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TECHNOLOGICALLY ASSISTED INTERVENTION (TAI):

ARE CLIENTS SATISFIED WITH ONLINE THERAPY?

by

Jennifer A. Morrow

A thesis submitted in partial fulfillment
of the requirements for the degree

of

MASTER OF SCIENCE

in

Family, Consumer, and Human Development
(Marriage and Family Therapy)

Approved:

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UTAH STATE UNIVERSITY
Logan, Utah

2008

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ABSTRACT

Technologically Assisted Intervention (TAI):

Are Clients Satisfied with Online Therapy?

by

Jennifer Morrow, Master of Science

Utah State University, 2008

Major Professor: Dr. Kim Openshaw, Ph.D.
Department of Family, Consumer, and Human Development

This study examined the level of satisfaction reported by participants of a technologically assisted intervention study (TAI). TAI is a type of teletherapy done through online, live video conferencing. Satisfaction was examined at three different time points, post therapy, 3-months post therapy, and 6-months post therapy. Analyses examined if there were any changes in reported satisfaction over the three time periods. Participants received cognitive behavioral therapy (CBT) targeted at reducing symptoms of mild to moderately severe depression. A satisfaction measure was developed for this study, and included quantitative and qualitative items which were analyzed to determine participants' level of satisfaction. Seventeen women residing in the Vernal and Roosevelt, Uintah Basin areas, volunteered to participate in the study that was funded by a CURI and AES grant.

This study found that the women experienced a high level of satisfaction with

TAI across the various dimension measured. This high level of satisfaction remained consistent across the three time periods examined. Qualitative data offered a depth of understanding regarding what particularly participants were and weren't satisfied with.

(106 pages)

ACKNOWLEDGMENTS

This thesis is dedicated to all those who have given of themselves to make this project possible. I extend a special acknowledgment to my parents for their unfailing guidance, encouragement, and support throughout my educational career, and to my colleagues and friends for their constant assurances and reassurances, which gave me the motivation to continue through this long process. Finally, special thanks to my major professor for his support and dedication to this project.

Jennifer A. Morrow

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CHAPTER I

INTRODUCTION

In 2000, the U.S. Department of Agriculture, Economic Research Service reported that the rural areas of the U.S. contained just over 80% of the land and about 20% of the population (Stamm et al., 2003). This percentage of land to people ratio makes rural areas different from urban areas in many ways. Wagenfeld (1990) reported that rural areas suffered from higher rates of psychopathology than did urban communities, suggesting that this may be attributed to the lack of mental health services available. Regardless of whether there is more or less mental illness in rural American communities, it is suggested that there be equal access to mental health care; however, the fact is, there is an insufficient amount and range of services available to treat mental and behavioral health problems in rural areas (Health Resources & Services Administration, 2005; Hartly, Bird, & Dempsey, 1999; Sawyer, Gale, & Lambert, 2006). Of relevance to this research, are three critical factors mentioned in a recent Health Resources & Services Administration (HRSA) document that have been identified as factors contributing to the different experiences that rural persons encounter when faced with mental health concerns, namely, availability, accessibility, and acceptability (the three A's; Sawyer et al.). While each of these factors will be briefly discussed, it should be realized that these are not independent dimensions; rather they are intricately interwoven one with the other.

Technologically assisted intervention (TAI), which is a type of teletherapy provided through online, live video conferencing, may prove to be an effective solution

that would provide access to therapy for those living in remote locations (Gibson, Morley, & Romeo-Wollf, 2002). Providing TAI has been found to be feasible (Dr. D. K. Openshaw, personal communication, September 2007), meaning capable of being done or accomplished (Feasible, 2007), and both statistically and clinically effective in delivering therapy to women diagnosed with depression and residing in rural Utah (Dr. D. K. Openshaw, personal communication, September 2007). If providing teletherapy is found to be effective, efficient and satisfying to clients it may prove to be an effective and efficient alternative to face-to-face therapy for those living in remote areas where access to therapy is limited or non-existent.

One determining factor in examining whether TAI is a credible and viable alternative would be to evaluate the satisfaction of clients who have experienced therapy using this treatment modality. Satisfaction data for the 17 women involved in the study were gathered at three time points, immediately after the completion of therapy, three months post therapy, and six months post therapy. The rationale for including three and six month post-therapy assessments was to determine if there was a change in opinion after clients had had some time to think about their therapy experience. The overriding research question was, "What was the perceived level of satisfaction experienced by participants who have received CBT for depression through the TAI medium?"

CHAPTER II

LITERATURE REVIEW

This literature review will discuss a variety of topics relevant to the study. It will focus on findings in the areas of depression, rural mental health, TAI, and the conceptualization of satisfaction. It also lists the research questions examined.

Depression in the United States

In the United States, depression is a serious medical illness that affects more than 19 million American adults age 18 and over each year (National Institute of Mental Health, 1999). Stanton Peele (2003) in response to the mid-June Journal of the American Medical Association's special edition on depression in America makes the following comment:

> More Americans report being depressed. We have had a revolution in the United States in identifying and treating depression, searching for its genetic causes and developing new families of antidepressant drugs. Yet we see no reduction in depression. In the recent Comorbidity Survey, 6.6 percent (about 14 million Americans) had a serious depressive episode in the previous year, while more than 16 percent (about 35 million) experienced such depression over their lifetimes. In the first comorbidity survey 10 years earlier, this figure was less than 15 percent.

Depression as a Major Mental Health Problem for Women

Approximately 12 million women in the United States experience clinical depression each year (NIMH, 1999). The percentage of U.S. women (12%) diagnosed with depression is nearly twice that of men (6.6%). The lifetime risk that an adult will be

diagnosed with a major depression is 7.9 to 8.6% for all adults; however, the lifetime risk of such diagnosis is 20% for women (NIMH, 1999). According to the National Institute of Mental Health (2007) the rate of depression has steadily risen for females over the past several decades.

There are a variety of factors unique to women's lives that are suspected to play a role in developing and maintaining depression. Some of these factors include: reproductive, hormonal, genetic or other biological factors; abuse and oppression; interpersonal factors; and certain psychological and personality characteristics. However, despite these suspected factors, the specific causes of depression in women remain unclear (NIMH, 2007). Not only are depression and its basic symptoms of concern, but depression also serves as a foundation for a variety of other negative outcomes.

Negative Sequella Associated with Depression

One of the most commonly reported negative outcomes associated with depression is suicide. Although men are four times more likely to commit suicide than are women, women report attempting suicide two to three times more frequently than men. Self-inflicted injury, including suicide, ranks ninth out of the 10 leading public health problems for females worldwide (Sinclair, Harris, & Baldwin, 2005).

Another negative consequence associated with depression is substance use and/or abuse. One method of coping with depression is to “self-medicate” with substances that artificially divert one’s sense of depression, but with depressive symptoms typically increasing after drug or alcohol use. It is not uncommon to find an interaction between

depression, substance use, and suicide (Cottler, Campbell, & Krishna, 2005).

Depression can have a negative effect on employment (Szádóczky, Sándor, & János, 2004). For example, Emptage, Sturm, and Robinson, (2005) found that persons with depression were more likely to lose their employment and health benefits. In regards to women, Chen, Subramanian, and Acevedo-Garcia (2005) found that employment status and earning capability decrease if women are depressed.

Finally, depression is associated with marital distress and attachment insecurity in romantic relationships (Whiffen, 2005). Lansford, Antonucci, and Akiyama (2005) suggested that depression is not only negatively associated with marital well-being, but with other relationships as well.

Depression is a Treatable Mental Health Illness

Cognitive-Behavioral Therapy (CBT) is "widely recognized as one of the central organizing theories and methods for the treatment of psychiatric disorders" (Wright, Basco, & Thase, 2006, pg. iv). The application of CBT evolved out of behavioral approaches focused on research and intervention with families (Dattilio, 1998). Aaron T. Beck was the first person to "fully develop theories and methods for using cognitive and behavioral interventions for emotional disorders" (Wright et al., 2006, p. 2). CBT is a purposefully simplified model of complex interactions, to direct the therapist's attention to the relationship that exists between a client's thoughts, emotions, and behaviors. It focuses on an individual's schema and how that schema influences thoughts, particularly through perception, attribution, expectancy, standards, and assumptions. Schemas are

"core beliefs that act as templates or underlying rules for information processing. They serve a critical function in allowing humans to screen, filter, code, and assign meaning to information from the environment" (Wright et al., 2006, p. 7). CBT then attempts to modify thoughts and in turn help clients regulate emotion, change behaviors, and alter unhealthy schemas. Doing this has been found to aid in the reduction of symptoms of depression. The CBT approach used in this study was based on Aaron Beck's work and a compilation of CBT tools compiled by Wright et al.

With CBT four out of five people diagnosed with depressive symptoms will show improvement. Researchers found that adults eighteen years and up with mild to moderate depression treated with short-term, cognitive therapy showed significant improvement compared with no treatment (United Health Foundation, 2004). Although it is possible to reduce the symptoms of depression, Regier et al. (1988) indicated that approximately two-thirds of the individuals in the U.S. with clinical symptoms of mental illness, including depression, receive no care at all for such symptoms (see also Vogin, 2004).

With the lack of service providers in rural communities, and the distance one must often travel to receive such services, the percentage of depressed persons receiving psychotherapeutic services in rural areas is less than are those residing in urban areas, which have a higher concentration of mental health facilities and specialized practitioners (Sawyer et al., 2006).

Rural Mental Health

While the definition of rural varies according to location, the definition of rural as

provided by the Office of Management and Budget (OMB, 2000) allows for 17% (49 million) of the population to be considered rural. When considering the definition of rural as suggested by the Census Bureau, 21% (59 million) of the US population resides in rural communities (HRSA, 2005). Regardless of the definition, the fact is that many Americans reside in rural communities. The U.S. Department of Agriculture, Economic Research Service in 2000 reported that the rural areas of the U.S. contained just over 80% of the land and about 20% of the population (Stamm et al.). This percentage of land to people ratio makes rural areas different from urban areas in many ways. Of relevance to this study, is the lack of mental health care available to those residing in rural areas, along with specific barriers to rural treatment, discussed below (Sawyer et al., 2006).

Prevalence of Psychopathology in Rural Areas

The literature below provides differing opinions regarding mental health in rural or nonmetropolitan communities compared with those residing in urban or metropolitan areas. Mulder and Lambert (2006) have found that the rate at which rural women experience mental and physical illness is equal to, or sometimes exceeds those, of urban residents. On the other hand, Wagenfeld (1990) reported that those residing in rural areas suffered from higher rates of psychopathology than did urban communities. She also found that rural areas were deficient in both the level and the quality of mental health services. While these studies differ, what does appear to be clear is that rural areas suffer from at least as much psychopathology as urban areas. Sawyer and colleagues (2006) noted that in the past thirty years, mental health related issues of rural or nonmetropolitan

America were unique and distinct from those of urban or metropolitan parts of the United States.

Receiving Mental Health Care in Rural America

While the prevalence of psychopathology in rural areas appears to be at least equal to that of urban areas, the opportunity to receive care in rural areas is not equal to that in urban areas (Wagenfeld, 1990). The Health Resources and Services Administration (HRSA, 2005), has identified three main factors that may prevent rural persons from receiving the mental health care that they need. These three factors are (1) Availability, (2) Accessibility, and (3) Acceptability ("3 A's").

Availability of mental health care. Availability is defined as present and ready for immediate use; obtainable (Available, 2007). If those living in rural areas are faced with mental and behavioral health problems to the same extent as those living in urban areas, it would seem prudent that there be equal, minimally equitable, availability to mental health care. While the logic of this goes without question, according to Sawyer et al. (2006), the availability of services both in the number of practitioners providing services as well as the range of possible services is significantly limited in rural communities. Hartley et al. (1999) noted that, as of 1990, only 79.5% of nonmetropolitan counties in the U.S. had any mental health services. They further noted that the number of specialty mental health services in rural counties was substantially lower than the average number in metropolitan counties, explaining that less than 20% of U.S. communities that support populations of less than 2,500 have a social worker and not even 10% have a psychiatrist.

In 1997, more than 75% of mental health professional shortage areas were non-metropolitan. This offered good reason to believe that for many of those who resided in rural counties the availability of mental health care was insufficient.

One of the greatest obstacles to providing mental health care services has been the challenge of recruiting trained and educated professionals into rural settings. Wagenfeld (1990) reported that rural community mental health centers differed from their urban counterparts in staffing patterns: specifically that rural community mental health centers had lower proportions of professionally prepared staff at all levels (Wagenfeld). Sawyer et al. (2006) suggested that the limited availability of clinicians with areas of specialty (e.g., prescribing medications or specialized areas of practice such as child and adolescent services) is an example of a hindrance relating to service delivery and availability. Murray and Keller (1991) note that clinicians who reluctantly reside and provide services in rural areas may have a high potential for dissatisfaction. Assimilation to rural life, isolation from professional colleagues, and the unique pressures rural mental health professionals face require particular professional attention when training clinicians for this lifestyle. This is mind, it is important to examine ways of encouraging rural communities, and the various professions, to attract and retain clinicians in rural communities.

Accessibility of mental health care. A definition of access is the freedom or ability to obtain or make use of something (Access, 2007). The President's New Freedom Commission on Mental Health (2004) has noted that the three components of access to mental health services that have put those in rural areas at a disadvantage are knowledge,

transportation and financing.

Knowledge refers to knowing when one needs care and where and what care options are available. According to the HRSA, "The perception of need for care is the first step in seeking care, and rural residents enter care later than do their urban peers due to a lower perception of need-a problem that is then compounded by their perceiving less access to care" (2005, p. 5).

Transportation is another impediment to the access of mental health services for those in rural communities. Sawyer et al. (2006) proposed that there are four areas that act as obstacles to mental and behavioral health service delivery in rural America. One of the four areas involves issues of structure and organization. A lack of transportation, especially public transportation, along with the unique geography of rural areas, is consistent with the structural and organizational issues proposed by Sawyer et al. Those living in rural settings tend to be spread out across wide expanses of land, making it difficult to organize community development or efficient service delivery. A typical rural mental health service delivery area covers more than 60,000 square miles with the population distributed in isolated communities (Murray & Keller, 1991). Due to the geography of rural areas, most consumers of mental health services in these areas must travel hundreds of miles every week to access services that are available only in larger communities (HRSA, 2005). This, coupled with a substantial lack of public transportation interferes with social interchange and accessibility of human services

Lack of financing and/or the inability of rural residents to pay for services is the third impediment to the access of mental health care services. According to Stamm and

colleagues (2003) in 1998, 14% of people in the United States living outside of metropolitan areas were in poverty and saw a greater income decline, 58% of rural families living at or below 300% of the poverty level, than their urban counterparts (12% and 46%, respectively; Stamm et al., 2003). Almost 1/3 of the nation's poor are rural residents (Human & Wasern, 1991), with the poorest counties in the U.S. [being] rural" (Murray & Keller, 1991).

Sawyer and colleagues (2006) have noted that a lack of flexible funding streams, complicated and cumbersome funding arrangements, and restrictive reimbursement requirements, such as the need to have licensed professionals on staff to seek Medicaid/Medicare reimbursement, make it difficult for many individuals living in rural areas to pay for mental health services. This lack of financial resources may inhibit access to services even if transportation is available or if there is there was the option of employing traveling mental health care professionals.

Acceptability. The third barrier that may prevent rural persons from receiving the mental health care is acceptability. Definitions of acceptability include "being judged to be in conformity with approved usage, meeting requirements, and being adequate for the purpose" (Acceptable, 2007). Sawyer et al. (2006) reported that one factor interfering with acceptability of psychotherapeutic services by those residing in rural communities was culturally based stigma. Two culturally based stigma commonly identified, and that interfere with the acceptability of services by rural residents, include the potential difficulty of maintaining confidentiality in small, tight-knit communities, and the perception that those residing in these communities are without the stress and strain one

would experience in urban communities (Sawyer et al.). In addition to these two common perceptions, Shinogle (2001) found that "studies have shown that depressed rural residents are more likely to negatively label people who sought professional help for treatment, and the lack of anonymity in small towns and rural environments may exacerbate the influence of this stigma" (p. 128).

Technologically Assisted Intervention (TAI): Reaching Out to Rural America

Technologically assisted intervention (TAI), or teletherapy, is a relatively new art of therapy available through recent innovations in technology. It appears to be a viable solution for both clients residing in rural communities and clinicians who are willing to provide services to these residents.

According to the research by Gibson et al., "'telemedicine' or 'telepsychiatry' videoconferencing has been suggested as a solution to the problems of providing psychiatric access to medically underserved, primarily rural areas in which the cost of transporting either clients or psychiatrists is prohibitive" (2002, p. 69). As noted above, one of the greatest barriers to the delivery of therapeutic services is that in these large geographic areas, there are few mental health professionals or clinics. When clinicians are available, the large distance between them and some clients, contributes to the lack of accessibility and availability to those clients. TAI offers a solution to accessibility of therapy by making geographic distance between therapist and client irrelevant.

TAI would also make services available in places where there was no clinician.

Through the use of this unique therapy modality, professionals from all over the country could be brought, literally as well as figuratively, into rural communities without leaving their offices. TAI offers rural residents the opportunity to access specialists trained to address their specific personal, couple or family concerns.

While TAI may not be seen as directly affecting acceptability, it is suggested that as TAI becomes increasingly recognized as a viable therapeutic modality, and those in need of services access them and find benefit from the services, it would only seem reasonable that they would share this information with others who would promote it with family, friends and co-workers (Dr. D. K. Openshaw, personal communication, September 2007). Over time, as has been seen with therapy in general (Giles & Dryden, 1991; Kaminetzky, 2001), various myths and stigma are replaced with facts and outcome which open the way for others to reach out and take advantage of these services. Also unique to TAI, would be the addressing the fear some have of "bumping into their therapist" at the grocery store or in their church. While a therapeutic relationship does appear to result when therapists use TAI, there is an aspect of anonymity that seems to be desirable to those who have been involved in this mode of therapy when their therapists are competent (Dr. D. K. Openshaw, personal communication, September 2007).

Clients receiving TAI services go to a designated location, where they have access to the necessary equipment. Alone in a room, they enter the therapeutic environment via the Internet, sitting in front of a computer where they see their therapist in real time. The therapist, likewise, is connected with the client. Both client and clinician are now in a simulated face-to-face therapy setting; ready to engage the issues as they would in an

office.

Determining the Effectiveness of TAI: An Examination of Satisfaction as One Factor

To ascertain the credibility and viability of TAI for rural communities, as well as others who may find access and availability limited (e.g., group homes desiring to provide family therapy when their residents come from various states, those with disabilities, or are aging) three essential determinants must be examined; feasibility, satisfaction, and outcome. This research pertains specifically to satisfaction. The overall study examines the use of TAI to provide cognitive behavioral therapy to women who have been diagnosed with mild to moderate or moderately severe depression in rural communities, where there are limited mental health services available. With this in mind, attention is turned to the conceptualization and operationalization of satisfaction, with the primary objective being to determine if women who have been provided therapy through TAI found this therapeutic modality satisfying.

The Conceptualization of Satisfaction

Satisfaction has been identified as an important variable in nearly any area where there is a service and/or product being offered. Client, patient, or customer satisfaction is important to those offering material goods, medical services, consulting, and clinical services. For example Tang, Lu, and Chan (2003) have looked at achieving client satisfaction for engineering firms, Schwab, DiNitto, Aureala, Simmons, and Smith (1999) explore the dimensions of client satisfaction with rehabilitation services, and Lin (2007),

explores customer satisfaction within the information and tourism industries. While many studies refer to the importance of satisfaction in a variety of contexts, there are as many definitions of the term. In conceptualizing satisfaction for this study, various definitions have been examined. A dictionary definition of satisfaction is, to (1) fulfill the desires, expectations, needs, or demands of (a person, the mind, and so forth); (2) give full contentment to (Satisfy, 2007).

Satisfaction, as defined in this study, refers to a perceived fulfillment of expectations. This definition is based on both dictionary definitions of satisfaction as well as the definitions for satisfaction found in the literature. Having examined a variety of ways to conceptualize satisfaction it appears that many of the definitions used in studies include the following as characteristics of satisfaction; a positive perception, a fulfillment of expectations, the belief that needs were met, and desires attended to (Murphy, Faulkner, & Behrens, 2004; Roe, Dekel, Harel, & Fennig, 2006). To conceptualize satisfaction for this study, three facets that are believed to both influence satisfaction and, in turn, guide in measuring satisfaction of TAI, are focused on. These three facets are satisfaction with the therapy process, satisfaction with the client-therapist relationship, and satisfaction with the modality (in this case the technology of the Internet). The study uses the client's perception of empathy as a measurement of how satisfied they are with the client-therapist relationship.

Research on Client Satisfaction with Teletherapy

Only a few researchers have assessed client satisfaction with teletherapy, and none have examined it from the TAI model. Dongier, Tempier, Lalinec-Michaud, and

Meunier (1986) reported that they found no difference in satisfaction of patients when comparing telemedicine with usual care. Norris et al. (2002) reported that patient satisfaction, based on both direct (satisfaction survey) and indirect (compliance rate with appointments) measures, was the same for face-to-face and telepsychiatric care. McCloskey (1997) also found teletherapy respondent satisfaction with many of the parameters he evaluated.

Empathy as a Measure of Satisfaction

Empathy is an important relationship skill and. Perhaps it could be stated that empathy may be considered a necessary ingredient to the client-therapist relationship and is one of the characteristics of a positive therapeutic experience. Some research suggests that the therapeutic alliance contributes consistently, but modestly, to retention which has been found to act as a measure of satisfaction (Carroll, 2005). However, even more research has repeatedly demonstrated that the quality of the therapist-client relationship is the single most important factor when measuring the overall outcome of therapy (Heaton, 1998). It has also been noted that a positive client-therapist relationship contributes to client's perceived satisfaction with therapy (Heaton). One of the most compelling findings in general psychotherapy literature is that the better the client-therapist alliance, which is grounded in empathy, the more likely the client will experience a positive therapeutic outcome (Hubble, Duncan, & Miller, 1999).

If treatment retention and a positive outcome are both signs of, and/or contribute to, higher levels of client satisfaction, and these are indirectly correlated with empathy, it makes theoretical sense to evaluate the client's perspective of the therapeutic alliance

using empathy as a critical variable. Relative to empathy, Heaton (1998) identified three therapist attributes that she believes are empathy based and necessary for building a therapeutic alliance; unconditional positive regard, empathic understanding, and congruence. All three of these attributes are addressed in the empathy instrument used in this study. Unconditional positive regard is defined as "acceptance, prizing, or caring." Empathic understanding refers to the therapist's ability to accurately perceive the feelings and personal meanings of those feelings of the client along with the ability to communicate accurately their understanding to the client (Rogers, 1957). Congruence relates to a therapist's authenticity and genuineness. One who is congruent does not present with an aloof professional attitude, but is present and transparent to the client.

Reynolds, Stiles, and Grohol, studying online therapy versus face-to-face therapy, reported "online clients provided similar session impact and therapeutic alliance ratings compared to face-to-face clients. Online therapists evaluated the depth, smoothness, and positivity aspects of session impact and confidence aspect of therapeutic alliance more highly than face-to-face therapists" (2006, p. 164). This shows that both clients and therapists involved in online therapy rated the therapeutic alliance at least as highly as those clients and therapists involved in face-to-face therapy.

While empathy does not translate directly into satisfaction, it is an indication or indirect measure of satisfaction. As discussed, reported clinical outcome and retention are indicators of client satisfaction. If the positivity of the clinical outcome and the likelihood of clients to returning to therapy are correlated with therapeutic alliance, which is empathy driven, then it is logical to assume that empathy can be considered as a

relevant measure of satisfaction.

In summary, satisfaction is a critical dimension that is necessary to examine when the desire is to determine whether a new art of therapy is effective for a given population in a specific context. As noted, therapy for women in rural communities is restricted by availability, accessibility, and acceptability. It is suggested that satisfaction is one of the factors important to increasing availability, accessibility, and acceptability. It is necessary that satisfaction of a service be present in order for that service to be available and sustained across time. It is only economically feasible to offer a service if people will be using that service and increased satisfaction in a service increases the usage of it. Accessibility is also related to satisfaction as those who are satisfied with certain services can join together in finding ways of making available services more accessible. Also, those who provide services will find it economically advantageous to make their services accessible to those who are satisfied with them, and would have a greater chance of using them.

Unfortunately there are limited studies addressing satisfaction in therapeutic settings even though the research in general would suggest that this would be an important area of study. This research assumes that understanding satisfaction will provide important information for the implementation of TAI; as such, this study incorporates quantitative and qualitative items developed to study satisfaction. The research items were written to assess satisfaction with TAI and TAI equipment, empathy, and willingness to refer others for TAI services. The overarching research question is, "What was the perceived level of satisfaction experienced by clients who have received

CBT for depression through the TAI medium?"

This overarching question was answered through the following research questions focused on in this study: Research Question No. 1: "Overall, how does the client rate the quality of the therapy services received?" Research Question No. 2: "Overall, how much empathy does the client perceives existed in the therapist-client relationship?" Research Question No. 3: "Overall, how satisfied were the participants with the technology used to provide TAI services?"

CHAPTER III

METHODOLOGY

Methods

Design

The basic research design for this study was as follows:

$$\mathbf{S \quad T_1 \quad X \quad T_2 \quad T_3 \quad T_4}$$

where S represented screening, T1 represented time of assessment of depression, X represented the TAI intervention, T2 represented the time of administration of the satisfaction instrument, immediately following treatment, T3 represented the time of administration of the satisfaction instrument three months following the treatment, and T4 the six month post-therapy assessment. This study involved participants who were assigned to one of two waves, first being in the Fall of 2006 and wave 2 Spring 2007.

Sample

This study about perceived satisfaction of women who have received TAI for depression, is part of a larger study (Openshaw, Pfister, Morrow, & Roper, 2008). Participants were adult women (ages 21 – 55) in rural Utah who have been diagnosed with mild to moderate depression. Seventeen adult women residing in the Vernal-Uintah Basin in Eastern Utah formed a purposive-convenience sample. The Uintah Basin was selected because it is a remote, rural location with a larger pool of women than other rural Utah communities, and there are facilities (e.g., Utah State University's Extension) where the principle investigator (PI) was allowed to set up the TAI.

Demographics of Sample

Table 1 details demographics of the 17 women who participated in the study. It may be interesting to note that all of the women were married and Caucasian. The most common type of occupation was white collar, and over half were on psychotropic medication. While it is unknown how these demographics affect the satisfaction women reported, the information may be useful as one attempts to generalize findings to specific populations.

Table 1

Demographic Data (Combined N = 17)

Variable	Number of participants	
Marital Status		
Married	17	
Race		
Caucasian	17	
Occupation		
Student	2	
None	5	
White Collar	9	
Blue Collar	1	
Income (Family)		
- 40,000	2	
41,000 – 80,000	7	
81,000 – 100,000	6	
101,000 +	2	
Psychiatric Hospitalization	2	
Psychotropic Medication	10	
	Mean	Median
Age	39.9	41

Recruitment

Clients were recruited through the local newspaper where an article about depression was written by Dr. Openshaw. This article concluded with a brief description of the study and an invitation to be involved. Recruitment was continuous until the desired number of participants, after screening, was acquired. Those who were not selected for the study because they did not meet the screening criteria, were, if appropriate, referred back to their physician for follow up.

Participant Screening and Selection

Women who responded to the TAI participation solicitation met individually with the PI who provided and discussed the Letter of Informed Consent (e.g., The proposed use of TAI to provide therapy for depression, selection of clients, confidentiality and how it could be potentially compromised, risks and benefits of participation, assignment to treatment or referral, and the option to decline treatment at any time). Next, potential clients were individually invited to sign the Letter of Informed Consent (see Appendix C) which was completed prior to their completing the screening process for participation.

Screening proceeded in the following manner: (1) The Letter of Informed consent was signed; (2) The PI administered the Short Depression Interview (SDI) and Mini-Mental State Examination (MMSE); (3) The SDI and MMSE were used to rule out women whose depression was secondary to physical (e.g., chronic illness, substances) and neurological problems (e.g., early onset dementia, onset of Alzheimer 's disease) that would need to be addressed prior to therapy for depression. If volunteers scored outside of cutoff ranges for indicators of illness, bereavement, drug use, problems with current

mental status, and so forth, they were not accepted into the study. This was to insure that symptoms of depression were not secondary or reactions to any of these other issues.

In addition to the SDI and MMSE, pre-assessment battery scores on the Beck Depression Inventory-II (BDI-II), Geriatric Depression Scale-5 (GDS-5), and University of Rhode Island Change Assessment (URICA) were used to *screen in* clients to whom invitations to participate were extended. Only women who were in the contemplative stage or above were considered for the study, whose BDI scores were within the mild to moderately severe depression cut-off range, and whose depression was verified with the GDS-5 and SDI were considered. Those whose scores reflected severe depression were referred to their physician for further consultation and treatment. The URICA was used to determine "readiness for change." Finnell (2005), as well as Rochlen, Rude, & Baron (2001), has demonstrated that those in the contemplative and action stages are more likely to engage therapy and remain actively involved in therapy than are those who are in the precontemplative stage. As such, in addition to the level of depression required for participation in the study, the women were required to demonstrate that they were in either the contemplative or action stage of readiness to be offered an invitation to participate.

Participant Confidentiality

Five issues of confidentiality were addressed prior to initiating the study. First, the study uses Internet technology. All therapy was conducted online through a confidential and secure software program called Breeze. This program has been approved by the IRB for this study due to its high security features. Dr. D. Kim

Openshaw had a personal communication with Mr. Marc Hugentobler on April 6, 2006, and Mr. Hugentobler indicated that "Macromedia Breeze as a communication platform is safe and secure. Especially if it is a meeting between two individuals, only the concerned parties can authenticate and gain access to the session." Hugentobler explained that while confidentiality may not be assured with 100% certainty, it appears as if Macromedia Breeze "performed well with respect to data validation and enforcement of access control to resources such as content, courses and meetings."

Second, in that TAI was to be offered at a location where employees may have contact with the clients, the PI offered a PowerPoint presentation addressing confidentiality for employees located at the centers where the TAI was provided (see Appendix D). Employees were required to sign an agreement of confidentiality with the PI (see Appendix D).

Next, a technician was employed to service equipment or be available should something go wrong with the equipment. The technician was able to have contact with the clients. As with the employees at the facility, the technician was shown the same PowerPoint presentation provided to employees of the center and required to sign an agreement of confidentiality.

Fourth, a sound screen was placed outside of the office area where the clients were, while engaging in therapy. A sound screen is a small device that emits white noise that in turn muffles information that may "leak" through the door or wall.

Finally, to facilitate ongoing supervision of those providing services, and possibly training of others in the use of TAI, a DVD recording of each session was made by

therapists. During supervision, only the PI (supervising therapist) and the therapists-in-training involved in the study reviewed the tapes. Therapists-in-training were expected to use the information presented during the course of supervision in an ethical manner. If, per chance, one or more of the therapists-in-training recognized an individual who was receiving services, they were to excuse themselves from that portion of the supervision. These recordings were used for supervision purposes only and destroyed at the conclusion of the study, unless permission was granted to use them for training purposes.

In addition to these precautions for the protection of confidentiality, the PI: (a) Kept the research records confidential, consistent with federal and state regulations. No names were associated with the data collected and only Dr. Openshaw and his research associates had access to the data, which were stored in a locked file cabinet; (b) Is keeping the data (i.e., the actual information acquired from completing the assessment measures) until one year after the completion of the study (July 2007) to allow time for the data to be analyzed; (c) Separated the Informed Consents from the data. Informed Consents were maintained by the PI in a separate location from the data where only the PI had access; (d) Analyzed and reported all results from the group data. No identifying information or individual information related to names was used in the reports. Clients were informed of these potential concerns with confidentiality which was addressed in, and discussed prior to the signing of, the Letter of Informed Consent.

Therapy

Once participants had been selected and signed the informed consent, the sample of 17 women was administered ten weekly sessions of TAI by the principal investigator

(PI), Dr. D. Kim Openshaw, Ph.D., LCSW, LMFT or graduate level therapists-in-training, who were trained and supervised by the PI. Because participants were mailed the satisfaction instrument, it did not take away from the integrity of this study to have the PI doing therapy. Each session was an hour and fifteen minutes in duration and focused on the treatment of depression using the Cognitive-Behavioral Model of therapy. As discussed in the literature review, CBT is widely recognized, empirically based treatment for psychiatric disorders (Wright et al., 2006). This is important as some insurance companies require evidence-based models. CBT was also chosen for the study because it is easily manualized, very visual, and high skill oriented. CBT directs the therapist's attention to the relationship that exists between a client's thoughts, emotions, and behaviors. It focuses on an individual's schema and how that schema influences thoughts. Schemas are the core beliefs that contain fundamental rules for information processing. "They provide templates for (1) screening and filtering information from the environment, (2) making decisions, and (3) driving characteristic patterns of behavior" (Wright et al., 2006, p. 173). The development of schemas is shaped by a variety of different things including interactions with others (parents, peers, teachers, and so forth), life events, traumas, successes, and genetics. CBT then attempts to modify thoughts and in turn help clients regulate emotion, change behaviors, and alter unhealthy schemas. The CBT approach used in this study is based on Aaron Beck's work and a compilation of CBT tools compiled by Wright et al.

The Therapists

The PI was the supervising therapist for the study, with master's students enrolled in the Marriage and Family Therapy program at Utah State University helping to carry out the therapy. Four therapists-in-training were selected from the Marriage and Family Therapy program, and one was a licensed clinician (LCSW). Potential therapists were interviewed and selected by the PI. They were then required to do some readings on the models, and participate in two weeks of training.

Satisfaction Measure

After completing ten sessions of TAI the clients were asked to complete a satisfaction questionnaire consisting of quantitative and open-ended quantitative questions (see appendix A). Clients were then asked to fill out the same satisfaction questionnaire 3 months, and again 6 months following termination of their treatment to determine if their opinion of satisfaction had remained consistent. The items were designed to assess the level of satisfaction reported by participants at the conclusion of the study, and then examine their post-therapy responses with their responses received 3 and 6 months post-therapy.

Technologically Assisted Intervention

Clients met individually with the PI at a selected therapy location to be taught how to use the TAI equipment. The equipment included a lap top computer, connected to a monitor to enhance the size of the picture, and a head set with microphone to facilitate listening and responding. A videocam system was connected to the computer to relay therapist and participant images through Macromedia Breeze. Participants were

introduced to an on-site technician who was available to help with the equipment when difficulties were encountered or when the participant forgot how to use it.

Ten treatment sessions were scheduled with each client. Nine of the ten sessions were scheduled to be 1.25 hours each whereas, the tenth and final session was 1.5 hours. The additional time for the final session was to allow for the therapist to explain the re-administration of the assessments. Except for the Beck Depression Inventory, the assessment battery was administered to participants prior to the initiation of therapy, re-administered at the conclusion of therapy, and once again approximately 12 weeks post-therapy. The BDI was also administered at the conclusion of the 5th session to review progress towards goals.

Treatment Fidelity

Four techniques were utilized to maintain treatment fidelity. First, a two-week training workshop was provided to the therapists. Second, a session treatment manual was developed and used to assure model purity. Third, weekly supervision with the therapists was provided. During the supervision clinical progress was examined, cases were staffed, and treatment protocols were examined in the context of CBT. Finally, TAI sessions were recorded, and random sessions, at least two, were reviewed by the PI for protocol consistency in the offering of CBT as related to the treatment plan. When lack of consistency was noted, additional supervision and training were provided.

Attrition

An unavoidable consequence of research is that of attrition. While there was no

way to prevent attrition, sample selection, as well as the research method to be employed helped address this potential issue. In the selection process, the URICA (University of Rhode Island Change Assessment) was used to screen out those who were in the pre-contemplative stage of change. In so doing, the study accepted only those who were in the contemplative, action, or maintenance phase. Those in these stages of change are most likely to engage in therapy and be sufficiently motivated to carry through (Finnell, 2005; Rochlen et al., 2001). There was one woman who participated in the overall study, but who did not return the satisfaction measure, and so the data analyzed accounts for only 16 women.

Methodologically, because of the small sample size, a small "n" design was adopted for data analyses. Ideal sample size for a small n design is based on the power one desires (Shuster, 1990) however, a single case design ($n = 1$) can be employed as a worst case scenario (Todman & Dugard, 2000).

Measures

Sociodemographic Information

The Sociodemographic Instrument given to clients was designed to collect basic demographic data in five areas, namely, *personal characteristics* (age, gender, marital status, ethnicity, years of schooling, educational level); *usual living situation* (alone, with relatives, type of accommodation, family composition); *employment and income* (employment status, occupational category, days of work lost during the past year, level of income); *service receipt* (hospital inpatient, outpatient/community-based service

contacts [mental health, social services, and primary care], criminal justice service contacts); *medical profile* (recent or chronic illness[es], name/type of medication, dosage level and frequency).

Technologically Assisted Intervention Satisfaction Instrument (TAISI)

The TAI Satisfaction Instrument included a variety of quantitative items measured on 5-point Likert scales. Quantitative items assessed general satisfaction, allowing clients to report on their perceived level of overall satisfaction. In addition, qualitative questions were developed to add clarity to the quantitative questions, and to elaborate on the satisfaction experienced by the participants. The over arching question of the study was, "Overall, how satisfied were the participants with the TAI services provided?"

Need Fulfillment Scale: A quantitative measure of satisfaction. This instrument is a multi-dimensional scale, organized around 12 items that provide an examination of the therapy process in greater specificity. Items are rated on a 5-point Likert scale, from "not at all" to "completely," and include questions such as, "To what extent did you therapist help you achieve the purpose for which you sought therapy?" and "To what extent did your therapist understand your needs?" The complete list of items is available for inspection in Appendix A, where the Satisfaction Measure has been included (the first 12 items of the measure). In that this instrument was developed for this study, there was no validity or reliability originally associated therewith, however, according to Dooley, "not all measures have criteria, that is, agreed-on standards. In the absence of a criterion, you might assess a test's validity by inspecting its content, that is, judging content

validity" (2001, p. 90). For this measure content validity was established by choosing items that matched theories of satisfaction. After administering the instrument to the participants at 3 different time periods it appears there is a good degree of reliability inherent in the measure, as the results of the measure at the second and third administration were similar to previous administrations. The research question these items address was; "Overall, how does the client rate the quality of the TAI therapy services received?"

Independent general satisfaction measures. Three independent quantitative items were included on the measure to assess for global satisfaction, namely, "Overall, how would you rate the quality of services you received?" "Overall, how satisfied were you with teletherapy?" and "How willing would you be to recommend teletherapy to a friend?" These three items maintained content validity, again through the matching of these items with theories of satisfaction. Reliability was established as the participants answered the items in a similar manner at three different time points. These items examined participants overall satisfaction with their experience and address the primary question, "Overall, how does the client rate the quality of the therapy services received through the TAI application of CBT?"

Empathy satisfaction instrument. As established, empathy can be considered an indirect measure of satisfaction with therapy; as such this study incorporates a measure of empathy. The ESI is comprised of 10 items that are rated on a 5-point Likert scale, from "strongly agree" to "strongly disagree," some of which employ reverse scoring. The ESI is based on the Empathy Scale developed by Burns (1998). Because this was an existing

instrument, validity and reliability measures were built in based on research by Burns (1998). Some examples of items include: “My therapist thinks I'm worthwhile,” and “My therapist is friendly and warm toward me.” Participants rate how much they agree with these statements, from strongly agree to strongly disagree. The ESI is part of the overall TAI Satisfaction Instrument that can be found in Appendix A (the 10 items listed under “Empathy Scale”). These items examine the research question: “Overall, how much empathy does the client perceive exists in the therapist-client relationship?”

Satisfaction with technology instrument. The medium through which this therapy was delivered was technological, that is, CBT was provided to participants through the Internet using the Breeze program. In that satisfaction, when delivering services through TAI, has to do not only with human relations but with the medium through which the services are being delivered, it is logical to assume that overall satisfaction would include a measure that assessed the technological aspect of the services. The STI consists of six items that were scored on 5-point Likert scales, from “poor” to “excellent.” As with the Need Fulfillment Scale, this instrument was developed specifically for this study, and establishes content validity, based on the matching of items and theory. Reliability was shown through similar responses each time the measure was administered. Examples of questions include, “How satisfied were you with the teletherapy sound?” “How satisfied were you with the teletherapy images?” and “How satisfied were you with the performance of the equipment?” All six items can be viewed in Appendix A. These items, related to technology examine the research question, “Overall, how satisfied were the participants with the technology used to provide TAI services?” It did this by

measuring the client's satisfaction with the sound, the visual images, the adequacy of privacy, the performance of the equipment and their and the therapist's understanding of the equipment.

The Open-Ended Quantitative Satisfaction Instrument (OEQSI). A variety of guided, open-ended quantitative items were included on the TAISI to increase depth of understanding of the client's satisfaction, particularly to address what they were and weren't satisfied with. While the scales focused on client's overall evaluation of their own perception of satisfaction, the open-ended items allowed the clients to answer questions that helped explain why and how they perceived their desires and needs being met. It also allowed participants to clarify areas that could be improved on. Because of their guided, yet open-ended nature, these items did not target specific research questions, but rather allowed clients to direct their answers towards answering any of the three research questions, providing insight into the overarching research question, "What was the perceived level of satisfaction experienced by clients who have received CBT for depression through the TAI medium?" Some examples of items include, "If there are things you felt were especially good or helpful about your teletherapy, please describe what you consider the three most significant to be," and "If we could improve something that would make you more willing to refer a friend for teletherapy, what would it be?" All open-ended quantitative questions can be viewed in Appendix A.

Data Analysis

The primary research question addressed in this study was, "What is the perceived

level of satisfaction experienced by clients who have received CBT for depression through the TAI medium?" The question was assessed post-therapy and again 3 and 6 months post-therapy. Quantitative items were used to help examine the question.

Specific Quantitative Research Questions

In clarifying the primary question, three substantive questions were explored and referred to as Research Questions No. 1, 2, and 3; Research Question No. 1 states, "Overall, how does the client rate the quality of the therapy services received?" Research Question No. 2 asks, "Overall, how much empathy does the client perceives existed in the therapist-client relationship?" and Research Question No. 3 states, "Overall, how satisfied were the participants with the technology used to provide TAI services?" For all of these questions descriptive statistics were calculated to assess the mean scores of the items related to each question. Repeated measures ANOVA was run to determine whether there was a significant difference between post-therapy answers, and 3 and 6 months post-therapy answers. Because participants were grouped as one, (no matter when they began the therapy) the researcher focused on within subjects effects and did not examine the between-groups effects.

Open-Ended Quantitative Research Questions

Guided, open-ended quantitative questions added to the researcher's understanding of the clients' perceived sense of satisfaction and dissatisfaction. To best examine these data a content analysis was implemented. Content analysis refers to "methods that count occurrences of selected lexical (related to words) features in samples

of text" (Dooley, 2001, pg. 105). To enhance the reliability of these data, three graduate students organized the answers to each of the guided open-ended questions into categories. Once categories were identified and agreed upon, students counted the number of times these categories were present in participants' answers. Information acquired was used to explain participant satisfaction and explore ideas presented by the participants.

CHAPTER IV

RESULTS

An Analysis of Quantitative Data

The study conceptualized satisfaction as a personalized positive outcome experienced by a client, based on their perceived fulfillment of desires, expectations, needs and demands. To best examine client satisfaction semi-specific questions regarding the participants experience and satisfaction was asked, such as, "To what extent did your therapist help you obtain skills that will help you handle future problems?" Semi-specific questions were created to examine satisfaction with the services, perceived empathy in the participant-therapist relationship, and satisfaction with the technology of TAI and the equipment used. Global questions were included to allow participants to simply relate their overall satisfaction; for example, "Overall, how satisfied were you with teletherapy?"

Quantitative data were analyzed from the TAI Therapy Patient Satisfaction Survey using SPSS 15.0. Data were entered by the principal investigator of the TAI study and corrected for errors. As summarized above, the participants for this study originally included 17 women suffering from mild to moderate or moderately severe-depression. Participants were part of the overall TAI depression study supported by a CURI and AES grant awarded Dr. Kim Openshaw. Participation for the satisfaction study was 94%, as 16 of the 17 women completed the Satisfaction Survey post therapy, 3-months post therapy, and 6-months post therapy.

Research Question One States

"Overall, how does the client rate the quality of the therapy services received?" This study sought to examine whether participants would be satisfied overall with the quality of the therapy services they received through TAI, and if this satisfaction would stay the same over time (from post to 3 months and from post to 6 months). The "Need Fulfillment scale" (NFS) was used to address this question.

The NFS (Items 1-12, Appendix A), was part of the TAISI. It included 12 5-point Likert items, and when scored provided a total score ranging from 0 to 60. Data provided from the analyses (see Table 2) indicated that, when the overall mean was examined, it could be concluded that the women were satisfied with the quality of the therapy services received. No cut off score was identified for overall satisfaction; however data suggested a high level of satisfaction. This is supported by an examination of the derived mean score, the total mean of all 3 time periods, (58.11) in comparison with the total possible score of 60.

There were also three 5-point Likert items on the Satisfaction Instrument (items 23, 31, and 34 in Appendix A); each was used as an independent global measure of

Table 2

Overall Levels of Satisfaction with Therapy Services Received, at Post Therapy, 3-months Post Therapy, and 6-months Post Therapy

Variable (overall satisfaction)	*N*	Mean	*SD*
Post therapy	16	58.13	2.872
3-months post therapy	16	58.25	2.671
6-months post therapy	16	57.94	3.907

satisfaction. The first item asked, "Overall, how would you rate the quality of services you received?" No cut off score was identified for overall satisfaction; however data suggest a high level of satisfaction in that the highest score possible was 5 (see Table 3). This is supported by an examination of the derived mean score, the total mean of all 3 time periods, (4.69) in comparison with the total possible score of 5.

The second item asked, "Overall, how satisfied were you with teletherapy?" Data provided from independent analysis of this item (see Table 4) indicated that the women were satisfied with teletherapy. No cut off score was identified for overall satisfaction; however data suggested a high level of satisfaction. This is supported by an examination of the derived mean score, the total mean of all 3 time periods, (4.73) in comparison with the total possible score of 5.

The third item asked, "How willing would you be to recommend teletherapy to a friend?" An examination of means provided in Table 5 demonstrates willingness to refer others for TAI therapy. If willingness to refer can be construed to be an indicator of satisfaction it must be concluded that for these women, they were well satisfied with the

Table 3

Levels of Satisfaction with the Quality of Services Received, at Post Therapy, 3-months Post Therapy, and 6-months Post Therapy

Variable (overall satisfaction with quality of services)	*N*	Mean	*SD*
Post therapy	16	4.81	0.403
3-months post therapy	16	4.63	0.619
6-months post therapy	16	4.63	0.500

Table 4

Levels of Satisfaction with Teletherapy, at Post Therapy, 3-months Post Therapy, and 6-months Post Therapy

Variable (overall satisfaction with teletherapy)	*N*	Mean	*SD*
Post therapy	16	4.81	0.403
3-months post therapy	16	4.69	0.602
6-months post therapy	16	4.69	0.602

TAI therapy. This is supported by an examination of the derived mean score, the total mean of all three time periods, (4.71) in comparison with the total possible score of 5. The increase in mean scores at each time point may be evidence that as time passed thewomen continued to experience positive outcomes which influenced a greater level of satisfaction.

To examine if change in perceived level of satisfaction was found across time, a repeated measures ANOVA was included as part of the analyses (see Tables 6-9). An ANOVA was used to examine the data from the Need Fulfillment Scale and the three independent measure of satisfaction, namely, global or general satisfaction, satisfaction with teletherapy, and willingness to refer. Because the study combined all participants into one group, between groups data was not acquired. Results from the within-subjects effects for the total score of the Need Fulfillment Scale indicated no statistically significant difference, or change, over the three time periods, $F = .087$, $p > .01$. Results from the within-subjects effects for each of the three independent satisfaction items also indicated no statistically significant difference (or effect) over the three time periods.

Table 5

Willingness to Refer Teletherapy to a Friend, at Post Therapy, 3-months Post Therapy, and 6-months Post Therapy

Variable (willingness to refer teletherapy to a friend)	*N*	Mean	*SD*
Post therapy	16	4.63	0.619
3-months post therapy	16	4.69	0.602
6-months post therapy	16	4.81	0.403

Table 6

Analysis of Variance for 12 item Satisfaction Scale, Within-Subjects Effects

Source	SS	df	MS	*F*	Sig.
Overall satisfaction	.756	2	.378	.087	.917

Table 7

Analysis of Variance for Single Item Measuring Overall Satisfaction with Quality of Services, Within-Subjects Effects

Source	SS	***df***	MS	*F*	Sig.
Satisfaction with quality of services	.375	2	.188	1.901	.167

One thing to note is that the standard deviation decreased over the three time periods. This shows that not only did the mean increase each time period, but the gap of scores narrowed and more of the women scored closer to the mean, strengthening the mean

Table 8

Analysis of Variance for Single Item Measuring Overall Satisfaction with Teletherapy, Within-Subjects Effects

Source	SS	Df	MS	*F*	Sig.
Satisfaction with teletherapy	.167	2	.083	.789	.463

Table 9

Analysis of Variance for Single Item Measuring Participants Willingness to Refer Teletherapy to a Friend, Within-Subjects Effects

Source	SS	Df	MS	*F*	Sig.
Willingness to refer	.292	2	.146	.868	.430

score.

In summary, data from the combination of questions that sought to examine overall satisfaction, from both a global and multi-dimensional perspective, including willingness to refer TAI, suggest high levels of overall satisfaction. These high levels of satisfaction did not significantly change over time; in other words 6 months after therapy the women continued to report high levels of overall satisfaction with their TAI experience.

Research Question Two States

"Overall, how much empathy does the client perceive existed in the therapist-

client relationship?" The mean empathy scores at each time point were over 46.6, relative to the possible mean score (mean = 50). While no specific cutoff was established, these high mean scores offer evidence that these women perceived a close, empathic relationship with their therapist (see Table 10).

To statistically support the conclusion noted above, a repeated measures ANOVA was run to compare the level of satisfaction across time (see Table 11). Results from the within-subjects effects for the 10-item empathy scale indicated no statistically significant difference, or change, over the three time periods, $F = .100$, $p > .01$.

In summary, empathy is perceived to be a critical component of therapy and correlated with progress in therapy. If it can be assumed that those who make progress in therapy are more satisfied that are those who do not make progress, then it may also be concluded that empathy may be viewed as an indirect measure of satisfaction. This in mind, the data from this portion of the study would suggest that women were able to develop an empathic relationship with their therapists and that their perception of that relationship did not change across time.

Research Question Three States

"Overall, how satisfied were the participants with the technology used to provide TAI services?" Means presented in Table 12 suggest that the women were satisfied with the teletherapy equipment. No cut off score was identified for levels of satisfaction with equipment; however data suggested a high level of perceived empathy. This is supported by an examination of the derived mean score, the total mean of all 3 time periods, (27.52) in comparison with the total possible score of 30.

Table 10

Client Perceived Levels of Empathy Within the Therapist-Client Relationship at Post Therapy, 3-months Post Therapy, and 6-months Post Therapy

Variable (perceived level of empathy)	*N*	Mean	*SD*
Post therapy	16	46.75	8.933
3-months post therapy	16	47.19	4.578
6-months post therapy	16	46.62	4.646

Table 11

Analysis of Variance for 10 item Empathy Scale, Within-Subjects Effects

Source	SS	df	MS	*F*	Sig.
Perceived Empathy	3.435	2	1.717	.100	.906

Table 12

Client Satisfaction with TAI Equipment at Post Therapy, 3-months Post Therapy, and 6-months Post Therapy

Variable (satisfaction with equipment)	*N*	Mean	*SD*
Post therapy	16	27.75	7.37
3-months post therapy	16	27.25	3.396
6-months post therapy	16	27.56	3.966

Repeated measures ANOVA was run to compare the level of satisfaction with the teletherapy equipment across time to determine if statistically, the same findings would

appear when comparing means (see Table 13). Results from the within-subjects effects for the sum of the six items measuring satisfaction with the teletherapy equipment indicated no statistically significant difference, or change, over the three time periods, $F = .114$, $p > .01$. Here the standard deviation again decreased over the three time periods, strengthening the mean score as more women scored closer to the mean.

In summary, understanding whether the women were satisfied with the TAI equipment was essential. The equipment was the medium for fostering the simulated face-to-face therapy experience. If the equipment failed the test of "satisfaction" then it would have been difficult to foster an empathic relationship and enhance therapeutic outcome. This, however, was not the findings of this study. While the equipment had its problems (e.g., occasional interruptions in audio and visuals) the women reported being satisfied with it as the medium for their therapy. This finding was consistent regardless of the time point of measurement.

Conclusion

Satisfaction, as defined in this study, refers to a personalized positive outcome experienced by a client, based on their perceived fulfillment of desires, expectations, needs and demands. It appears, based on quantitative analysis that the women in the study experienced a high level of satisfaction in all of the areas examined.

Content Analysis of Data Derived from Open-Ended Items

The content analyses of guided, open-ended quantitative items provided a more comprehensive understanding regarding the participants reported satisfaction/

Table 13

Analysis of Variance for 6 Items Measuring Satisfaction With Teletherapy Equipment, Within-Subjects Effects

Source	SS	df	MS	*F*	Sig.
Satisfaction with equipment	4.39	2	2.195	.114	.893

dissatisfaction with TAI. Five areas of satisfaction were assessed using open-ended quantitative items. The first two open-ended quantitative items (Items 32 and 33, Appendix A) asked participants to share what they felt was especially good or helpful with TAI, and then requested that they report on specific concerns or complaints. The next item (Item 35, Appendix A) was asked in association with the quantitative item that asked, "How willing they would be to recommend teletherapy to a friend?" Regardless of whether there were concerns with TAI, this item asked participants to clarify what could be improved about TAI so that they would be more willing to refer a friend for teletherapy.

A fourth item (included item 36 and 37, Appendix A) asked participants whether they would prefer to have teletherapy, like that which they received through the study, or face-to-face therapy that would require they travel some distance to receive it. While a yes or no response was solicited initially, participants were also asked to explain their selection. Finally, one item (Item 38, Appendix A) was provided so that participants could share anything they would like the researchers to know about their experience with TAI that may not have been addressed. The results and categories are reported below,

and a table depicting the frequency of categorized responses for each of the open-ended quantitative items is located in Appendix B (see Table 14).

The limitation with the open-ended quantitative data is the same as that with the other quantitative data, namely, that data collected came from a small *n* sample, and as such the ideas expressed, suggestions made, or conclusions drawn, must remain in the context of the sample size.

Another limitation may be that the open-ended nature of questions might have encouraged some of the women to answer in ways they felt would be socially appropriate. This bias may or may not exist depending on the participant. The instrument attempted to prevent the participants from answering with only what they felt were "socially appropriate" answers. Questions asked for not only positives, what the participants liked about TAI, but also for concerns and suggestions. The hope was that questions regarding concerns and suggestions would open up dialog about perceived negative aspects of TAI along with positive aspects.

Open-Ended Quantitative Item No. 1

This first open-ended quantitative item asked participants to report on what they perceived to be the most satisfying aspect of their experience with TAI. From the responses, four categories were identified, namely, skill building, therapist efforts (or positive comments about their therapist), confidentiality/anonymity, and convenience of accessibility.

Skill building. The first category identified was that of skill building, which specifically focused on reported satisfaction with the types of skills they learned from

Cognitive Behavioral Therapy (CBT). Seven of the women (41% of participants) made positive comments about the skills they had learned. One participant stated specifically that she thought "CBT was great," while another explained that she was "very satisfied with the type of therapy, [because it gave her] needed skills and strategies to take with [her], not just a place to cry over [her] troubles." Other comments included, "I learned to look at things from a different perspective" and "I was given ideas or tools on how to deal with problems in the future." While the therapist was not in the room with the client, it appears the client was still able to learn specific skills that could be used in treatment and following termination.

Therapist efforts to provide a positive and effective therapeutic experience. Seven of the women (41%) expressed satisfaction with their therapists, making positive comments about the therapist's role and/or their relationship with the therapist. On the one hand, comments focused on the therapist's positive manner in approaching therapy while building up the client. For example, one woman explained, "[my therapist] was very validating. I always left feeling good about things," Other comments spoke more to knowledge and insight of the therapist like, "the therapist was very good at seeing past the surface issues and going to the heart of the matter." And other comments addressed the skills provided by the clinician to make the therapeutic experience successful, for example, "all of the knowledge my therapist offered was great." It appears that although the therapist was separated from the participants by considerable distance (approximately 400 miles), participants still experienced a high level of satisfaction with their experience and/or relationship with their therapist. These data are supportive of the quantitative data

for empathy, suggesting that those interacting with the therapist felt an empathic association.

Privacy and confidentiality of TAI. Comments from participants relating to privacy and confidentiality suggested that TAI offered a unique form of confidentiality, namely, that the therapist was someone whom they could confide in but would not have to worry about meeting up with at various locations in the community. Seven women (41% of participants) commented on the positives of confidentiality and/or anonymity they perceived while participating in TAI. In a small community this increases the likelihood that client-clinician contact is made somewhere. One participant stated, "It was helpful to have a therapist who was out of town so that I didn't have to worry about someone in my small community knowing my personal business. I may not be willing to go to counseling with a therapist from such a small community."

Other participants commented on the positives of having someone physically distant during the therapy process, for example, one woman explained, "not sitting personally in the same room [as the therapist] I felt more at ease and could be more open." Another participant reported, "I think that I would feel slightly uncomfortable if I had to meet with a person alone in a room. This way I received the benefits of an excellent therapist without being alone in a room together." Other comments related to privacy and confidentiality and were more general, such as, "it felt very private," and "I felt it was safer and there was more privacy." While it is unknown specifically what about the teletherapy encouraged feelings of safety and privacy for these participants it can be concluded that this mode of delivery allows for a certain sense of privacy and/or

anonymity that increased satisfaction for some of the participants.

Convenience of availability and accessibility, two of three critical barriers to providing mental health services in rural communities. The last category identified from analysis of this item was availability and accessibility. There were comments from 3 of the women (18% of participants) who were satisfied with the convenience that came from having a resource available and close to home accessibility. One woman answered, "I liked having access to the therapist. In rural communities you sometimes have to drive hundreds of miles to receive therapy." Another woman explained that, "the most important thing was to have access to some therapy [availability]. I had been looking for some help for a long time. It was wonderful to find something I didn't have to drive for 2 ½ hours to get [accessibility]." These comments related specifically to two of the "3 A's," accessibility and availability. While therapy is available, in the sense that the resource exists in our nation, and in each state, it becomes less available to many due to limited accessibility. Some of these women saw TAI as something that was more convenient and accessible than having to drive for hours, and some saw that the accessibility was what made the therapy available to them.

Open-Ended Quantitative Item No. 2

To contrast with those that found TAI satisfying, it was the desire of the researcher to determine if there were issues needing to be addressed to make this medium of therapy more desirable to the general public, at least those residing in rural Utah. In examining this item, two categories were identified, one having to do with the technology and the other with confidentiality.

Technological issues with TAI. There were four women (24% of participants) who commented on concerns with technology. An examination of these issues suggested that there were three primary areas addressed by the participants as concerns, namely, basic adjustment to the technology, general equipment issues, and other technology issues.

Basic adjustment to the technology. In regards to basic adjustment, which is reasonable moving from face-to-face to technology-based therapy, there were two women who mentioned difficulties with adjusting to the one-way communication. The one-way communication was a characteristic of the technology and equipment used. It would allow for only one speaker at a time, much like a walkie-talkie. The therapist and participant would attempt to not interrupt or talk over the other as this would create interruptions in the sound and sound delays. It took some adjusting to this type of communication, as it is not the typical style in our society. At times a sound inside or outside of the room would interfere with the one-way communication from the therapist who was talking. Just as interference with the sound occurred when the therapist and the client spoke at the same time, an outside noise could create this same interference. The microphone would pick up the outside noise and create a sound interference. One woman explained that "if [her] microphone picked up an outside noise it would switch and [she] would miss what [her] [therapist] was saying."

General equipment issues. Two of the women expressed concerns having to do with equipment. One said, "Over half the time the camera for visuals didn't work. The other half of the time I had a hard time getting the computer to work." The other woman

explained that one of the days there was some freezing of the audio and visual. She followed with a disclaimer that most days it was pretty good. Because the Internet would sometimes slow down (as is common when one is connected to a network with many users) there would be an occasional freezing of the audio and visual. This means that the picture would freeze and no sound could be heard. This generally did not happen often and when it did, it would not last more than a few seconds. However, very rarely it would freeze for a longer period of time and the program would need to be rebooted. Because the researcher was aware of this technology issue prior to beginning the study they made the participants aware of the issue and explained how to log out and restart the program should this occur.

Other technology issues. Finally, there were two random concerns about the technology. For example, the breeze program is set up in such a way that participants saw not only the therapist on the computer screen, but the picture of themselves as well. One woman explained that it was difficult to "have the camera focused so close on my face." It is unknown whether this meant that the picture transmitted was more upper torso and face than the whole body, which made the participant uncomfortable, or if it referred to times when the camera setting changed and there was just a large image of the face. Another women's concern had to do with the perception that the clinician/client may not have been able to read the body language quite as effectively. One participant explained that she was sometimes able to cover up what she really felt "because the therapist misses a lot of body language." The comments were particularly interesting when one considers that, one participant addressed the inability to see the whole person,

and another addressed her sensitivity with seeing herself.

Issues of confidentiality associated with TAI. Three of the women (18% of participants) expressed concerns with confidentiality. One concern expressed by two of the women who received TAI was if they could hear noise outside of the room, perhaps those outside could hear into the room and listen in on the therapy conversation. Because the TAI was set up in a public location, an office at the University Extension in two rural Utah Communities, there was most likely foot traffic outside the door. One participant reported that she could hear "talking in the hallways" which led to a lack of confidence in privacy. In addition, some participants wondered whether anyone outside the room could hear them while in therapy. While these concerns are reasonable, as with any office regardless of whether it is distance based or local, the room was provided with a sound screen to create white noise interference for anyone who might be walking by or who might stop outside of the room in an attempt to listen. Another woman's concern related to confidentiality was that she knew a lot of the professors who worked in the building and she wondered if they knew her specific purpose for using the room. Agreements of confidentiality were signed by employees who worked at the buildings where the TAI was set up as an additional step taken to protect confidentiality, since several of the employees were involved in making certain the room was open and the equipment was operating appropriately. Perhaps better education in terms of privacy with the clients would help dispel some of the concerns and help them to understand that their concerns could be the same if they were going to an office and sitting in the waiting room. Taking a proactive position would help increase acceptability for such services.

Open-Ended Quantitative Item No. 3

The third open-ended quantitative item focused on what clients perceived could be improved in order to make them more willing to refer a friend for teletherapy. Only four of the women answered this question with suggestions of what could be improved. The others simply left this item blank, or said that no changes were needed. From the four that answered, only one category was identified. It paralleled one of the categories that was identified under qualitative item No. 2. Three of the women (18% of participants) suggested improvements related to technology and equipment.

Technology/equipment improvements. Some of the specific technology improvements suggested included the following: One woman felt it would be helpful "to refine and simplify the "sign on" procedures." The sign on procedures included opening up the Breeze program, entering a user name and password, clicking on the specific meeting and then making sure the sound and visual settings were turned on. Though the participants were educated on how to sign in, it may have been difficult to remember all the details, especially if the participant felt uncomfortable with technology in general. Reviewing the sign on procedures may have been helpful for some participants. Another woman expressed a suggestion similar to the technology concerns mentioned above, "find something that doesn't have such a long sound delay," and one simply said, "make sure the equipment works."

Miscellaneous suggestions. There were two miscellaneous answers that were unrelated to technology or to each other. One woman suggested "the privacy" could be improved. It is unsure what specifically about the privacy she felt could be improved.

Another explained, “the only improvement for me personally would be the ability to have teletherapy from my home computer because of weather, sick children, car troubles, [and so forth].” This suggestion is one that will be discussed in further detail in the Discussion Section.

These suggestions offer some helpful insight into what would increase satisfaction. The answers that were left blank or in which the participant simply wrote “nothing” also offered information. It may be assumed that these women experienced a level of satisfaction high enough that there was nothing in particular that could be improved that would influence their willingness to refer a friend for teletherapy.

Open-Ended Quantitative Item No. 4

The fourth open-ended quantitative item asked the participants whether they would prefer to have teletherapy like that which they had just received or face-to-face therapy that would require they travel some distance to receive it. The item then asked for a brief explanation of their answer. All of the women, except one, answered that they would prefer teletherapy. The one woman who preferred face-to-face therapy explained that in face-to-face therapy she “wouldn't have to stress about getting a computer to work and how to get it started.” There were two categories identified as reasons the women preferred teletherapy. The first was the convenience of availability and accessibility. The second was the anonymity of teletherapy.

Convenience of availability and accessibility, two of three critical barriers to providing mental health services in rural communities. The category identified was similar to the one identified in item No. 1, and related to convenience of greater

availability and accessibility. There were nine women (53% of participants) who made comments related to this greater level of availability and accessibility being the reason they preferred teletherapy over face-to-face therapy. There were two comments that alluded to teletherapy being the medium that made therapy available. One woman explained, "I liked having therapy close to my home. I would not have been able to travel for therapy otherwise." Another said, "I would not be able to leave my family once a week to travel a long distance for therapy." In this sense, teletherapy is what gave these women the necessary availability and accessibility to therapy. Other women talked about how the teletherapy increased the convenience, making teletherapy more accessible than it would be otherwise. Comments included: "I dislike traveling, and this therapy is definitely adequate," "teletherapy closer to home makes it easier to make and keep appointments and to continue with therapy," "I like the concept of teletherapy and it was a great experience for me. If I had to go to SLC or Provo for therapy, it would be an all day event," and "depression makes it so hard to do things. Even things that will help. Having to drive more than 20-30 minutes could be more than I could do. I have been needing a therapist for 5 years, but teletherapy made it worth it." These statements do not include all of those that related to this theme, and it was apparent that for the majority of these women teletherapy made something accessible, or at least convenient enough to be personally accessible that isn't otherwise.

Anonymity. The second category related to why the women preferred teletherapy to face-to-face therapy revolved around the idea of anonymity. There were four women (24% of participants) who commented on this category. One woman simply stated, "I

felt I had more anonymity." Another explained that "I did not receive therapy earlier because I felt self-conscious about going to a clinic." One explained how the teletherapy created a sense of anonymity for her, "it seemed as though I was more able to open up because of the 'distance' teletherapy created." Another woman summed up both themes when she explained that "teletherapy was very convenient. I've had close family not receive the help they needed because of travel issues, or not feeling comfortable in the atmosphere of a local clinic because of small town talk or knowing the people who work there." These statements regarding anonymity indirectly relate to one of the "3 A's" regarding receiving treatment, acceptability. In rural areas there appears to be a greater stigma attached to receiving treatment for mental illness than in urban areas (Sawyer et al., 2006). This has been a barrier to treatment for some, and it appears that TAI may offer a protection against this barrier to treatment.

Open-Ended Quantitative Item No. 5

The last open-ended quantitative item was an invitation for the participants to include any extra comments. In response to this item, one of the women offered some concerns related to TAI, one offered a suggestion, and 5 women (29% of participants) expressed things about TAI they were happy with. There were two categories identified from the positives reported on this item, both of which are similar to categories presented above and related to other open-ended quantitative items. The first category was a positive experience with the therapist, and the second focused on skills learned.

Concern and suggestion. One of the women expressed concerns with confidentiality. She worked in the same building where the TAI was set up, and she was

worried that there were some people who knew what she was doing and who might try to listen. Her other concern was that because the therapist could not see all of her body language she could hide some of what she was feeling. One woman offered a suggestion, saying that if TAI could be taken to care centers and into homes it could benefit elderly, who don't have ability to get out and go to therapy. This idea will be discussed further in the discussion section.

Positive experience with the therapist. There were comments from four women related to this theme (24% of participants), and included such statements as, "My therapist was a terrific therapist" and "I could always trust that my therapist could put her finger on the real problem. She was very perceptive. She was good at supporting and directing me to focus and dig deep for the truth. My therapist, I think, truly cared about and loved me through this sometimes very painful process. She also managed to do it without making me dependent on her." Just as discussed above, under quantitative item No. 1, it appears that while there was a computer screen and some distance separating the clients and participants, many participants still experienced a high level of satisfaction with their experience and/or relationship with their therapist.

Skill building. There were three women (18% of participants) offered comments related to the second category, that of skills learned, and included such thoughts as, "I learned new skills that I will always value and share with my family," "I liked the CBT," and "my therapist transferred the skills to me." These comments were similar to comments that made up the theme of skill building when analyzing the first quantitative item. It appears that although the therapist and participant aren't sitting in the room

together, the therapist is able to teach skills via TAI that are helpful in reducing the participant's symptoms.

Conclusion

The data from the guided, open-ended quantitative items on the satisfaction measure offered a greater depth of understanding as to why the women had reported high levels of satisfaction in the scaled quantitative section of the measure. It was interesting to note that the women offered a greater amount of feedback related to what they liked about TAI and what made it satisfying and helpful. On the items that asked participants to list concerns and/or suggestions for improvement many of the women simply left the space blank. This may offer some insight as more of the women were able, or more willing, to identify and express the positives of TAI than the concerns or the negatives. There were comments under the different open-ended quantitative items that paralleled each of the three critical barriers to providing mental health services in rural communities. It appears that one of the reasons TAI is satisfying to participants is that it reduces these barriers to treatment. There were also some helpful ideas and suggestions for improvement that might be helpful in future research or the application of TAI in rural communities. One women ended her last comment by saying, “I really hope that this research will lead to this kind of therapy being readily available in the Uintah Basin.”

CHAPTER V

DISCUSSION

Discussion of Quantitative Analyses

Data from the scaled quantitative analyses provided an understanding as to how well satisfied the participants in this study were with the mental health services delivered via TAI across three specific dimensions, general quality of service, empathy, and the technology used to deliver the mental health services.

Quality of Service: A General Measure of Satisfaction

An important aspect in understanding participant's level of satisfaction was to find out how they rated the quality of the services they received. Based on the level of satisfaction reported by the participants, it was concluded that those women participating in the study were very well satisfied with the quality of services provided them via TAI.

It is believed that this high level of satisfaction with the quality of services provided positively influences participants' overall satisfaction. The high level of satisfaction reported on this scale offers evidence that clients can experience a fulfillment of desires, expectations, needs, and demands through the medium of TAI. If the participants of this study were able to experience a fulfillment of expectations it is likely that clients of other demographic backgrounds and with different problems would also be able to experience a fulfillment of expectations if they participated in TAI. It would be necessary to conduct further research to examine the generalizability of these findings.

Empathy as a Measure of Satisfaction

According to Patterson, Williams, Graug-Grounds, & Chamow (1998) empathy is critical to forming a positive client-therapist relationship, which research suggests is perhaps the most single significant determinant to therapeutic change. This study assumes that for satisfaction to be perceived, participants must experience both a therapeutic change and a positive client-therapist relationship. Therapeutic change is addressed by Openshaw, Pfister et al. (2008) with the findings suggesting significant change, both statistically as well as clinically for 15 of the 17 women in the study. Empathy is assumed to be a factor in the determination of client satisfaction with services and more specifically the client-therapist relationship. Part of what was examined in this study was whether a participant could perceive high levels of empathy via online, live video conferencing. One of the components of face-to-face therapy that makes it successful is that clients can perceive a certain level of empathy from their therapist. For TAI to be an alternative to face-to-face therapy it would also be necessary for clients to be able to perceive a this level of empathy from the therapist.

Five therapists participated in providing therapy. One concern, post facto was how to delineate what might have been related to lower empathy scores should such have been found. While this becomes a concern and issue for future research, data from this study suggest that all reported high levels of perceived empathy. This in mind, it was concluded that therapists were sufficiently skillful in interventions and joining so as to encourage an empathic relationship. Further, the context in which the therapists provided therapy was supportive in facilitating empathy. This finding is clearly an important

finding worth validating in future studies. What this suggests is that, regardless of the therapeutic context, face-to-face or TAI, effective therapy can be delivered in a way that the participant can experience an empathic relationship. Further, if empathy is the critical skill (Patterson et al., 1998) for change, then it is logical to assume that the clients who report greater empathy with their therapist will experience greater satisfaction with therapy because they will experience more change. (Openshaw, Pfister et al., 2008).

Satisfaction with TAI Technology

Unlike face-to-face therapy, which requires no technological additions, TAI is technologically mediated. TAI necessitates the use of computers, screens, Internet access, passwords, and sound equipment. It requires both therapist and client have the knowledge to use the technology (e.g., how to turn a computer on and use a password) and get into the session. Because of the high dependence on technology it seemed prudent to assess participant's satisfaction with TAI, specifically the technological aspects that make it different from traditional therapy delivery methods. As noted in the Results section, most all participants reported high levels of satisfaction with the technology, including the teletherapy images, sound, and performance of the equipment. This high level of satisfaction with the TAI technology and equipment is believed to contribute to higher levels of overall satisfaction with TAI. If this is the case, it would be an indication that we have technology advanced enough to use TAI as a medium of delivery for therapy. If clients are satisfied with the technology, and if the other areas of satisfaction on which they report aren't negatively influenced due to the online therapy, TAI may prove to be a solution for those who have limited or no access to therapy.

Changes Across Time: A Measure of Consistency in Reported Levels of Satisfaction

This study assumed that those completing therapy would be satisfied at the conclusion of their therapy, and may want their therapists to have a good report. Time seems to be a factor where once away from the setting, and having had time to contemplate the therapeutic experience, there may be changes in reported levels of satisfaction with the general quality of the services rendered, perceived empathy, or the technology used to provide therapy.

Importantly, there were no statistically significant changes in the reported levels of satisfaction in any of the areas. As such, it may be assumed that over time, participants continued to experience a high level of satisfaction with the experience they had with TAI. It also becomes more likely that the satisfaction participants reported at post therapy was due to the experience of TAI, rather than to be "nice" to the therapist, or to show appreciation for the free therapy, or whatever other reason participants may have felt the need to express more satisfaction than they actually perceived. If, in fact these participants were able to express satisfaction across time, it can be predicted that there is a high likelihood that future research on TAI will show similar findings. According to this analysis, and if positive outcomes find TAI to be effective in treating the diagnosed illness, TAI could be a very plausible solution for those who lack resources and services in mental health close to home.

Discussion of Content Analysis

Five open-ended quantitative items were used to assess participants' level of satisfaction with TAI. These measures were designed to give greater depth and understanding of satisfaction, taking into consideration what participants were or weren't satisfied with. This understanding would provide a basis for future research, with potential implications for clinical intervention. More specifically, this knowledge will help those interested in rural mental health plan their therapeutic endeavors in such a way that current barriers may be effectively transcended. It would also help those who do TAI in the future, whether for research or as an alternative to face-to-face therapy to know what to do more of. In other words, the content analysis gave direction for doing less of what doesn't work and more of what does work when using TAI in the future.

Discussion of Client Perceived Positives of TAI

One of the open-ended quantitative items asked participants to describe the most significant things they felt were especially good or helpful about their teletherapy. Some of the comments related to categories that parallel two of the three A's that have been discussed, accessibility and acceptability. Socially and culturally our nation has adopted therapy as one avenue for treating and managing mental illness. Because of this, therapy is available throughout all parts of the nation. However, research has shown that for some, the availability of therapy is not accessible enough to warrant its usage. Due to the geography of rural areas, most consumers of mental health services in these areas must travel hundreds of miles every week to access services that are available only in larger

communities (HRSA, 2005). For some, a therapy office may be closer but it may not include enough clinicians to service all who need therapy. The participants of this study commented on how TAI offered therapy that may not be otherwise taken advantage of due to distance. By making therapy more accessible through TAI it is more likely to be utilized.

Also, for many living in rural areas there is a stigma associated with seeking treatment for mental illness, and that stigma is exacerbated through the lack of anonymity that exists (Shinogle, 2006). Many of the participants reported that they found TAI to be an effective solution to the negative effects of that stigma and lack of anonymity present in face-to-face therapy. Many of the participants were more comfortable meeting with a therapist that didn't live in their small town and who didn't know their neighbors and friends. This is a benefit offered by TAI that would not exist with the traditional office therapy, unless clients were willing to drive for miles.

Discussion of Client's Concerns with TAI

When examining the open-ended quantitative item regarding concerns it was found that there were concerns with privacy/confidentiality. The concern was specifically related to the fact that participants received their therapy in a public setting, University Extension, where there were students and employees who walked the hallways and were seen by the participants as they entered and left the building. This left some participants feeling exposed and vulnerable to someone outside the door hearing the therapy or worried that someone in the building might know why the participant was there-for therapy. The concern with privacy expressed by two participants, in reality was

not a great deal different than what one might face going to a clinicians office and sitting in the waiting room with other clients. Even so, finding alternative locations for providing therapy and educating clients in regards to the limits of privacy/confidentiality would help decrease this perception.

One method of addressing this concern, as noted above, would be to find alternative locations for the participants to receive their therapy where they may feel more comfortable, such as local hospitals or public schools where TAI could be transmitted. With continued advances in technology, and if TAI is found to be effective, efficient, feasible, and satisfying, an alternative to face-to-face therapy would be to set up TAI in clients' homes where they could experience a level of privacy not found in even most face-to-face settings where clients go out into public and walk into a building where other clients are present. This would also allow for even greater accessibility. In a study currently in progress, Dr. Openshaw is doing just that with one of the clients who is receiving therapy for anxiety/agoraphobia with considerable success (personal communication, March 19, 2008).

There were also some concerns regarding the equipment used for the TAI. One of the participants commented that sometimes she would cover up what she was really feeling because the technology didn't show the entire body and so some body language was missed. While we chose to use the Breeze system for this study, there are other systems out that would allow for the therapist and the client to not only see each other's faces, but could show the entire length of the body, and in some cases the bodies of more than one person. Another suggestion for improvement from some of the participants was

to find something with less of a sound delay. These, and other concerns about technology, were ones that could be addressed depending on the situation, and adjusted to meet individual needs. Also, as technology continues to be improved on an almost daily basis we can assume that the available equipment will continue to be refined.

Satisfaction with TAI and
Marriage and Family Therapy

What do these high levels of satisfaction with TAI mean for the field of Marriage and Family Therapy? In answering this question attention is focused on four specific areas, clinical training, clinical practice, research, and social policy.

Implications for clinical training. When considering clinical training, the fact that clients reported that they were satisfied with TAI, it seems important that clinical training begin by examining how their programs are training clinicians to provide quality services to those in rural areas. While TAI would feasibly allow clinicians in urban areas to treat those in rural areas, there are unique issues related to rural areas that make mental health treatment somewhat different from in urban areas (Sawyer et al., 2006). It would be important that clinicians are not only trained to use TAI, but that they receive some training specifically on mental health in rural areas.

Implications for clinical practice. Openshaw, Pfister et al. (in progress) have demonstrated that TAI can be effective in providing services to women experiencing depression. The outcome suggests that TAI was an effective modality for providing, in this case CBT. It seems logical that if TAI can be effectively used in this situation, it could most likely be extended to the practice of Marriage and Family Therapy,

particularly with the advances in technology that allows for the therapist to involve couples and families. Adopting TAI as a treatment modality would allow therapists interested in working with those who reside in rural areas to practice therapy from their office in an urban setting. Those who currently drive miles every week to work in different rural mental health centers would have the option of practicing from a standard location without the consequence of a smaller client pool.

When examining the importance of reaching out, to the individuals, couples, and families in distress of all types, it seems logical that clinicians who are interested in becoming knowledgeable in rural mental health, and who learn how to provide distance therapy, and work towards evidence based therapy for rural clients will be able to develop significant practices.

TAI and research. TAI is a new form of teletherapy, without much published research to back it up. Openshaw and colleagues have extended this research into the areas of outcome, feasibility, and this study addressing satisfaction. These directions offer some data regarding the possibility of the hopefulness of this method of providing therapy to those who are disenfranchised by the barriers of availability, accessibility, and acceptability. If satisfaction levels with TAI are high among female participants from the Uintah Basin it could be assumed that similar levels of satisfaction might be found in rural areas across the nation, however, it would be important to set up further research studies to examine this assumption. It would also be important to set up studies that examine the satisfaction, and other aspects of TAI for different demographics and cultures, including males, those from different socio-economic backgrounds, those of

different ages, and so forth.

Another area of research would be to test other online live web-cam programs that could be used to deliver TAI. This study has found that participants can experience high levels of satisfaction with the Breeze program, which works for a 1:1 ratio, one therapist and one client, however, there now exists the technology to do TAI with multiple people present. For example, there is an online video conferencing technology, the Polycom/Tandberg system, that would allow a therapist to see and hear multiple clients at once, such as married couples and/or families. Researching different methods to use TAI may open up more opportunities to use TAI in the mental health field. It will also be important to examine satisfaction with TAI when used to deliver therapy that treats different presenting problems. For example, would TAI be an effective method of treating anxiety (Dr. D. K. Openshaw, personal communication, September 2007), adjustment disorders, relational and marital problems.

Finally, relative to rural mental health in general, there is little research that has provided a sufficient base of research evidence to begin to establish "best practices." It would be presumptuous to assume that just because therapy of one form or another works among urban residents that this can be directly translated to rural residents. Thus, it would behoove future research to address this critical issue so that training programs can offer information about rural mental health from an evidence based perspective.

TAI and policy. If TAI proves to be an effective modality of treatment it would raise a variety of policy issues in the field of Marriage and Family Therapy, and other mental health therapy disciplines. For example, Marriage and Family Therapists are

currently licensed through the state where they practice and different requirements exist within different states. If TAI were presented as a viable form of therapy decisions would need to be made as to whom the therapist can treat. Because TAI could be done with a client anywhere in the nation, or world for that matter, it could possibly benefit therapists and clients alike to work with those not residing in the same state.

Also, ethical codes and standards, as well as state rules and regulations, will need to be more specific relative to how teletherapy is to be conducted. This will be an important step to avoiding defrauding clients who assume that because someone offers mental health therapy they are both licensed and qualified.

Satisfaction with TAI and the Three A's:
Availability, Accessibility, and Acceptability
TAI and Availability

While therapy is available in many areas across the nation, both rural and urban, research shows that there is less availability to mental health services, including specialty services, in rural areas (Wagenfeld, 1990). In some rural areas there may be a mental health center in town, but it may not offer the variety of services or the quality of care that centers offer in urban areas (Wagenfeld). One woman explained that she had family members who needed therapy but had not sought treatment because the long travel distance made therapy unavailable. The high levels of satisfaction reported with TAI are an indicator that this may be a good option for rural areas that lack the necessary range of services or quality of mental health care. There are others to whom services are not available, such as the elderly, disabled, and others who may not be able to get out of their home for whatever reason. TAI, which may be set up in a home, may also prove to be a

good alternative to face-to-face therapy for those who are homebound.

TAI and accessibility. Satisfaction with TAI may begin a grass roots effort by the community, spearheaded by those who have been satisfied, to encourage accessibility. They may, in fact, become advocates bringing services to their community and encouraging referral sources to use these services. Ten of the 17 women commented on the positive aspect that came from TAI being so much more convenient than driving miles to receive traditional face-to-face therapy. Understanding that rural mental health needs are as great as urban needs suggests that there is sufficient demand for such services. With demand, once initial costs to set up this therapy are covered, it is logical to assume that it would be as economically feasible as face-face therapy. This may become more and more economically efficient as Internet services in private homes increase the ability of the therapist to go directly into the home and provide therapy.

Advocacy at the legislative level, state, and federal, may bring about the necessary pressure to encourage insurance companies to provide for these services. With the economic aspects of therapy addressed, it is likely that more rural residents will seek out mental health treatment, as it would become more accessible. Much like the way TAI would make therapy more available to those who currently have difficulty leaving home, therapy would become more accessible to those for whom it is more convenient and easier to do therapy from home, such as the elderly or disabled.

TAI and acceptability. There may be a variety of reasons therapy carries a greater stigma in rural areas. It may be due to the idea, often prevalent in rural areas, that to seek help makes one weak. There is often a sense of independence that exists among those in

rural areas and they are taught to be self-reliant. This may influence a sense of personal failure for those who feel they could benefit from mental health services. There also seems to be the view that those who live in rural areas experience a more stress-free, quiet life. This stereotype may also influence the stigma that those in rural areas are "happier" and don't need therapy. This may lead to feelings of guilt and inadequacy for those who wish to seek therapy. As rural residents begin to experience satisfaction with therapy services, such as TAI they are likely to spread the word about the positives of therapy to friends, neighbors, and family. With an increase in the accessibility of therapy through TAI, and some education in rural areas about the benefits of therapy, there may be more who would seek it and utilize the resources. As more people experience the benefits of therapy and find themselves to be satisfied with the delivery of therapy through TAI, there would, over time, be a decreased stigma associated with seeking treatment.

Also, as evidenced in the statements of many women from this study, TAI would allow a greater confidence and satisfaction in privacy. There would not be as much concern that in going to therapy one would be seen by a neighbor walking into the clinic, or that their therapist would be a friend or know their friends. If clients were satisfied with TAI, this increased anonymity would likely make TAI a preferred choice to face-to-face therapy in rural areas.

Limitations

Four important limitations need to be addressed in order that the findings are not inappropriately interpreted. The first was that the study utilized a convenience sample.

While the sample was one of convenience, it mimicked what we find in real-life therapy where clients most often seek out services and participate voluntarily. A second limitation of the study was the small sample size. A repeated measures ANOVA was felt to be the most appropriate statistic for analyzing the quantitative data, however, because of the small "n" design, results should not be overgeneralized. Another limitation is in regards to two of the scaled measures used in the TAI Satisfaction Survey, the Need Fulfillment Scale and the Teletherapy Technology Assessment Scale. While they maintain face validity, and appear from the repeated tests (over three different time periods) to also maintain reliability, they have not been previously used or tested. This being the case, they do not have established validity and reliability based on empirical evidence. The final limitation, which also warns against overgeneralization, is that the therapy only took place in two rural areas of the country, both located in Utah, and the therapy only targeted one diagnosable mental illness, depression. While these limitations exist, the study provided some useful data and a helpful transition point for future research.

Conclusion

TAI is a unique method of providing therapy to those residing in rural America, allowing the barriers of availability, accessibility, and acceptability to be transcended as the TAI takes hold in communities. For the many who are suffering, often silently so because of stigma or myth this mode of therapy offers hope and provides a credible alternative to face-to-face therapy.

It is hoped that this study will provide an interest to further research on TAI and its important applications of this methodology for providing mental health services across a variety of individual disorders, couple problems, and family issues. Further, it is hoped that the further study of TAI will offer suggestions and recommendations for structuring clinical experiences so that the best interests of the client is served by developing a body of literature that will provide for evidence based therapy for a broad range of mental health concerns specific to rural communities. Finally, as TAI continues to be used in communities, research gathered, and outreach education provided, the current barriers to mental health services, namely, availability, accessibility, and acceptability can be eliminated. With this direction in mind, there will be equitable access to mental health services and a stronger overall nation.

REFERENCES

Acceptable. (2007). In *Princeton Wordnet Search.* Retrieved July 10, 2007, from http://wordnet.princeton.edu/perl/webwn?s=acceptable

Access. (2007). In *Merriam-Webster Online Dictionary*. Retrieved July 10, 2007, from http://www.merriam-webster.com/dictionary/available

Available. (2007). In *Merriam-Webster Online Dictionary*. Retrieved July 10, 2007, from http://www.merriam-webster.com/dictionary/available

Burns, D.D. (1989). The feeling good handbook. New York: Morrow/Avon.

Carroll, K.M. (2005). Only Connect? *Addiction. 100*(3), 267-268.

Chen, Y-Y., Subramanian, S.V., & Acevedo-Garcia, D. (2005). Women's status and depressive symptoms: A multilevel analysis. *Social Science & Medicine, 60*(1), 49-60.

Cottler, L.B., Campbell, W., & Krishna, V.A.S. (2005). Predictors of high rates of suicidal ideation among drug users. *Journal of Nervous and Mental Disease*, *193* (7), 431- 437.

Dattilio, F. (ed.) (1998). *Case studies in couple and family therapy: systemic & cognitive perspectives.* New York: Guilford Press.

Dongier, M., Tempier, R., Lalinec-Michaud, M., & Meunier, D. (1986). Telepsychiatry: Psychiatric consultation through two-way television: A controlled study. *Canadian Journal of Psychiatry, 31*, 32-34.

Dooley, D. (2001). *Social research methods* (4th ed.). Upper Saddle River, NJ: PrenticeHall.

Emptage, N.P., Sturm, R., & Robinson, R.L. (2005). Depression and comorbid pain as predictors of disability, employment, insurance status, and health care costs. *Psychiatric Services, 56*(4), 468-474.

Feasible. (2007). In *Merriam-Webster Online Dictionary*. Retrieved July 10, 2007, from http://www.merriam-webster.com/dictionary/feasible

Finnell, D.S. (2005). Building a program of research based on the transtheoretical model. *Journal of Addictions Nursing, 16*, 13-21.

Gibson, S.F., Morley, S., & Romeo-Wollf, C.P. (2002). A model community telepsychiatry program in rural Arizona. In R.C. Hsiung (Ed.), *e-Therapy: Case studies, guiding principles, and the clinical potential of the internet* (pp. 69-91). New York: Norton.

Giles, S., & Dryden, W. (1991). Fears about seeking therapeutic help: The effect of sex of subject, sex of professional, and title of professional. *British Journal of Guidance & Counseling, 19*(1), 81-92.

Greenstien, D.K., Franklin, M.D., & McGuffin, P. (1999). Measuring motivation to change: An examination of the University of Rhode Island Change Assessment Questionnaire (URICA) in an adolescent sample. *Psychotherapy: Theory, Research, Practice and Training, 36*(1), 47-55.

Hartley, D., Bird, D., & Dempsey, P. (1999). Mental health and substance abuse. In T. Ricketts (Ed.), *Rural health in the United States* (pp. 159-178). New York: Oxford University Press.

Health Resources and Services Administration. (2005). *Mental Health and Rural*

America: An Overview and Annotated Bibliography. Washington, DC: U.S. Department of Health and Human Services.

Heaton, J.A. (1998). *Building basic therapeutic skills.* San Francisco: Jossey-Bass.

Hubble, M.A., Duncan, B.L., & Miller, S.D. (1999). Introduction. In M.A. Hubble, B.L. Duncan, & S.D. Miller (Eds.), *The heart and soul of change: What works in therapy* (pp. 1-32). Washington, DC: American Psychological Association.

Human, J., & Wasern, C. (1991). Rural mental health in America. *American Psychologist*, *46*(3), 232-239.

Kaminetzky, G. (2001). Can we remove the barriers to psychological help-seeking. *Dissertation Abstracts International: Section B: The Sciences and Engineering.* 62 (2B), p. 1086.

Lansford, J.E., Atonucci, T.C., & Akiyama, H. (2005). A quantitative and qualitative approach to social relationships and well-being in the United States and Japan. *Family Studies, 36*, 1-22.

Lin, W. (2007). The exploration of customer satisfaction model from a comprehensive perspective. *Expert Systems with Applications, 33*(1), 110-121.

McCloskey, A.T. (1997). Rural psychiatric collaborative care via telemedicine. Syllabus of the 150th Annual Meeting of the American Psychiatric Association, San Diego, CA.

Mulder, P.L., & Lambert, W. (2006). Behavioral health of women: Challenges and stressors. In R.T. Coward, L.A. Davis, C.H. Gold, H. Smiciklas-Wright, L.E. Thorndyke, & F.W. Vondracek (Eds.), *Rural women's health: Mental,*

behavioral, and physical issues (pp. 15-28). New York: Springer.

Murphy, M.J., Faulkner, R.A., & Behrens, C. (2004). The effect of therapist–client racial similarity on client satisfaction and therapist evaluation of treatment. *Contemporary Family Therapy: An International Journal, 26*(3), 279-292.

Murray, J.D., & Keller, P.A. (1991). Psychology and rural America: Current status and future directions. *The American Psychologist, 46*(3), 220-231.

National Institute of Mental Health. (1999, August). *The numbers count: Mental illness in America: Science on our minds fact sheet series*. Retrieved October 15, 2007, from http://www.nmha.org/infocrt/factscheets/23.cfm

National Institute of Mental Health. (2007, September). *Depression, what every women should know.* Retrieved October 15, 2007, from http://www.nimh.nih.gov/health/publications/depression-what-every-woman- should-know/depression-what-every-woman-should-know.pdf

Norris, T.E., Hart, G.L., Larson, E.H., Tarczy-Hornoch, P., Masuda, D.L., Fuller, S.S., et al. (2002). Low-bandwidth, low-cost telemedicine consultations in rural family practice. *Journal of the American Board of Family Practice 15*(2), 123-127.

Office of Management and Budget. (2000). Standards for defining metropolitan and micropolitan statistical areas: Notice. *Federal Register,* 65(249), 82228-82238.

Openshaw, D.K., Pfister, R., Morrow, J., & Roper, S. (2008). *Mental health services for women diagnosed with depression in rural Utah communities: Evaluating the clinical effectiveness of a technologically assisted intervention.* Unpublished manuscript.

Patterson, J., Williams, L., Grauf-Grounds, C., & Chamow, L. (1998). *Essential skills in family therapy.* New York: The Guilford Press.

Peele, S. (2003, July). Why no reduction in depression in America? *Harford Courant,* Retrieved November 2007, from http://www.peele.net/lib/depression.html

President's New Freedom Commission on Mental Health. (2004). *Subcommittee of rural issues: Background paper*. DHHS Pub. No. SMA-04-3890. Rockville, MD.

Regier, D.A., Boyd, J.H., Burke, Jr. J.D., Rae, D. S., Myers, J.K., Kramer, M., et al. (1988). One-month prevalence of mental disorders in the United States. *Archives of General Psychiatry, 45*, 997-986.

Reynolds, D.J., Stiles, W.B., & Grohol, J.M. (2006). An investigation of session impact and alliance in internet based psychotherapy: Preliminary results. *Counseling & Psychotherapy Research, 6*(3), 98-102.

Rochlen, A.B., Rude, S.S., & Baron, A. (2001). The relationship of client stages of change to retention, working alliance, and outcome in short term therapy. *The Research Consortium of Counseling and Psychological Services in Higher Education, 22*(1), 1-18.

Roe, D., Dekel, R., Harel, G., & Fennig, S. (2006). Clients' reasons for terminating psychotherapy: A quantitative and qualitative inquiry. *Psychology & Psychotherapy: Theory, Research, and Practice, 79*(4), 529-538.

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

Satisfy. (n.d.). *Dictionary.com Unabridged (v 1.1).* Retrieved July 20, 2007, from

http://dictionary.reference.com/browse/satisfy

Sawyer, D., Gale, J., & Lambert, D. (2006). *Rural and frontier mental and behavioral health care: Barriers, effective policy strategies, best practices*. Retrieved November 6, 2006, from the National Association for Rural Mental Health Web site: http://www.narmh.org/pages/project.html

Schwab, A.J, DiNitto, D.M., Aureala, W., Simmons, J.F., & Smith, T.W. (1999). The dimensions of client satisfaction with rehabilitation services. *Journal of Vocational Rehabilitation, 13*(3), 183-194.

Shinogle, J. (2006). Mental health care utilization and expenditures among rural women. In R.T. Coward, L.A. Davis, C.H. Gold, H. Smiciklas-Wright, L.E. Thorndyke, & F.W. Vondracek (Eds.), *Rural women's health: Mental, behavioral, and physical issues* (pp. 127-146). New York: Springer.

Shuster, J. (1990). *Handbook of small sample size: Guidelines for clinical trials*. Boca Raton, FL: CRC Press.

Sinclair, J.M.A., Harris, L., & Baldwin, D.S. (2005). Suicide in depressive disorders: A retrospective case-control study of 127 suicides. *Journal of Affective Disorders, 87*(1), 107-113.

Stamm, B.H., Metrick, S.L., Kenkel, M.B., Davenport, J.A., Davenport, J., Hudnall, A.C., et al. (2003). Introduction. In B.H. Stamm (Ed.), *Rural behavioral health care* (pp. 3-10). Washington, DC: American Psychological Association.

Szádóczky, E., Sándor, R., & János, Z. (2004). Predictors for 2-year outcome of major depressive episode. *Journal of Affective Disorders, 83*(1), 49-57.

Tang, S.L., Lu, M., & Chan, Y.L. (2003). Achieving client satisfaction for engineering consulting firms. *Journal of Management in Engineering, 19*(4), 166-172.

Todman, J.B., & Dugard, P. (2000). *Single case and small N designs: A practical guide to randomization.* Mawah, NJ: Earlbaum.

United Health Foundation. (2004). *Clinical evidence, 11.* London: BMJ Publishing Group.

U.S. Department of Agriculture: Economic Research Service. (2000). *Agricultural Income and Finance: Situation & Outlook Report* (Pub. No. AIS-76). Washington, DC: USDA/ERS.

Vogin, G.D. (2004). Telephone psychotherapy may provide relief from depression symptoms. *Journal of the American Medical Association, 292*, 935-942.

Wagenfeld, M.O. (1990). Mental health and rural America: A decade review. *The Journal of Rural Health*, 6(4), 507-522.

Whiffen, V.E. (2005). The role of partner characteristics in attachment insecurity and depressive symptoms. *Personal Relationships 12*(3), 407-423.

Wright, J.H., Basco, M.R., & Thase, M.E. (2006). Learning cognitive-behavior therapy: An illustrated guide. Washington, DC: American Psychiatric Publishing.

APPENDICES

Appendix A. TAI Therapy Patient Satisfaction Survey

TAI Therapy Patient Satisfaction Survey

This study is being conducted to see if Teletherapy can be beneficial in the delivery of therapy services for those who live in rural Utah communities. The information collected from this survey will be kept confidential, as will all data collected during the course of this study. It is the intent of the Principal Investigator, Dr. D. Kim Openshaw, to use this information to identify what you enjoyed about this form of therapy and what you believe could improve.

Today's date_____ Location_____

Need Fulfillment Scale					
Please answer the following questions about your therapy experience.					
Item	**Not at All**		**Neutral**	**Completely**	
To what extent did your therapist:	**1**	**2**	**3**	**4**	**5**
1. help you achieve the purpose for which you sought therapy?					
2. help you obtain skills that will help you handle future problems?					
3. demonstrate competence as a therapist?					
4. understand your needs?					
5. help you define your needs?					
6. involve you in the treatment planning (such as treatment goals and frequency of appointments.)?					
7. respond to your requests?					
8. respect your privacy and confidentiality?					
9. address issues important to you?					
10. show care and concern for you?					
11. listen and understand what you were saying?					
12. demonstrate an understanding of your diagnosis?					

Empathy Scale

Using the scale from 1 to 5 below, rate the EXENT TO WHICH YOU FEEL EACH OF THESE STATEMENTS IS TRUE TODAY. Please read carefully in that items are stated positively and negatively.

1 – Strongly Disagree
2 – Disagree
3 – Neutral
4 – Agree
5 – Strongly Agree

	1	**2**	**3**	**4**	**5**
PLEASE MARK BELOW					
13. I feel that I can trust my therapist.					
14. Sometimes my therapist does not seem to be completely genuine.					
15. My therapist thinks I'm worthwhile.					
16. My therapist pretends to like me more than he or she really does.					
17. My therapist is friendly and warm toward me.					
18. My therapist does not seem to care what happens to me.					
19. My therapist usually understands what I say to him or her.					
20. My therapist does not understand the way I feel inside.					
21. My therapist is sympathetic and concerned about me.					
22. My therapist sometimes acts condescending and talks down to me.					

Item	**Poor**	**Fair**	**Good**	**Very Good**	**Excellent**
23. Overall, how would you rate the quality of services you received?					

Teletherapy Technology Assessment Scale					
Please answer the following questions about your therapy experience.					
Item **How satisfied were you with the:**	**Poor**	**Fair**	**Good**	**Very Good**	**Excellent**
24. teletherapy images (visual images on the computer)?					
25. with the teletherapy sound?					
26. adequacy of privacy?					
27. performance of the equipment?					
28. therapists understanding of the equipment?					
29. your understanding of how to use the equipment?					

30. **Was this the first teletherapy experience you have had?**

☐ Yes ☐ No

Item	**Poor**	**Fair**	**Good**	**Very Good**	**Excellent**
31. Overall, how satisfied were you with teletherapy?					

32. **If there are things you felt were especially good or helpful about your teletherapy, please describe what you consider the three most significant to be:**

1)_____
_____
_____

2)_____
_____
_____

3)_____
_____
_____

33. **If you have specific concerns or complaints concerning your teletherapy experience, please describe what you consider the three most significant concerns/complaints to be:**

1)_____
_____
_____
2)_____
_____
_____
3)_____
_____
_____

Item	Definitely Unwilling	Unwilling	Maybe Maybe Not	Willing	Very Willing
34. How willing would you to be to recommend teletherapy to a friend?					

35. **If we could improve something that would make you more willing to refer a friend for teletherapy, what would it be?**

_____
_____
_____
_____

36. **All things considered, would you prefer to have teletherapy, like that which you have just received, or face-to-face therapy that would require that you travel some distance to receive it**?

☐ Teletherapy ☐ Travel for face-to-face therapy

37. **Please briefly explain your answer**

_____
_____
_____

38. **Please make any other comments you would like to share about your teletherapy experience on the back of this page.**

Appendix B. Table 14: Summary of Content Analysis

Table 14

Summary of Content Analysis

Open-ended quantitative Item and themes associated	n	% of participants
Item No. 1: What did you feel was particularly good or helpful about teletherapy?		
-skill building	7	41
-therapist efforts	7	41
-confidentiality/anonymity	7	41
-availability and accessibility	3	18
Item No. 2: What concerns/complaints did you have about your teletherapy experience?		
-technology	4	24
-confidentiality	3	18
Item No. 3: What could be improved to make you more willing to refer a friend for TAI?		
-technology/equipment	3	18
Item No. 4: Explain why you would prefer teletherapy or face-to-face therapy.		
-prefer teletherapy. availability/accessibility	9	53
-prefer teletherapy. anonymity	4	24
-prefer face-to-face. lack computer skills	1	6
Item No. 5: Offer any extra comments you would like to share about your teletherapy experience.		
-positive experience with therapist	4	24
-learned useful skills	3	18

Appendix C. Letter of Informed Consent

INFORMED CONSENT: TAI Participants

Mental Health Services for Women Diagnosed with Depression in Rural Utah Communities:
A Technologically Assisted Intervention

Introduction/Purpose

Professor D. Kim Openshaw, Ph.D., LCSW, LMFT in the Department of Family, Consumer, and Human Development at Utah State University is conducting a research study employing a new and innovative form of therapy referred to Technologically Assisted Intervention or TAI. While this may seem like a big name, it really means that therapy is being offered through a computer and Internet rather than you having to going to the office of the therapist. Therapy, through TAI is being offered to twenty women, between the ages of 21 and 55, who suffer from mild to moderate symptoms of depression.

What Dr. Openshaw wants to know if therapy can be provided to women who reside in rural Utah communities using this form of technology, and if this type therapy can effectively decrease symptoms of depression.

Procedures

If you believe that you would like to participate, the following explains what would be expected of you:

- Discuss with Dr. Openshaw the Letter of Informed Consent, Consent for Treatment, and Consent to Use DVD Recordings for Training Purposes.
- Sign the Letter of Informed Consent, the Consent for Treatment, and if you choose, the Consent to Use the DVD Recordings for Training Purposes.
- Meet with Dr. Openshaw and complete a pre-assessment which is to determine whether you would benefit from participation. This pre-assessment would take approximately 45 minutes of your time.

If, based on the pre-assessment, it is determined that you would benefit from the therapy to be offered, you will be asked to:

- Learn how to effectively use the TAI system for your therapy,
- Be actively involved in ten sessions of therapy (Therapy will be on a weekly basis for ten (10) weeks. The first nine sessions will be1.25 hours long and the last session will be 1.5 hours so that therapy can be completed and the assessment measures re-administered. During the first session, Dr. Openshaw will be the therapist to introduce you to your therapist. You will have an opportunity to ask questions during this initial session. Dr. Openshaw wants to make certain that you are comfortable and all questions have been answered to you satisfaction before therapy begins. Once this has been accomplished, the therapist will begin therapy.), and
- Complete the study post-assessment measures at the conclusion of therapy

and approximately 12 weeks following therapy [Approximately 45 minutes each time].

Because the study is seeking women who show mild to moderate symptoms of depression, if it is determined that you would not benefit from this therapy, Dr. Openshaw will refer you for further consultation.

New Findings

During the course of this study, you will be informed of any significant new findings (either good or bad), such as changes in the risks or benefits resulting from participation in the research, or new alternatives to participation that might cause you to change your mind about continuing in the study. If new information is obtained that is relevant or useful to you, or if the procedures and/or methods change at any time throughout this study, your consent to continue participating will be obtained again.

Risks

There is minimal risk in being involved in the therapy to be provided. Perhaps the most obvious risk is that the pre-assessment will suggest that you would not benefit from TAI Therapy. If this occurs, Dr. Openshaw will refer you to your primary health care provider who you will be able to consult with about what would be in your best interest.

It is also possible that the symptoms of depression will worsen during the course of therapy. If this occurs, Dr. Openshaw will be involved to assess the situation and determine, in consultation with yourself, if your participation should be stopped or if you would be benefited by continuing. If stopping is the agreed to action, then Dr. Openshaw will refer you to your primary health care provider who you can discuss with you what would be in your best interest.

In that this therapy is being offered through computer and Internet there is a slight possibility that confidentiality could be breached.

Finally, this is an investigational study designed to provide therapy through computer and Internet; there is a possibility that your symptoms of depression may not subside.

Benefits

Four immediate benefits may be achieved by your participation. First, although not guaranteed, Cognitive Behavioral Therapy has a proven record in helping to decrease symptoms of depression such as those you are experiencing. Second, there will be no financial cost to you for your participation in this therapy opportunity. Next, you will not need to travel long distances to receive therapy. Finally, your participation will contribute to the knowledge that may be helpful to others, especially concerning whether this type of therapy is a practical, convenient, and effective way to reach out to those living in remote and rural areas.

Explanation and Offer to Answer Questions

Dr. Openshaw has explained this study to me and has answered my questions. If I have other questions or research related problems, I may reach Dr. Openshaw at 1-435-797-7434 or through email at d.k.openshaw@usu.edu.

Extra Costs

I understand that there are no financial costs to me for participating in this study. The therapy that I receive will be free.

Payment

I understand that there is no payment to be made to those participating in this study.

Voluntary Nature of Participation and Right to Withdraw Without Consequences

Participation in this research is voluntary. You may refuse to participate or withdraw at any time without consequence. In addition, you understand that you may be withdrawn from this study without my consent by the Dr. Openshaw if my symptoms of depression increase to a point where a referral needs to be made to my physician. You may also be withdrawn for consistently missing scheduled appointments with your therapist.

Confidentiality

Because confidentiality is so important to your feeling secure and comfortable, Dr. Openshaw is doing the following to ensure, as much as possible, that your confidentiality will be maintained.

First, the study uses Internet technology (i.e., Breeze) to provide TAI. According to experts with whom Dr. Openshaw has consulted, Breeze is safe and secure, especially if it is a meeting between two individuals—like between you and the therapist. This is because only you and your therapist can gain access to the session.

Second, in that TAI will be offered at a location where employees may know you, Dr. Openshaw will provide to these employees a presentation addressing confidentiality. Employees will be required to sign an agreement of confidentiality with Dr. Openshaw. So that you understand confidentiality, Dr. Openshaw will be explained it to you and, if you would like to see it, show you the presentation he will be providing the employees. If you do know any of the employees, Dr. Openshaw would encourage you not to initiate contact with them so that you are not put in an awkward position or confidentiality is violated.

Next, a technician will be employed to service equipment or be available to you should something go wrong with the equipment. Therefore, the technician may have contact with you. As with the employees at the facility, the technician will be instructed in confidentiality and required to sign an agreement of confidentiality. A sound screen is a small device that emits white noise that in turn muffles information that may “leak” through the door or wall.

Fourth, a sound screen will be placed outside of the office area where you will be while in therapy. A sound screen is a small device that emits white noise that in turn muffles information that may "leak" through the door or wall.

Finally, for Dr. Openshaw to direct the therapists in providing you with the best therapy possible he will ask that the therapists make a DVD of each session so that he and the therapist can review the session. These recordings will be used for supervision, and with your permission, training purposes. The DVD's will be destroyed at the completion of the study unless you are willing, and a release is obtained from you, to allow Dr. Openshaw to keep the DVD's for training purposes.

In addition to these precautions, Dr. Openshaw will:

- Keep the research records confidential, consistent with federal and state regulations. No names will be associated with the data collected and only Dr. Openshaw and his research associates will have access to the data, which will be stored in a locked file cabinet.
- Keep the data (i.e., the actual information acquired from completing the assessment measures) for one year after the completion of the study (July 2007) to allow time for the data to be analyzed.
- Analyze and report all results from the group data, in other words, your specific information will not be reported on.

IRB Approval Statement

The Institutional Review Board (IRB) for the protection of human participants at USU has reviewed and approved this research.

Copy of Consent

You have been given two copies of this Informed Consent. You have signed both, keeping one for your personal records and returning the other to Dr. Openshaw.

Investigator Statement

"I certify that the research study has been explained to the individual, by me or my research staff, and that the individual understands the nature and purpose, the possible risks and benefits associated with taking part in this research study. Any questions that have been raised have been answered."

1ID_____

INFORMED CONSENT FOR TREATMENT

I understand that treatment for my depression, as provided by therapists-in-training under the supervision of Dr. Openshaw, involves discussing emotional, psychological and relational issues that may be distressing at times. I also understand that therapy is intended to help me personally deal with my depression. I am aware that my therapist or Dr. Openshaw will discuss alternative treatment resources available with me, if needed.

Dr. Openshaw has discussed this investigational study, explaining to me the benefits and risks of participation. He has also provided me with a Letter of Informed Consent that sets out what the study is, the expectation of me as a participant, and that I may withdraw at anytime without consequence. I understand that if I have questions, I may either discuss them with my therapist or contact Dr. Openshaw by phone (435) 797-7434 or email [d.k.openshaw@usu.edu]. Although I understand that I can leave therapy at any time, I further understand that this is best accomplished in consultation with my therapist and Dr. Openshaw.

I understand that graduate students in marriage and family therapy or psychology will be conducting my therapy under the supervision of Dr. Openshaw, and that therapy sessions are routinely recorded and/or observed by Dr. Openshaw for supervision.

I understand that all information disclosed within sessions is kept confidential and is not revealed to anyone with the exception of those therapists-in-training being supervised by Dr. Openshaw. Outside of those being supervised, the only exceptions to this are those where disclosure is required by law (where there is reasonable suspicion of abuse of children or elderly persons, where the client presents a serious danger or violence to self or others unless protective measures are taken or when there is a court order to release information).

By my signature below, I agree to participate in therapy provided through Technologically Assisted Intervention, as explained to me by Dr. Openshaw and as discussed in the Letter of Informed Consent. Further, I agree to have my sessions recorded for therapeutic and supervision purposes. Finally, I agree to receive therapy via TAI.

_____ _____
Client's Signature Date

_____ _____
D. Kim Openshaw, Ph.D., LCSW, LMFT Date
Associate Professor, Family, Consumer, and Human Development
And Marriage and Family Therapy

Appendix D. Outline:10 Sessions of CBT for Teletherapy

10 SESSIONS OF CBT FOR TELETHERAPY

Session 1:
- Introductions. Answer questions regarding equipment and log-in procedure.
- Discuss roles of therapist and client.
- Set agenda.
- Discuss client's diagnoses/symptoms, formative influences, situational issues, and biological, genetic, and medical factors.
- Identify and discuss client's strengths and assets.
- Go over the cycle of events, automatic thoughts, emotions, and behaviors (the awareness wheel).
- Client identifies 2-3 events they would like to begin working with.
- Discuss the 3-column technique (event, automatic thoughts, emotions)
- Collaboratively develop homework assignment.
- Set up treatment goals.

Session 2:
- Set agenda.
- Review any questions or thoughts that came up over the week.
- Discuss homework assignment.
- Discuss automatic thoughts in greater detail.
- Discuss negative or troubling automatic thoughts related to client's chosen events.
- Discuss emotions related to automatic thoughts.
- Teach client to weigh the evidence for and evidence against the automatic thought.
- Begin discussing and identifying cognitive errors.
- Collaboratively develop homework assignment.

Session 3:
- Set agenda
- Review any questions or thoughts that came up over the week.
- Discuss homework assignment.
- Discuss cognitive errors in greater detail.
- Define different types of cognitive errors.
- Practice identifying automatic thoughts, emotions, and cognitive errors.
- Practice defining types of cognitive errors, and explaining why thoughts are cognitive errors.
- Collaboratively develop homework assignment.

Session 4:
- Set agenda
- Review any questions or thoughts that came up over the week.
- Discuss homework assignment.
- Begin walking through and practicing the 5-column Thought Change Record (Beck,

et al. 1979).
- Collaboratively develop homework assignment.

Session 5:
- Set agenda.
- Review any questions or thoughts that came up over the week.
- Discuss homework assignment.
- Teach flow chart- a variation of the Thought Change Record (could be used in place of the Thought Change Record). Apply flow chart to events in client's life.
- Begin discussing schemas.
- Collaboratively develop homework assignment.

Session 6:
- Set agenda
- Review any questions or thoughts that came up over the week.
- Discuss homework assignment.
- Continue discussing client's schemas using the Schema Inventory handout and the Evidence for Schemas Worksheet.
- Discuss principle-based schemas.
- Have client list out principles they want to live by.
- Help them begin to develop a principle-based schema to work towards.
- Collaboratively develop homework assignment.

Session 7:
- Set agenda.
- Review any questions or thoughts that came up over the week.
- Discuss homework assignment.
- Continue working through treatment goals, and the events clients brought into therapy to work through. Apply the Thought Change Record or flow chart. Use the principle-based schema developed by the client to guide their alternate thoughts.
- Discuss outcomes associated with use of new schema and therefore new automatic thoughts.
- Collaboratively develop homework assignment.

Session 8:
- Set agenda.
- Review any questions or thoughts that came up over the week.
- Discuss homework assignment.
- Evaluate client's symptoms and treatment goals. Discuss what is working and what is not.
- Adjust any goals or events as necessary.
- Continue working through treatment goals, and the events clients brought into therapy to work through. Apply the Thought Change Record or flow chart. Use the principle-based schema developed by the client to guide their alternate thoughts.

- Go over the Weekly Activity Schedule. Have client bring it back next session.
- Collaboratively develop homework assignment.

Session 9:
- Set agenda.
- Review any questions or thoughts that came up over the week.
- Discuss homework assignment.
- Go over client's Weekly Activity Schedule.
- Continue working through treatment goals, and the events clients brought into therapy to work through. Apply the Thought Change Record or flow chart. Use the principle-based schema developed by the client to guide their alternate thoughts.
- Begin discussing relapse prevention and termination of therapy.
- Collaboratively develop homework assignment.

Session 10:
- Set agenda.
- Review any questions or thoughts that came up over the week.
- Discuss homework assignment.
- Continue working through treatment goals, and the events clients brought into therapy to work through. Apply the Thought Change Record or flow chart. Use the principle-based schema developed by the client to guide their alternate thoughts.
- Continue discussing relapse prevention. Set up relapse prevention plan.
- Have client discuss what they are going to do to remember what they learned in therapy.
- Share with client ways they have grown over the course of therapy sessions.
- Discuss termination. Answer client questions.