy to do very much.
- 3 I don't have enough energy to do anything.

**16. Changes in Sleeping Pattern**

- 0 I have not experienced any change in my sleeping pattern.
- 1a I sleep somewhat more than usual.
- 1b I sleep somewhat less than usual.
- 2a I sleep a lot more than usual.
- 2b I sleep a lot less than usual.
- 3a I sleep most of the day.
- 3b I wake up 1-2 hours early and can't get back to sleep.

**17. Irritability**

- 0 I am no more irritable than usual.
- 1 I am more irritable than usual.
- 2 I am much more irritable than usual.
- 3 I am irritable all the time.

**18. Changes in Appetite**

- 0 I have not experienced any change in my appetite.
- 1a My appetite is somewhat less than usual.
- 1b My appetite is somewhat greater than usual.
- 2a My appetite is much less than before.
- 2b My appetite is much greater than usual.
- 3a I have no appetite at all.
- 3b I crave food all the time.

**19. Concentration Difficulty**

- 0 I can concentrate as well as ever.
- 1 I can't concentrate as well as usual.
- 2 It's hard to keep my mind on anything for very long.
- 3 I find I can't concentrate on anything.

**20. Tiredness or Fatigue**

- 0 I am no more tired or fatigued than usual.
- 1 I get more tired or fatigued more easily than usual.
- 2 I am too tired or fatigued to do a lot of the things I used to do.
- 3 I am too tired or fatigued to do most of the things I used to do.

**21. Loss of Interest in Sex**

- 0 I have not noticed any recent change in my interest in sex.
- 1 I am less interested in sex than I used to be.
- 2 I am much less interested in sex now.
- 3 I have lost interest in sex completely.

Subtotal Page 2

Subtotal Page 1

Total Score

NOTICE: This form is printed with blue and black ink. If your copy does not appear this way, it has been photocopied in violation of copyright laws.

## WORKING ALLIANCE INVENTORY

### Working Alliance Inventory

Form C

**Instructions**

On the following pages there are sentences that describe some of the different ways a person might think or feel about his or her therapist (counsellor). As you read the sentences mentally insert the name of your therapist (counsellor) in place of \_\_\_\_\_ in the text.

Below each statement inside there is a seven point scale:

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always

If the statement describes the way you *always* feel (or think) circle the number 7; if it *never* applies to you circle the number 1. Use the numbers in between to describe the variations between these extremes.

This questionnaire is **CONFIDENTIAL** neither your therapist nor the agency will see your answers.

Work fast, your first impressions are the ones we would like to see.  
(PLEASE DON'T FORGET TO RESPOND TO **EVERY** ITEM.)

Thank you for your cooperation.

© A. O. Horvath, 1981, 1984.

1. I feel uncomfortable with _____	1 Never	2 Rarely	3 Occasionally	4 Sometimes	5 Often	6 Very Often	7 Always
2. _____ and I agree about the things I will need to do in therapy to help improve my situation	1 Never	2 Rarely	3 Occasionally	4 Sometimes	5 Often	6 Very Often	7 Always
3. I am worried about the outcome of these sessions.	1 Never	2 Rarely	3 Occasionally	4 Sometimes	5 Often	6 Very Often	7 Always
4. What I am doing in therapy gives me new ways of looking at my problem.	1 Never	2 Rarely	3 Occasionally	4 Sometimes	5 Often	6 Very Often	7 Always
5. _____ and I understand each other.	1 Never	2 Rarely	3 Occasionally	4 Sometimes	5 Often	6 Very Often	7 Always
6. _____ perceives accurately what my goals are.	1 Never	2 Rarely	3 Occasionally	4 Sometimes	5 Often	6 Very Often	7 Always
7. I find what I am doing in therapy confusing	1 Never	2 Rarely	3 Occasionally	4 Sometimes	5 Often	6 Very Often	7 Always
8. I believe _____ likes me.	1 Never	2 Rarely	3 Occasionally	4 Sometimes	5 Often	6 Very Often	7 Always
9. I wish _____ and I could clarify the purpose of our sessions.	1 Never	2 Rarely	3 Occasionally	4 Sometimes	5 Often	6 Very Often	7 Always
10. I disagree with _____ about what I ought to get out of therapy.	1 Never	2 Rarely	3 Occasionally	4 Sometimes	5 Often	6 Very Often	7 Always
11. I believe the time _____ and I are spending together is not spent efficiently.	1 Never	2 Rarely	3 Occasionally	4 Sometimes	5 Often	6 Very Often	7 Always

WAI(C) p. 2



12. \_\_\_\_\_ does not understand what I am trying to accomplish in therapy.

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always

13. I am clear on what my responsibilities are in therapy.

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always

14. The goals of these sessions are important for me.

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always

15. I find what \_\_\_\_\_ and I are doing in therapy is unrelated to my concerns.

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always

16. I feel that the things I do in therapy will help me to accomplish the changes that I want.

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always

17. I believe \_\_\_\_\_ is genuinely concerned for my welfare.

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always

18. I am clear as to what \_\_\_\_\_ wants me to do in these sessions.

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always

19. \_\_\_\_\_ and I respect each other.

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always

20. I feel that \_\_\_\_\_ is not totally honest about his/her feelings toward me.

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always

21. I am confident in \_\_\_\_\_'s ability to help me.

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always

22. \_\_\_\_\_ and I are working towards mutually agreed upon goals.

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always

WAIIC p. 3

23. I feel that \_\_\_\_\_ appreciates me.

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always

24. We agree on what is important for me to work on.

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always

25. As a result of these sessions I am clearer as to how I might be able to change.

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always

26. \_\_\_\_\_ and I trust one another.

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always

27. \_\_\_\_\_ and I have different ideas on what my problems are.

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always

28. My relationship with \_\_\_\_\_ is very important to me.

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always

29. I have the feeling that if I say or do the wrong things, \_\_\_\_\_ will stop working with me.

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always

30. \_\_\_\_\_ and I collaborate on setting goals for my therapy.

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always

31. I am frustrated by the things I am doing in therapy.

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always

32. We have established a good understanding of the kind of changes that would be good for me.

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always

33. The things that \_\_\_\_\_ is asking me to do don't make sense.

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always

WAIIC p. 4

34. I don't know what to expect as the result of my therapy.	1 Never	2 Rarely	3 Occasionally	4 Sometimes	5 Often	6 Very Often	7 Always
35. I believe the way we are working with my problem is correct.	1 Never	2 Rarely	3 Occasionally	4 Sometimes	5 Often	6 Very Often	7 Always
36. I feel _____ cares about me even when I do things that he/she does not approve of.	1 Never	2 Rarely	3 Occasionally	4 Sometimes	5 Often	6 Very Often	7 Always

## DUNCAN DEMOGRAPHIC SURVEY

## DUNCAN'S DEMOGRAPHIC QUESTIONNAIRE

## Q. Gender

What is your sex?

- Male
- Female

## Q. Age

- 18-26
- 27-40
- 41-65
- 66 or older

## Q. Mental Health

How many years have you had depression?

- 0-3
- 4-10
- 11-20
- more than 20

How many years have you been in mental health treatment of any kind?

- 0-3
- 4-10
- 11-20
- more than 20

Have you ever been hospitalized for mental health treatment?

- 0
- 1-3
- 4-10
- 11-20
- more than 20

## Q. Marital Status

What is your marital status?

- Now married
- Widowed
- Divorced
- Separated
- Single never married

## Q. Education

What is the highest degree or level of school you have completed? If currently enrolled, mark the highest degree received.

- Less than high school, no diploma
- High school graduate - high school diploma or the equivalent (for example: GED)
- Some college credit, but less than 1 year
- Associate degree (for example: AA, AS)
- Bachelor's degree (for example: BA, BS)
- Master's degree or greater (for example: MA, MS)

Q. Employment Status

Are you currently...?

- part -time
- Employed for wages over 35 hours per week
- Self-employed
- Out of work and looking for work
- Out of work but not currently looking for work
- A homemaker
- A student
- Retired
- Not in the work force
- Disabled

Q. Race

Please specify your race.

- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or Other Pacific Islander
- White
- Hispanic

## REFERENCES

- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders*. (4th ed., text rev.). Washington, D.C.: American Psychiatric Association.
- Arean, P. A., & Chatav, Y. (2003). Mood disorders: Depressive disorders. In M. Hersen & S. M. Turner (Eds.), *Adult Psychopathology and Diagnosis* (pp. 286-312). Hoboken, New Jersey: John Wiley & Sons, Inc.
- Arseneau, J. R., & Fassinger, R. E. (2006). Challenge and Promise: The Study of Bisexual Women's Friendships. *Journal of Bisexuality*, 6(3), 69-90.
- Arkowitz, H., Westra, A. H., Miller, R. W., & Rollnick, S. (2008). *Motivational interviewing in the treatment of psychological problem*. New York, NY: The Guilford Press Publications, Inc.
- Barbe, R. P., Bridge, J., Birmaher, B., Kolko, D. and Brent, D. A. (2004), Suicidality and Its Relationship to Treatment Outcome in Depressed Adolescents. *Suicide and Life-Threat Behavior*, 34: 44–55. doi: 10.1521/suli.34.1.44.27768
- Barlow, S. (2008). Group psychotherapy specialty practice. *Professional Psychology: Research and Practice*, 39(2), 240-244. doi: 10.1037/0735-7028.39.2.240.
- Barlow, S. H., Burlingame, G. M., & Fuhriman, A. (2000). Therapeutic application of groups: From Pratt's "thought control classes" to modern group psychotherapy. *Group Dynamics: Theory Research and Practice*, 4(1), 115-134. doi: 10.1037//1089-2699.4.1.115.
- Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191-215. doi: 10.1037/0033-295X.84.2.191.
- Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist*, 44(9),

1175-1184. doi: 10.1037/0003-066X.44.9.1175.

Beck, A. T., Epstein, N., Brown, G., & Steer, R. A. An inventory for measuring clinical anxiety: Psychometric properties. *Journal of Consulting and Clinical Psychology, Vol 56(6)*, Dec 1988, 893-897. doi:10.1037/0022-006X.56.6.893

Bertholet, J. Y., Dournaud, P., & Sarrieau, A. (1993). No aging effect on hippocampal type II glucocorticoid receptors in two inbred mouse strains. *Neurobiology of Aging, 14(1)*, 97-99. doi: 10.1016/0197-4580(93)90028-A.

Bremner, J. D. (2002). *Does stress damage the brain? Understanding trauma related disorders for a mind-body perspective*. New York: W. W. Norton & Company, Inc.

Breslau, N., Davis, G. C., & Andreski, P. (1991). Traumatic events and posttraumatic stress disorder in an urban population of young adults. *Archives of General Psychiatry, 48*, 216-222.

Callaghan, G. M. (2001). Demonstrating clinical effectiveness for individual practitioners and clinics. *Professional Psychology: Research and Practice, 39(3)*, 289-297. doi: 10.1037//0735-7028.32.3.289.

Canli, T., Zhao, Z., Brewer, J., Gabrieli, J., & Cahill, L. (2000). Event-related activation in the human amygdala associates with later memory for individual emotional experiences. *Neuroscience, 20(19)*, 1-5.

Carlbring, P., Jonsson, J., Josephson, H., & Forsberg, L. (2010). Motivational interviewing versus cognitive behavioral group therapy in the treatment of problem and pathological gambling: A randomized controlled trial. *Cognitive Behavior Therapy, 39(2)*, 92-103. doi: 10.1080/16506070903190245.

Carlson, N. R. (2001). *Physiology of behavior* (7th ed.). Needham Heights, Massachusetts: Allyn

and Bacon.

- Chan, D., Cheadle, A., Reiber, G., Unützer, J., & Chaney, E. (2009). Health care utilization and its costs for depressed veterans with and without comorbid PTSD symptoms. *Psychiatric Services, 60*(12), 1612-1617.
- Chaplin, J. P. (1985). *Dictionary of psychology* (second revised edition). New York, New York: Bantam Doubleday Dell Publishing Group, Inc.
- Ciesla, J. A., & Roberts, J., E. (2007). Rumination, negative cognition, and their interactive effects on depressed mood. *Emotion, 7*(3), 555-565. doi: 10.1037/1528-3542.7.3.555.
- Corcoran, K. A., & Maren, S. (2001). Hippocampal inactivation disrupts contextual retrieval of fear memory after extinction. *Neuroscience, 21*(5), 1720-1726. doi: 10.1523/JNEUROSCI.2246-05.2005.
- Cornelius., J. R., Douaihy, A. Bukstein, O. G., Daley, D. C., Wood, S. D., Kelly, T. K., Salloum, I. M. (2011). Evaluation of cognitive behavioral therapy/motivational enhancement therapy (CBT/MET) in a treatment trial of comorbid MDD/AUD adolescents. *Addictive Behaviors, (36)* 843-848.
- Conner, M. G. (2009). *Transference: Are you a biological time machine?* Retrieved from <http://www.crisiscounseling.com/articles/transference.htm>.
- Coleman, P., & Flood, D. (1987). Neuron numbers and dendritic extent in normal aging and Alzheimer's disease. *Neurobiology of aging, 8*(6), 521. doi: 10.1016/0197-4580(87)90144-8.
- Chalmers, D. T., Kwak, S. P., Mansour, A., & Watson, S. J. (1993) Corticosteroids regulate brain hippocampal 5-HT1A receptor mRNA expression. *Journal of Neuroscience, 13*(3), 914-923.

- Consoli, A. J. (2005). Training in Psychotherapy Integration II: Further efforts. *Journal of Psychotherapy Integration*, 15(4), 355-357. doi: 10.1037/1053-0479.15.4.355
- Corey, M., S., & Corey, G. (2006). *Groups: Process and practice*. Belmont, CA. Thompson Brooks/Cole.
- Corsini, R., & Rosenberg, B. (1955). Mechanisms of group psychotherapy: Process and dynamics. *Journal of Abnormal Social Psychology*, 51(3), 406-411. doi: 10.1037/h0048439.
- Crits-Christoph, P., Gibbons, M., Gallop, R., Ring-Kurtz, S., Barber, J., Worley, M., Present, J., & Hearon, B. (2008). Supportive-expressive psychodynamic therapy for cocaine dependence: A closer look. *Psychoanalytic Psychology*, 25(3), 483-498. doi: 10.1037/0736-9735.25.3.483.
- Cuijpers, P., van Straten, A., Schuurmans, J., van Oppen, P., Hollon, S. D., & Andersson, G. (2010). Psychotherapy for chronic major depression and dysthymia: a meta-analysis. *Clinical psychology review*, 30(1), 51-62.
- David, D., & Szentagotai, A. (2006). Cognitions in cognitive-behavioral psychotherapies; toward an integrative model. *Clinical Psychology Review*, (26), 284– 298.
- Davidson, J., Smith, R., & Kudler, H. (1989). Familial psychiatric illness in chronic posttraumatic stress disorder. *Comprehensive Psychiatry*, 30(4), 339-345. doi: 10.1016/0010-440X(89)90059-X.
- Davies, D. R., Burlingame, G. M., Johnson, J. E., Gleave, R. L., & Barlow, S. H. (2008). The effects of a feedback intervention on group process and outcome. *Group Dynamics: Theory, Research, and Practice*, 12(2), 141. doi: 10.1037/1089-2699.12.2.141
- Dick-Niederhauser, A. (2009). Therapeutic change and the experience of joy: Toward a theory of



- curative process. *Journal of psychotherapy Integration* 19(2), 187-211. doi: 10.1037/a0016020.
- Dooley, C. P., & Cohen, H. (1988). The clinical significance of campylobacter pylori. *Gastroenterology* 93(2), 371-383.
- Dozois, D. J. A., Dobson, K. S., & Ahnberg, J. L. (1998). A psychometric evaluation of the Beck Depression Inventory-II. *Psychological Assessment*, 10(2), 83-89. doi: 10.1037/1040-3590.10.2.83.
- Elkin, I., Parloff, M., Hadley, S., & Autry, J. (1985). National Institute of Mental Health treatment of depression national collaborative research program. *General Psychiatry*, 42, 305-316.
- Encarta® World English Dictionary. (2004). North American Edition. Developed for Microsoft by Bloomsbury Publishing Plc.
- Field, L., F., & Seligman, L. (2004). Mood disorders in children and adolescents. In *Counseling Treatment for Children and Adolescents with DSM-IV-TR Disorders*. R. R. Erk (Ed.), (pp. 239-272). Upper Saddle River, NJ: Pearson Education, Inc.
- Gallagher, D., Nies, G., & Thompson, W. L. (1982). Reliability of the Becks Depression Inventory with older adults. *Journal of Consulting and Clinical Psychology*, 50(1), 152-153. doi: 10.1037/0022-006X.50.1.152.
- Genden, S. (2010). *Motivational Interviewing Supervision Training I, II, III*. The Guidance Center. Southgate, MI.
- Green, C. (2010). *Wayne County Michigan SEMCA training*. Substance Abuse and Record Management. Southeastern Taylor, MI.
- Hale, S., & Cows, J. (2009). Psychoeducational Groups. In *International Handbook of*

*Occupational Therapy Interventions* (pp. 255-260). Springer New York.

Hair, J. F., Black, W., Babin, B., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis*. Upper Saddle River, NJ: Pearson Education, Inc.

Harmon, S. C., Lambert, M. J., Smart, D. W., Hawkins, E. J., Nielsen, S., Slade, K., & Lutz, W. (2007). Enhancing outcome for potential treatment failures: Therapist-client feedback and clinical support tools. *Psychotherapy Research*, 17(4), 379-392. doi: 10.1080/10503300600702331.

Hoffman, A. (2009). Dissertation Oral/Written Qualifying Exams: *What are the Main Factors for Therapeutic Change?* Winter Written and Oral Defense-Candidate: Kirk David Duncan. Wayne State University, Detroit, MI.

Horvath, A. O., & Symonds, B. D. (1991). Relation between working alliance and outcome in psychotherapy: A meta-analysis. *Journal of Counseling Psychology*, 38(2), 139-149. doi: 10.1037/0022-0167.38.2.139.

Horvath. (1992). Scoring key for the WAI.

Retrieved from

<http://wai.profhorvath.com/sites/default/files/upload/WAI%28Key%29.pdf>

Hu, T. W., He, Y., Zhang, M., & Chen, N. (2007). Economic costs of depression in China. *Social psychiatry and psychiatric epidemiology*, 42(2), 110-116.

Hundt, N. E., Mignogna, J., Underhill, C., & Cully, J. A. (2013). The relationship between use of CBT skills and depression treatment outcome: A theoretical and methodological review of the literature. *Behavior therapy*, 44(1), 12-26.

Johnson, J. E., Pulsipher, D., Ferrin, S. L., Burlingame, G. M., Davies, D. R., & Gleave, R. (2006). Measuring group processes: A comparison of the GCQ and CCI. *Group*

- Dynamics: Theory, Research, and Practice*, 10(2), 136.
- Kessler, R. C., Akiskal, H. S., Ames, M., Birnbaum, H., Greenberg, P., Hirschfeld, R. M., . . . & Wang, P. S. (2006). Prevalence and Effects of Mood Disorders on Work Performance in a Nationally Representative Sample of U.S. Workers. *The Journal of Psychiatry*, 163(9) 1561-1568. doi: 10.1176/appi.ajp.163.9.1561.
- Kerr, D. S., Campbell, L. W., Applegate, M. D., Brodish, A., & Landfield, P. W. (1991). Chronic stress-induced acceleration of electrophysiologic and morphometric biomarkers of hippocampal aging. *The Journal of neuroscience*, 11(5), 1316-1324.
- Kivlighan Jr, D. M., & Tarrant, J. M. (2001). Does group climate mediate the group leadership–group member outcome relationship? A test of Yalom's hypotheses about leadership priorities. *Group Dynamics: Theory, Research, and Practice*, 5(3), 220.
- Kivlighan Jr, D. M., & Arseneau, J. R. (2009). A typology of critical incidents in intergroup dialogue groups. *Group Dynamics: Theory, Research, and Practice*, 13(2), 89.
- Kornrich, W. (2009). The great depression revisited. *Medical Economics*, 86(13), 57.
- Laska, K. M., Gurman, A. S., & Wampold, B. E. (2013). *Expanding the Lens of Evidence-Based Practice in Psychotherapy: A Common Factors Perspective. Psychotherapy*. doi: 10.1037/a0034332.
- Lazarus, R. S. (1966). *Psychological stress and the coping process*. New York: McGraw-Hill.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer Verlag.
- Lewinsohn, P. M., Hoberman, H. M., & Clarke G. N. (1989). The coping with depression course: Review and future directions. *Canadian Journal of Behavioural Science*, 21(4), 470-493. doi: 10.1037/h0079846.

- Licinio, J., & Wong, M. L. (1999). The role of inflammatory mediators in the biology of major depression: Central nervous system cytokines modulate the biological substrate of depressive symptoms, regulate stress-responsive systems, and contribute to neurotoxicity and neuroprotection. *Molecular Psychiatry*, 4, 317–32.
- Lipman, E. L., Waymouth, M., Gammon, T., Carter, P., Secord, M., Leung, O., ... & Hicks, F. (2007). Influence of group cohesion on maternal well-being among participants in a support/education group program for single mothers. *American Journal of Orthopsychiatry*, 77(4), 543.
- Maritz, J. S., & Jarrett, R. G. (1978). A note on estimating the variance of the sample median. *Journal of the American Statistical Association*, 73, 194-196.
- Markin, R. D., & Kivlighan, Jr., D. M. (2008). Central relationship themes in group psychotherapy: A social relations model analysis of transference. *Group Dynamics: Theory, Research, and Practice*, 12(4), 290-306. doi: 10.1037/a0013024.
- Marmarosh, C., Holtz, A., & Schottenbauer, M. (2005). Group cohesiveness, group-derived collective self-esteem, group derived hope, and the well-being of group therapy members. *Group Dynamics: Theory, Research, and Practice*, 9(1), 32-44. doi: 10.1037/1089-2699.9.1.32.
- Martin, T. N. (1984). Role stress and inability to leave as predictors of mental health. *Human Relations*, 37(11), 969-984. doi: 10.1177/001872678403701106.
- McEwen, B. S. (1992). Re-Examination of the glucocorticoid hypothesis of stress and aging. *Progress in Brain Research*, 93, 365-383. doi: 10.1016/S0079-6123(08)64585-9.
- McEwen, B. S., & Sapolsky, R. (1995). Stress and cognitive function. *Recent Opinion in Neurobiology*, 5(2), 205-216. doi: 10.1016/0959-4388(95)80028-X.

- McEwen, B. S., Conrad, C. D., Kuroda, Y., Frankfurt, M., Margarinos, A. M., & Mckittrick, C. (1997). Prevention of stress-induced morphological and cognitive consequences. *European Neuropsychopharmacology*, 7(3), 322-328. doi: 10.1016/S0924-977X(97)00064-3.
- MedTerms.com (2003). MedicineNet.com. Medical Dictionary.
- Mee-Lee, D. (2010). *American Society for Addictive Medicine Training (ASAM)*. The University of Michigan-Dearborn. Dearborn MI, Summer 2010.
- Miller, W. R., & Rollnick, S. (2002). *Motivational Interviewing* (2nd ed.) New York, New York: Guilford Publications, Inc.
- NAMI (National Alliance for the Mentally Ill) in Denton County Newsletter. (1999, Oct./Nov.). *Gentle drive to make voters of those with mental illness*. 12(5), p. 2, 5-7.
- National Institute of Mental Health (2010). Retrieved from <http://science.education.nih.gov/supplements/nih5/mental/other/glossary.htm>.
- Oquendo, M. A., Placidi, G. P., Malone, K. M., Campbell, C., Keilp, J., Brodsky, B., ... & Mann, J. J. (2003). Positron emission tomography of regional brain metabolic responses to a serotonergic challenge and lethality of suicide attempts in major depression. *Archives of General Psychiatry*, 60(1), 14-22.
- Pesale, F. P., & Hilsenroth, M. J. (2009). Patient and therapist perspectives on session depth in relation to technique during psychodynamic psychotherapy. *Psychotherapy Theory, Research, Practice, Training*, 46(3), 390-396. doi: 10.1037/a0016999.
- Paone, T. R., Packman, J., Maddux, C., & Rothman, T. (2008). A school-based group activity therapy intervention with at-risk high school students as it relates to their moral reasoning. *International Journal of Play Therapy*, 17(2), 122-137. doi:

10.1037/a0012582.

- Payne, K. T., & Marcus, D. K. (2008). The efficacy of group psychotherapy for older adult clients: A meta-analysis. *Group Dynamics: Theory, Research, and Practice*, *12*(4), 268.
- Present, J., Crits-Christoph, P., Connolly Gibbons, M. B., Hearon, B., Ring-Kurtz, S., Worley, M., & Gallop, R. (2008). Sudden gains in the treatment of generalized anxiety disorder. *Journal of Clinical Psychology*, *64*(1), 119-126.
- Prochaska, J. O., & Norcrose, J. C. (2007). *Systems of psychotherapy: A transitional analysis* (6th ed.), Belmont, CA; Thompson Brooks/Cole.
- Oquendo, M. A., Placidi, G. P., Malone, K. M., Campbell, C., Keilp, J., Brodsky, B., Kegeles, L. S., . . . & Mann, J. J. (2003). Positron emission tomography of regional brain metabolic responses to a serotonergic challenge and lethality of suicide attempts in major depression. *Archives of General Psychiatry*, *60*(1), 14-22.
- Reading, V. (2010). *Motivational Interviewing Training I, II, III*. Spring, Summer, Fall Sessions. Center for Excellence-The Guidance Center, Southgate, MI.
- Riedel, W. J., Sobczak, S., Nicolson, N., & Honig, A. (2002). Stress, cortisol and memory as markers of serotonergic vulnerability. *Acta Neuropsychiatrica*, *14*(4), 186-191. doi: 10.1034/j.1601-5215.2002.140405.x.
- Robins, L., Helzer, J., Weissman, M., Orvaschel, H., Gruenberg, E., Burke, J., & Regier, D. (1984). Lifetime prevalence of specific psychiatric disorders in three sites. *Archives of General Psychiatry*, *41*(10), 949-958.
- Rossello, J., Bernal, G., & Rivera-Medina, C. (2008). Individual and group CBT and IPT for Puerto Rican adolescents with depressive symptoms. *Cultural Diversity and Ethnic Minority Psychology*, *14*(3), 234-245. doi: 10.1037/1099-9809.14.3.234.

- Safran, J. D., Samstag, L. W., Muran, J. C., & Stevens, C. (2001). *Repairing alliance ruptures. Psychotherapy, 38*(4), 406-412. doi: 10.1037/a0022140.
- Safran, J. D., & Muran J. C. (2006). Has the concept of the therapeutic alliance outlived its usefulness? *Psychotherapy: Theory, Research, Practice, Training, 43*(3), 286-291. doi: 10.1037/0033-3204.43.3.286.
- Sapolsky, R. M. (1985). A mechanism for glucocorticoid toxicity in the hippocampus; increased neuronal vulnerability to metabolic insults. *Journal of Neuroscience, 5*(5), 1228-1232.
- Sapolsky, R. M. (1992). *Stress, the aging brain, and the mechanisms of neuron death*. Cambridge, Massachusetts: The MIT Press.
- Sapolsky, R. M. (1994). *Why zebras don't get ulcers*. New York: W. H. Freeman and Company.
- Schuman, S., (2010). *What is a group facilitator?* International Association of Facilitators. Retrieved from <http://www.iaf-world.org/i4a/pages/index.cfm?pageid=3290>.
- Seligman, M. E., Maier, S. F., & Geer, J. H. (1968). Alleviation of learned helplessness in the dog. *Journal of Abnormal Psychology, 73*(3), 256-262. doi: 10.1037/h0025831.
- Shechtman, Z., & Toren, Z. (2009). The effect of leader behavior on processes and outcomes in group counseling. *Group Dynamics: Theory, Research, and Practice, 13*(3), 218-227. doi: 10.1037/1089-2699.11.2.117.
- Silberschatz, G. (2009). What have we learned about how the alliance develops over the course of therapy?. doi: 10.1037/a0016915.
- Smith, M. A., Makino, S., Kvetnasky, R., & Post, R. M. (1995). Stress and glucocorticoids affect the expression of brain-derived neurotrophic factor and neurotrophin-3 mRNA in the hippocampus. *Journal of Neuroscience, 15*(3), 1768-1777.
- Spiegler, M. D., & Guevremont, J. (2003). *Contemporary behavior therapy*. Belmont, CA:

Wadworth/Thomson.

Stern, J. (2003). *Biological foundations of health psychology*. Lecture Summer Session II 2003.

The University of Michigan-Dearborn, Dearborn, Michigan.

Stevens, J. P. (2002). *Applied multivariate statistics for the social sciences* (4th ed.).

Philadelphia, PA: Erlbaum.

Stiles, W. B., Gordon, L. E., & Lani, J. A. (2002). Session evaluation and the session evaluation questionnaire. In G. S. Tryon (Eds.), *Counseling based on process research: Applying what we know* (pp. 325-343). Boston, MA: Allyn & Bacon.

Stockton, R., Morran, D. K., Clark M. B. (2004). An investigation of group leaders' intentions.

*Group Dynamics: Theory, Research, and Practice*, 8(3), 196-206. doi: 10.1037/1089-2699.8.3.196.

Straub, R. O. (2002). *Health psychology*. New York, NY: Worth Publishers.

Tyler, R. W. (1949). *Basic principles of curriculum and instruction*. Chicago: University of Chicago Press.

Vader, A., Walters, S., Houck, J., Prabhu, G., & Field, C. (2010). The language of motivational interviewing and feedback: Counselor language, client language, and client drinking outcomes. *Psychology of Addictive Behaviors*, 24(2), 190-197. doi: 10.1037/a0018749.

Vermetten, E., & Bremner, D. J. (2002) Circuits and systems in stress. I. Preclinical studies. *Depression and Anxiety*, 15(3), 126-147. doi: 10.1002/da.10016.

Vermetten, E, Bremner, J. D. Circuits and systems: II. *Applications to Neurobiology and Treatment in PTSD. Depress Anxiety* (in press).

Vnek, N., & Rothblat, L. A. (1996). The hippocampus and long-term memory in the rat. *The Journal of Neuroscience*, 16(8), 2780-2787.



- Wade, N., & Goldman, D. (2006). Sex, group composition, and the efficacy of group interventions to promote forgiveness. *Group Dynamic: Theory, Research, and Practice*, 10(4), 297-308. doi: 10.1037/1089-2699.10.4.297.
- Wantanabe, Y., Sakai R. R., McEwen, B. S., & Mendelson, S. (1993). Stress and antidepressant effects on hippocampal and cortical 5HT1a and 5HT2 receptors and transport sites for serotonin. *Brain Research*, 615 (1) 87-94. doi:10.1016/j.physletb.2003.10.071.
- Wasan, A., Neufeld, K., & Jayaram, G. (2009). Practice patterns and treatment choices among psychiatrists in New Delhi, India. *Social Psychiatry Epidemiology*, 44 (2), 109–119. doi: 10.1007/s00127-008-0408-z.
- Wicks-Nelson, R., & Israel, A. C. (2003). *Behavior disorders of childhood*. Upper Saddle River, NJ: Pearson Education, Inc.
- Wilcox, R. R. (1996). *Statistics for the social sciences*. San Diego, CA: Academic Press.
- Wood, J. N., & Grafman, J. (2003). Human prefrontal cortex: Processing and representational perspectives. *Nature Reviews Neuroscience*, 4 139-147. doi:10.1038/nrn1033
- Yalom, I. D. (1985). *The theory and practice of group psychotherapy*. (3rd ed.). New York: Basic Books.
- Yalom, I. D. (1995). *The theory and practice of group psychotherapy*. (4th ed.). New York: Basic Books.

**ABSTRACT****PROCESS GROUP VS. SKILLS GROUP MODALITIES  
IN THE TREATMENT OF INDIVIDUALS DIAGNOSED WITH MAJOR  
DEPRESSIVE DISORDER**

by

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The goal of this study was to evaluate the impact of a process group vs. a cognitive behavioral skills group modality on depression while investigating the effects of facilitator bond on outcomes. Analysis of covariance (ANCOVA) was conducted on the BDI-II posttest scores, and pretest scores served as the covariate and the group membership as the independent variable. When observing Figure 1 there was a visual desired decrease in depression scores, but result was not statistically significant. As a consequence, the small sample size of the study may have impacted this result.

A series of ANCOVAs were conducted with the posttest subscales (i.e., Bond, Task, & Goal) as the dependent variable, the pretest subscales as the covariate, and the grouping variable being the comparison vs the experimental study condition. Another approach was to analyze the three subscales simultaneously via a multivariate analysis of covariance (MANCOVA). The multivariate analysis of analyzing all three subscales simultaneously also resulted in no statistically significant difference. However, in that analysis, it was noticed that only eight participants (comparison group = 3, experimental group = 5) completed the entire pretest and

posttest on all three subscales. Hence, analyses were repeated for just those  $N = 8$  participants, and all three subscales, individually, were statistically significant favoring the experimental group.

However, in the latter analysis, the even further reduced sample size of the between groups tests for only those participants who had subscale scores for all three parts of the WAI indicated that Bond were statistically significant. This is evidence that based on this reduced sample size that the motivational interviewing process group had greater working alliance with their therapist that did those who only participated in the cognitive-behavior manualized skills group on those three subscales. Due to the small sample size, and high correlation within the scales (Task, Bond, Goal), it is difficult to infer to what some of these results may indicate. Recommendations for future research were offered.

## AUTOBIOGRAPHICAL STATEMENT

### KIRK DAVID DUNCAN

Education	<p>Wayne State University- Detroit, Michigan          Doctor of Philosophy, 2014          Major: Counseling</p> <p>Wayne State University- Detroit, Michigan          Master of Arts, 2006          Majors: School and Community/Marriage and Family Psychology</p> <p>The University of Michigan – Dearborn, Michigan          Master of Science, 2004          Major: Health Psychology</p> <p>The University of Michigan – Dearborn, Michigan          Bachelor of Arts, 2000          Major: Psychology          Minor: Sociology</p>
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Professional Licenses	<p>Psychologist Limited License-Masters          Certified Advanced Alcohol and Drug Counselor          Internationally Certified Advanced Alcohol and Drug Counselor          Qualified Mental Health Professional</p>
Clinical Experience	<p>The Guidance Center          2006-Present-Clinical Therapist</p> <p>St. John Providence Hospital-Eastwood Clinics          2009-Present-Clinical Therapist</p> <p>Wayne State University          2006-2010-Assistant Supervisor Practicum/Techniques-Counseling</p> <p>Lakeside Family Counseling          2008-2011-Independent Psychotherapist</p> <p>Havenwyck Hospital          2004-2005-Psychiatric Care Specialist</p> <p>Starfish Family Services-Counterpoint 1999-2000-Intern and          Volunteer Group Counselor</p>