

2011

**An examination of the similarities and differences in mental health status, working alliance, and social persence between face-to-face and online counseling.**

Courtney M. Holmes  
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**AN EXAMINATION OF THE SIMILARITIES AND  
DIFFERENCES IN MENTAL HEALTH STATUS, WORKING  
ALLIANCE, AND SOCIAL PRESENCE BETWEEN FACE-TO-FACE  
AND ONLINE COUNSELING**

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A Dissertation

Presented to

The Faculty of the School of Education

The College of William & Mary

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In Partial Fulfillment

Of the Requirements for the Degree

Doctor of Philosophy

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By

Courtney M. Holmes

April 2011

**AN EXAMINATION OF THE SIMILARITIES AND  
DIFFERENCES IN MENTAL HEALTH STATUS, WORKING  
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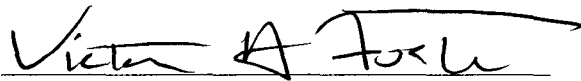
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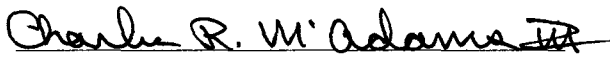
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Bruce Bracken, Ph.D.

## DEDICATION

*“If you have respect for people as they are, you can be more effective in helping them to become better than they are...”*

- John Gardner,  
*No Easy Victory*

This research is dedicated to all mental health professionals who devote their whole selves to a life of self exploration and personal growth in order to be more effective in helping others reach their full potential.

May our field continually seek to evolve and develop in order to better help the people we serve.

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**AN EXAMINATION OF THE SIMILARITIES AND DIFFERENCES IN  
MENTAL HEALTH STATUS, WORKING ALLIANCE, AND SOCIAL  
PRESENCE BETWEEN FACE-TO-FACE AND ONLINE COUNSELING**

**ABSTRACT**

This study examined the similarities and differences between online and face-to-face counseling with regard to general mental health, working alliance, and social presence. The research questions focused on possible differences between current online and face-to-face counseling clients, the demographics of current users, and possible relationships between the measures of social presence, working alliance, and mental health. Participants included 50 current counseling clients (37 face-to-face, 13 online) who were recruited through online means. Chi square tests, *t*-tests for independent means, and Pearson correlations were used to analyze the data. Results indicated a significant difference between the face-to-face and online counseling groups indicating that online users perceived a significantly stronger working alliance on the total measure as well as the Goal subscale. Other results indicated no significant differences between the groups on general mental health or social presence. A significant positive correlation was found between the working alliance measure and the social presence scale within the face-to-face counseling group as well as within the total sample. These results support the contention that a strong working alliance can be developed through online counseling and that the counseling field should continue to develop understanding of online counseling.

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SCHOOL PSYCHOLOGY AND COUNSELOR EDUCATION

THE COLLEGE OF WILLIAM & MARY

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## Chapter One: Introduction

*“The internet is the first thing that humanity has built that humanity doesn’t understand...”*

–Eric Schmidt (Chief Executive Officer of Google)

The internet is an increasingly popular medium for providing psychotherapeutic interventions, and has been for over a decade (Barak, Hen, Boniel-Nissim & Shapira, 2008). Traditional counseling is transformed by technology and the World Wide Web; clients use videoconferencing, synchronous chat, and asynchronous email with professional therapists in place of or in addition to face-to-face counseling (Mallen, Vogel, Rochlen, & Day, 2005). The growth of the online mental health community has not, however, been without controversy. According to Rochlen, Zack, and Speyer (2004), “the integration of technology with the practice of psychotherapy has been, arguably, one of the most vigorously debated topics among mental health professionals within the last 15 years” (p. 269).

Counseling is defined as “a professional relationship that empowers diverse individuals, families, and groups to accomplish mental health, wellness, education, and career goals (ACA, 2010). Per this definition, face-to-face relationship is not explicitly required as a part of the counseling process, leaving possibility for different types of counseling modalities to take shape. Technology-assisted counseling is thought by many to offer comparable applications to face-to-face counseling, and has already begun to be

used by mental to offer similar types of services. Hackerman and Greer (2000) note that “although not totally different from other forms of communication, cybercommunication presents unique parameters not previously encountered” (p. 1). According to Anthony (2003), “it remains to be confirmed whether technological advances are a positive step for the profession of counseling, even though technology’s role is defined and already present, even ahead of solid research evidence” (p. 33).

The discussion surrounding technology’s role in the future of therapy brings into question the traditional understanding of counseling. Until a decade ago, counseling was generally considered to take place between a client, or group of clients, and a professional that shared the same physical space. According to Fenichel et al., (2010), “online therapy has shattered three of the basic premises of therapeutic interaction, which is that it must always, by definition, be based on: (1) visible (face-to-face) contact, (2) talking, (3) synchronous (“real time”) interaction” (p. 1). The current view of counseling is molding to accommodate new types of counseling that are not necessarily inclusive of these basic premises once thought to define the counseling process. Fenichel et al., (2010) contend that regardless of how we define therapy processes and outcomes, the documented successes of online counseling are undeniable. While literature documenting the utility of online counseling does support future use, much still needs to be understood. Our technological capabilities exceed the current understanding of the implications for using this type of counseling modality, ultimately impacting the ability to ensure a positive impact on consumers (McAdams & Wyatt, 2010).



Counseling is currently in an era of change as computer-mediated services are evolving and developing within the field, even ahead of a firm research base. As the field works to match research with practice, Lundberg (2001) aptly notes:

“Counselors are still groping for an effective merger between an increasingly technological world and a profession that is practiced through very personal contact. More fundamentally, human service professionals are still trying to understand just how human relationships change when they are mediated by computers” (p. 142).

This study highlights the working alliance as one implication of online counseling that requires more research. The impact of a positive working alliance in traditional counseling is well documented through research, however little is known about how this alliance functions in online counseling (Knaevelsrud & Maercker, 2006). Whether technology assisted counseling can construct an authentic therapeutic relationship remains unsubstantiated, and Chester and Glass (2006) ask this question: Can a therapeutic alliance be built if two people do not share the same physical space? This chapter provides an overview of current online counseling practices, current theoretical underpinnings, and a consideration of the therapeutic working alliance as integral to online counseling. The risks and benefits associated with online counseling are described briefly below, with the fundamental therapeutic relationship highlighted as the central component of the current research.

### **Categories of Online Counseling**

For decades, counselors have been using telephone and letter-writing to supplement their counseling relationships offered to clients (Rochlen et al., 2004; Skinner

& Zack, 2004). In recent years, means to supplement face-to-face counseling services, or replace them altogether, changed with the development of technology. Ainsworth (2002) divides the types of internet counseling services into four categories:

- E-therapy: ongoing helping relationships that take place solely through internet communication (i.e. Email, synchronous chat)
- Mental health advice: professionals respond to one question in depth, without a continued relationship, with communication solely through the internet
- Adjunct services: internet communication is used to supplement traditional, face-to-face services
- Behavioral telehealth and telepsychiatry: health professionals use sophisticated videoconferencing systems to work with patients as an extension of clinic or hospital care

Barak et al., (2008) identify three factors that differentiate among the many online therapeutic applications including method of services, time, and modality. The first factor is the employed method of online services involving either of the following: an ongoing therapeutic relationship through human connection or self-help or a web-based type of therapy utilizing a focused cognitive base and structured plan provided by a computer-based program or facilitator. The second factor includes the time in which the service is offered, synchronously or asynchronously. The third factor is whether the services are offered through text, audio, webcam, or a combination of these.

Combinations of these factors offer clients an array of options when choosing the amount of support and personal involvement of services they desire.

In order to utilize the internet or technology in the ways mentioned above, email, synchronous chat, videoconferencing and internet phone (telephone) are employed (Ainsworth, 2002). Synchronous chat and email are the two most commonly used forms of Internet counseling (Pelling, 2009). Videoconferencing, a lesser-utilized tool, allows each participant to speak with one another with the benefit of having verbal and nonverbal cues within the conversation. Although videoconferencing is becoming more affordable, many clients do not have access to this type of counseling due to monetary constraints as it requires the purchase of a videocamera (Mallen et. al, 2005).

Synchronous chat allows for a real-time, text-based communication between participants, however, the participants do not see or hear one another through the conversation. Email counseling exchanges are similar to synchronous chat communication and also lack the ability to retrieve verbal and nonverbal information. However, email takes place at different times so the participants do not share the same cyber space simultaneously. Email and synchronous chat are the most easily available to online users requiring only an email account and to a computer with the internet.

### **Forms of Online Counseling**

Clients are using different types of online counseling, such as videoconferencing, synchronous chat, and email with mental health professionals as stand-alone services or as supplemental communication to ongoing face-to-face services (Mallen et al., 2005). Clients are now able to obtain services that meet a wide range of needs and presenting issues using different types of online counseling including: (1) forums/support groups; (2) couples and family counseling; and (3) individual counseling. Each format offers particular parameters for the counseling structure and process as delineated below.

### *Forums/Support Groups*

Online support groups served as the predecessor of online counseling, as Skinner and Zack (2004) note, “the enduring success of these groups has firmly established the potential of computer-mediated communication to enable the discussion of sensitive personal issues” (p. 435). Forums and support groups allow users to go online whenever they choose to post or read. Some groups are therapeutic or supportive in nature, while others are strictly psychoeducational and informational (Stevens & Shulman, 2003). Users communicate with other users through a discussion board offering personal questions, concerns, ideas or support to others about a predetermined topic (i.e., depression, anxiety). Online groups and forums offer social support which can be exceptionally beneficial for those who feel isolated. These forums provide new ideas for coping with distress (Mallen et al., 2005). According to Stevens and Shulman (2003) online groups “create a sense of universality that eliminates geographical boundaries, and perhaps gender and culture” (p. 257). Although the potential for misinformation exists if a trained mental health professional is not facilitating the site, these frameworks remain popular and may be considered as an early example of an online community.

### *Couples and Family Counseling*

Couples and family counseling is offered through the same online formats as individual counseling, including Email, synchronous chat, and videoconferencing. However, couples and families enter counseling with different challenges than individuals. The most basic difference is the addition of more people, which changes process and communication dynamics within the counseling session. When family

counselors allow asynchronous chat in family counseling, each family member is able to attend to the conversation according to his or her schedule. Furthermore, beginning difficult conversations through text-based chat may open communication pathways for family members who are emotionally cut off (Stevens & Shulman, 2003) as clients feel as if they can be more open through text that allows for a type of anonymity (Suler, 2001). Email and synchronous chat offers parents an effective way of communicating with children and teens as it allows for both age groups to meet on a non-threatening level to discuss issues that children and teens may be uncomfortable talking about in a face-to-face format. The multitude of potential uses of the internet and technology in couples and family counseling are only beginning to be discovered.

### *Individual Counseling*

Individual counseling is now the foundational service in online therapy services, expanding to use asynchronous email chat, synchronous chat, and videoconferencing. Clients are utilizing online counseling for ongoing therapeutic relationships, mental health advice, and adjunct services with continual face-to-face counseling (Ainsworth, 2002). Individual online counseling services offered over the internet change the way in which treatment providers and clients alike conceptualize treatment options. Individual online counseling services can supplement face-to-face services in various ways, potentially as a connection between client and counselor in between sessions or as a continuation of services after a face-to-face relationship ends. Online counseling services are also used as a stand-alone treatment modality. Email, chat, and videoconferencing services are provided to consumers without a supplemental face-to-face relationship, and in many cases clients and counselors never meet offline. While treating clients without a

physical connection vastly increases the potential for counseling options, this expansion of services requires significant academic inquiry as treatment providers must be able to know how to effectively serve their clients regardless of the modality with which they serve their clients.

### **Demographics of Online Users**

Initial adopters of new technologies are likely to be young, male, better educated, more affluent, urban, and not members of a racial or ethnic minority group (Norris, 2001). Online research companies have repeatedly characterized the “typical Internet user as overwhelmingly white, male, and well-educated, with a higher than average income” (Weiser, 2000, p. 168). However, gender differences seem to disappear as the new technology becomes more widely accepted over time (Compaine, 2001).

One study offered data supporting the disappearance of the gender gap online; however, gender differences in specific uses of the Internet, such as email, distance learning, or job search were not examined (Ono & Zavodny, 2003). Weiser (2000) investigated specific differences in gendered internet use and found that “female Internet use is driven primarily by interpersonal communication and, to a lesser extent, academic assistance; in contrast, male use is driven mainly by entertainment and leisure” (p. 175). These differences in general uses of the internet may offer a profile for potential consumers of online counseling. Also, Tsan & Day (2007) found that women had significantly more positive attitudes than men toward seeking face-to-face counseling and counseling via email, while no significant difference existed between men and women in their attitudes toward counseling via videoconference or synchronous chat. These results

could indicate that men may have a greater propensity to seek online counseling via videoconferencing or synchronous chat than originally thought.

Current literature touts the ability to reach clients not otherwise served by traditional counseling as major benefit of online counseling (Layne & Hohenshil, 2005). However, whether clients who are physically, geographically, or financially compromised are indeed those seeking services offered through the internet has not yet been documented in current literature. Several studies that examined the therapeutic alliance built through online counseling cited the homogenous sample of Caucasian, college-educated, women as a methodological weakness (Cook & Doyle, 2002; Leibert, Archer, Munson, & York, 2006). Sanchez-Page (2005) clarifies the implications of race on the utility of online counseling in serving minority populations, stating “attempts to use online counseling to address the needs of underserved populations may be ineffective if special attention to the comfort and use patterns of communities of color are not understood” (p. 894).

Due to the nature of some types of online counseling, specifically synchronous chat and email, users must be fluent in written communication (Hackerman & Greer, 2000). Naturally, this precludes some clients who are unable to read or write from accessing these services. An additional layer is that a potential consumer of online counseling must also be “computer literate” or knowledgeable of how to access and use a computer and the hardware needed to use online counseling (Hackerman & Greer, 2000, p. 2). These requirements of knowledge base create a phenomenon termed a “digital divide” (Mallen, Vogel, Rochlen & Day, 2005). This “digital divide” separates potential uses based on financial means and other socioeconomic issues. Without baseline

knowledge of written language and computers, certain people are unable to access online counseling.

Debate surrounds what client populations are currently benefiting from online counseling. Some literature touts the utility of online counseling to reach populations typically underserved by face-to-face counseling, such as the geographically or physically isolated client (Layne & Hohenshil, 2005; Ragusea & Vandercreek, 2003); however, other literature is skeptical that these target populations are actually being served by online counseling due to cultural, socioeconomic, and other barriers. Current literature wonders what demographics of clients are seeking online counseling services, and if these demographics are congruent with the client populations originally targeted as potential consumers. Online counseling providers could be informed by more information on this topic in order to reevaluate how clients are reached and supported through this process.

### **Limitations of Online Counseling**

Consumer protection is a central component of mental health services, and must be considered when acknowledging the limitations and benefits of online counseling. All counselors are required to maintain ethical practice regardless of the counseling modality that is being provided. Online counseling presents unique ethical liabilities that have been addressed by national counseling accrediting bodies such as The American Counseling Association (ACA, 2005) and the National Board of Certified Counselors (NBCC, 2005). Through these published documents, online counseling practitioners have legitimate and meaningful guides to responsible and ethical practice through this new counseling modality. The ethical and technical challenges presented by online counseling



are many (Rochlen et al, 2004; Shaw & Shaw, 2006) and include missing nonverbal information, technical challenges, and legal and ethical obligations. In order to be effective in communicating through technology, both counselors and clients must possess at least minimal understanding of and skill with technology and computer literacy (Hackerman & Greer, 2000). Several of the potential limitations of online counseling are discussed in detail below.

The first limitation is potential for breaches of confidentiality through internet services as information given online is not always safe from hackers and other dangers. To help ensure confidentiality, ACA (2005) has given an ethical mandate for all online service providers to obtain encryption software. This encryption software helps to make online and computer-mediated communication safer for clients and counselors alike. However, even encryption-protected systems are not guaranteed for complete safety as they remain vulnerable to intrusion (Andert & Burleson, 2005). Finn (2006) conducted a study that reported one in twenty social workers had experienced violations in client's confidentiality through email communication. The potential for confidentiality breaches is an important realization for all online treatment providers, and one that must be relayed to the client before treatment begins (ACA, 2005).

Another challenge for online counseling is the ability for one to maintain confidentiality over the internet (Shaw & Shaw, 2006). The 2005 ACA ethical codes require counselors to give out their full name and credentials to clients treated online, and to record the full name and other identifying information for their clients. If counselors never see clients face to face, clients may falsify or leave out identifying information, raising serious implications for counselor liability for clinical crises. A counselor must

know the correct name, address and location of a client in case they must report suicidal or homicidal ideation, or known abuse of a child or an elderly person (ACA, 2005). Additionally, without some type of verification via text-only communication, a counselor may unknowingly relay confidential clinical information to a third party. One option to avert this potential is to decide a code-word that only the client and counselor will know in order to verify the client's identity before treatment begins.

Another limitation of online counseling is the lack of nonverbal cues. All nonverbal information including tone of voice, body language, and facial expressions of the client are important in building relationship in counseling and understanding not only the content of a story, but the underlying meaning. Some forms of online counseling may offer this (i.e. videoconferencing) but other forms like email and synchronous chat do not allow for nonverbal information to be conveyed. While this is certainly a limitation for online counseling, practitioners have found ways to offer supplemental information through text using colors, capital letters and emoticons (Alleman, 2002; Anthony, 2003). A study indicated that while missing non-verbal information was the main drawback to online counseling, the missing information was compensated for by other benefits, such as anonymity (Leibert et al., 2006), indicating that while consumers of online counseling realized the limitation of missing nonverbal information, other benefits of this type of service outweighed this limitation. More research on the impact of the absence of nonverbal information in technology-assisted counseling is needed to clarify potential drawbacks and advantages of different online therapeutic models.

Finally, cultural issues have not yet been clearly addressed in the literature. Rochlen et al. (2004) note that, "technology could lead some therapists to adopt a 'carte

blanch' approach to the indiscriminate crossing of cultures, time zones, and social systems" (p. 273). Without nonverbal cues or access to cultural information about the counselor or client, some important cultural considerations may go unattended. The ACA (2005) ethical codes state that Counselors are required to "recognize that culture affects the manner in which clients' problems are defined" (E.5.b, p. 12). If certain racial, ethnic, and cultural differences cannot be easily identified through online counseling, a counselor practicing online counseling is ethically bound to address these issues in a different way than they might through face-to-face counseling. Currently, however, no specific way to do this has been identified through the literature.

### **Threats of Internet Security**

Threats of online security are a piece of the ethical and legal puzzle of online counseling; however, "security and privacy issues are often overlooked as a concern in online therapeutic interactions" (Grohol, 1998, p. 136). Very little remains online that is absolutely private. Hacking is maintained as a large problem for online practitioners and clients alike. The verification of identity is a significant challenge for online therapists. The potential flaws of online counseling are noted by Skinner and Zack (2004):

"Online therapy is cast as 'ineffective (because it lacks the same visual cues as face-to-face work), 'dangerous' (because of potential computer security threats), 'irresponsible' (because counselors are limited in their ability to intervene in a crisis), and even 'illegal' (because of licensure bounds and the ability to provide unlicensed therapy to clients in other jurisdictions)" (p. 438).

However, these authors clarify that “nearly all of these [above] concerns are easily surmounted with a bit of effort and outweighed by the possible gains to be had by offering online therapy” (p. 438).

Ideally, consumer protection will guide research to understand this controversial topic. Counseling is bound by ethical codes that guide care providers in all aspects of therapeutic services. According to Grohol (1998), “a great deal more work...needs to be done on privacy technologies before it will no longer be a concern to therapists” (p. 136). Online counseling is still in its infancy regarding academic research, as there is still much to learn. Many state licensure boards across the United States have not yet made legal decisions surrounding the use of online counseling (McAdams & Wyatt, 2010). The field is moving forward with using technology to supplement traditional counseling services; however, clear legal decisions have not yet been documented. According to Skinner and Zack (2004), “the loudest skeptics [of online counseling] are those who either (a) have never interacted with anyone online in more than the most limited way or (b) have some sort of ulterior motive or vested interest in lambasting this type of work” (p. 438). These skeptics highlight a necessary debate with reasonable skepticism (Goss & Anthony, 2009), as it is only with robust and meaningful academic debate will rigorous research take place.

### **Benefits of Online Counseling**

One noted benefit of online counseling is the potential to reach a greater range of clients (Layne & Hohenshil, 2005). Clients in rural areas many miles from a physical office may be able to seek mental health help through online means, thus avoiding travel costs and inconvenience. In addition, a small community may have a limited number of

counselors and the internet may increase the potential of finding a good fit between client and counselor. Online services may be extended to those who are physically or psychologically unable to leave their homes (Ragusea & Vandercreek, 2003).

A second benefit is the option for clients to seek mental health services in the privacy of their own home. Some clients may be worried about the stigmatization of seeing a mental health professional and thus prefer the privacy of online services, at least initially (Rees & Stone, 2005). One study found that a large percentage of those who originally sought online counseling went onto seek face-to-face counseling in the future (Alleman, 2002), indicating that online counseling may serve as a buffer for those clients who are wary of seeing a counselor and may serve as a first step to seeking face to face mental health help.

People who are more comfortable disclosing in a written format may be more comfortable seeking help through online counseling, another noted benefit of online counseling. Techniques to enhance text-only messages are available and are widely used (Anthony, 2003; Alleman, 2002). For example, using all capital letters may signify shouting or add emphasis to one's statements or the use of emoticons or graphics can help to portray an emotion or feeling at that moment. Placing nonverbal behavior in italics or enclosed within parentheses, so that the reader can have more information to how the statement was intended. Text-only types of counseling can provide an outlet for expressing thoughts and feelings as one might through personal journaling (Suler, 2000). Additionally, some people disclose more positive and negative personal information sooner through an online, text-based format than in a face-to-face format (Alleman). This tendency is known as the "online disinhibition effect", where in technology users are able

to be more honest and expressive, as well as divulge personal information more quickly and openly than in a face-to-face relationship (Suler).

Synchronous chat and email allow the client and counselor time to formulate responses and the ability to reply with meaningful, thoughtful statements that may not happen in real time (Anthony, 2003). Using email in particular, offers the writer time to draft a response and then make alterations as necessary before the correspondence is sent. This reflective period may encourage the counselor to think through responses in a way that is not allowable in a face-to-face contact. This “zone for reflection” (Suler, 2000), allows for both the client and counselor time to reflect on the responses the other sent and use these reflections to enhance the counseling process.

In summary, online counseling offers potential to expand the counseling profession with regard to types of services available, increased reachable consumer populations, and facilitation of meaningful communication via text only communication. While skeptical responses to online counseling exist, supporters of online counseling point to the convenience in providing services, lower costs, ability to span geographic distance, and the utility of computer-mediated communication as counterpoints to criticism. All points, positive and negative, influence future research as the field seeks to discover more information. Conceptual ideas have been discussed to highlight the current state of online counseling in practice to date. Theoretical underpinnings of the counseling relationship may allow for a more thorough exploration of the quality of the online counseling relationship.

### **Person Centered Theory as the Theoretical Rationale**

Humanistic Psychology, specifically Person-Centered Therapy developed by Carl Rogers (1951, 1957) allows for a robust consideration, steeped in counseling theory, of the role of the therapeutic relationship in online counseling. The humanistic foundation provides a heuristic framework that has influenced the mental health profession for over five decades. Person-Centered therapy “gives priority to human experience, values, intentions, and meanings while promoting personal growth and change” (Kutash & Wolf, 1986, p. 195). According to Rogers (1986), “The individual has within himself or herself vast resources for self-understanding, for altering his or her self-concept, attitudes and self-directed behavior-and that these resources can be tapped if only a definable climate of facilitative psychological attitudes can be provided” (p. 197). Personal growth is developed through a “growth-promoting climate” (p. 197) in which the relationship between the client and therapist is held in the highest regard. Person-Centered counseling is built on the assumption that if a facilitative, “growth-promoting climate” can be fostered within the therapeutic relationship, only then a client can utilize innate resources for self-understanding and personal growth to produce personal change (Rogers, 1986).

A crucial underpinning of the growth producing climate is the formation and sustainability of a therapeutic relationship. Three conditions constitute this therapeutic relationship: genuineness/congruence, unconditional positive regard, and empathic understanding. The first element, genuineness or congruence, means that the therapist is present in awareness of the moment in counseling, and can be real and true to him or herself within the relationship without putting up a professional façade (Rogers, 1986). Unconditional positive regard, the second condition, creates an environment for acceptance and caring. The therapist is able to consistently put forth a positive,

nonjudgmental and accepting attitude toward the client. The third condition, empathic condition, describes the therapist as accurately sensing the personal feelings and meanings of the client, and able to clearly communicate these back to the client, demonstrating acceptance and understanding (Rogers). The presence of these conditions lays the groundwork to foster a meaningful relationship between counselor and client which, in turn, promotes client change.

Rogers (2007) defined the necessary and sufficient conditions that the counselor must create in order to support the client through effective therapy. These six conditions must exist and continue over time in order for therapeutic change to occur: (1) two persons are in psychological contact; (2) the client is in a state of incongruence, being vulnerable or anxious; (3) the therapist is congruent or integrated in the relationship (4) the therapist experiences unconditional positive regard for the client; (5) the therapist experiences an empathic understanding of the client's internal frame of reference and endeavors to communicate this experience to the client; and (6) the communication to the client of the therapist's empathic understanding and unconditional positive regard is to a minimal degree achieved (Rogers). From these six conditions stems the framework for building a therapeutic relationship between counselor and client. Regardless of counseling modality, online or face-to-face counseling, these conditions stand as common pillars of treatment through a heuristic lens.

### **The Role of the Therapeutic Relationship**

Person-Centered theory defines the conditions necessary to build a meaningful therapeutic relationship (Goldfried, 2007). Gelso and Carter (1994) define the therapeutic relationship as “the feelings and attitudes that counseling participants have toward one



another, and the manner in which these are expressed” (p. 297). Three interconnected concepts work together to form a therapeutic relationship including: therapist variables, such as interpersonal style or personality; the facilitative conditions stemming from Rogers (1951, 1957) such as empathy, warmth and positive regard; and the working relationship between client and counselor, termed as the therapeutic alliance (Norcross, 2002). The nature of these concepts is such that they cannot be thought of as independent, but only as overlapping and interrelated as each plays a role with the others. These factors highlight the importance of the therapists’ role within the therapeutic relationship and the responsibility to portray and promote these conditions to every client in pursuit of building a therapeutic relationship.

Although different theories within the field of counseling put different weight and meaning on the therapeutic relationship, research has shown a clear relationship between the therapeutic relationship and positive outcomes in therapy, as “relationship variables consistently correlate more highly with client outcome than specialized therapeutic techniques” (Norcross, 2002, p. 26). While some therapists believe the client-counselor relationship to be the “essence” of treatment, and others believe it to be a vehicle to implement useful therapeutic techniques, a “striking agreement” exists between all positions that the relationship plays an important role in therapy (Gelso & Carter, 1994, p. 297). The therapeutic relationship is, indeed, considered central to the therapeutic process (Duncan, Hubble, & Miller, 1997; Rees & Stone, 2005).

### **The Common Factors Approach**

The common factors approach asserts that regardless of specific counseling approach, technique, or theory, four factors are prevalent throughout and are evidenced in

why counseling is effective (Hubble, Duncan, & Miller, 1999; Sprenkle & Blow, 2004). Research on the therapeutic relationship has shown these four factors account for change: extratherapeutic factors (40 percent); counseling relationship (30 percent); theoretical stance of the therapist (15 percent); and hope/placebo effect (15 percent) (Duncan et al., 1997; Wampold, 2010). The combination of these factors, work within a counseling process to promote client change. While a definition of the therapeutic relationship has not been clearly identified and accepted within the field, it is generally understood that the working alliance is a vital part of the relationship (Hubble et al, 1999).

The common factors are variables that contribute to client change in all different types of therapy, regardless of theoretical approach (Sprenkle & Blow, 2004). Regardless of treatment modality (i.e. behavioral and cognitive, psychodynamic, eclectic) a correlation has been established between the therapeutic relationship and therapeutic outcome (Duncan et al., 1997). These results indicate that “it is important for therapists to attend closely to the relationship developed with their clients and regularly monitor its quality” (Hubble et al., 1999, p. 138).

As online and technology-assisted counseling is an extension of traditional therapy services, the therapeutic relationship and working alliance would be assumed to play a role in the success or efficacy of these types of services. While the distribution of online therapy services is steadily increasing (Chester & Glass, 2006), “little is known about how the therapeutic relationship (or working alliance) evolves over the internet (Knaevelsrud & Maercker, 2006, p. 1)” and whether is as influential in online therapy as it is in face-to-face counseling. Grohol (1998) notes that

“the ‘common factors’ research has shown that a number of factors common to all therapies—such as an empathic professional relationship, an accepting and nonjudgmental attitude toward the client etc. – seem to be required for beneficial, therapeutic change to take place. Existing research does not preclude other modalities that include these ‘common factors’ from possibly sharing the same relative effectiveness” (p. 132).

Technology-assisted counseling falls into this category. If the common factors can be portrayed through technological mediums, then a therapeutic relationship may be built between client and counselor, rendering technology-assisted counseling potentially as effective as face-to-face counseling. Currently, however, research has not specifically addressed the common factors within online counseling.

The common factors approach directly links the therapeutic alliance with therapeutic outcome and exemplifies the importance of relationship when deciphering what makes counseling effective. According to Peck (2010), “there is strong evidence of the importance of common factors, and particularly of the therapeutic relationship, in determining outcomes in psychological therapies; but there is also strong evidence that good outcomes can be obtained using therapy delivery methods that include little or no direct contact between clients and therapists” (p. 150). This conundrum poses strong and relevant questions for online counseling. Can a therapeutic relationship be built through electronic means? What would be different or similar about an electronically-based therapeutic relationship and a face-to-face relationship?

### **The Working Alliance in Counseling**

Often mistakenly used interchangeably, the therapeutic relationship and the working (therapeutic) alliance are considered fundamentally different. The therapeutic relationship is theoretically built upon the conditions set forth by Rogers (1951, 1957) including unconditional positive regard, empathy, and congruence. Rogers argued that these conditions were necessary and sufficient conditions to produce change in clients (Horvath & Luborsky, 1993). The working alliance has been conceptualized as an extension of these conditions and is theoretically based on the client and counselor's ability to align together with the tasks of counseling (Horvath & Bedi, 2002). However, Horvath and Luborsky suggest that the conditions met by the therapeutic relationship are important components of the working alliance, and that the working alliance, while fundamentally different, is developed through or in juxtaposition with the therapeutic relationship. The working alliance is, "an expression of a patient's positive bond with the therapist who is perceived as a helpful and supportive person" (Luborsky, 1994, p. 39).

Extensive empirical research on this construct has existed since the late 1970's (Horvath, 1994). The importance of the working alliance in producing client change has been documented (Horvath & Luborsky, 1993). Horvath and Bedi (2002) define the working alliance as follows:

"The alliance refers to the quality and strength of the collaborative relationship between client and therapist in therapy. This concept is inclusive of the positive affective bonds between client and therapist, such as mutual trust, liking, respect, and caring. Alliance also encompasses the more cognitive aspects of the therapy relationship: consensus about, and

active commitment to, the goals of therapy and to the means by which these goals can be reached. Alliance involves a sense of partnership in therapy between therapist and client, in which each participant is actively committed to their specific and appropriate responsibilities in therapy, and believes the other is likewise enthusiastically engaged in the process. The alliance is a conscious and purposeful aspect of the relation between therapist and client: It is conscious in the sense that the quality of the alliance is within ready grasp of the participants, and it is purposeful in that it is specific to a context in which there is a therapist or helper who accepts some responsibility for providing psychological assistance to a client or clients” (p. 41).

Research has linked the quality of the therapeutic alliance between the client and therapist with positive therapy outcome (Horvath, 2001). Several outcome studies have shown that the therapeutic alliance provides a condition that is predictive of positive client outcome, even across different therapy modalities and theories (Duncan et al., 1997). Luborsky (1990) summarized three broad curative factors of counseling: (1) the necessity to establish an at least partly positive relationship with the therapist; (2) the expression by the patient of the patient’s conflicts and the working out by the patient and therapist of ways coping with them; (3) the incorporation of the gains of treatment so that they are maintained after its termination. The positive relationship, or working alliance, lays the groundwork for the other curative factors to follow. Luborsky (1994) notes, “The positive alliance ultimately is an essential curative factor that partly explains the hot-housed growth that occurs within the treatment environment” (p. 48). While the

working alliance has been shown to be essential in the change process in face-to-face therapy (Duncan et al.; Luborsky, 1994), the role that it plays in online counseling has yet to be understood.

### **Social Presence Theory**

Social presence was defined in 1976 as “the degree of salience of the other person in the interaction and the consequent salience of the interpersonal relationships” (Short, Williams, & Christie, 1976, p. 65). Originally, the concept was developed to describe a critical factor within all communication mediums, the degree to which a person is perceived as “real” in face-to-face and computer- and technology-mediated communication (Gunawardena & Zittle, 1997). According to Short et al. (1976) “social presence is an important key to understanding person-to person telecommunications and varies between different media, affecting the nature of the interaction” (p. 65). Further research indicated users of computer-mediated communication felt a similar sense of social presence as users rating face-to-face communication (Walther, 1995). Social presence is impacted by the capacity of each particular type of mediated communication to portray particular nonverbal information between the communicating partners (Gunawardena & Zittle, 1997).

A current working definition addresses the nuanced differences between face-to-face and computer-mediated communication. Biocca, Harms, and Gregg (2001) define social presence in the following way:

“Mediated social presence is the moment-by-moment awareness of the co-presence of another sentient being accompanied by a sense of engagement with the other. Social presence varies from a superficial to

deep sense of co-presence, psychological involvement, and behavioral engagement with the other. As a global, moment-by-moment sense of the other, social presence is an outcome of cognitive simulations (i.e., inferences) of the other's cognitive, emotional, and behavioral dispositions" (p. 2).

Essentially, this working definition encompasses the sense of awareness and engagement that one person feels when communicating via technology with another person. In addition, it asserts that psychological, emotional, and behavioral component interactions that place in communications lacking the face-to-face component. Social presence is one of the most significant factors in building a sense of community through online communication (Aragon, 2003).

Several concepts of Social Presence Theory align with research to understand the role of the therapeutic relationship in online counseling such as immediacy and intimacy (Rettie, 2003). Immediacy is a measure of psychological distance while intimacy is expressed by verbal and non-verbal behaviors (Rettie, 2003). According to Gunawardena and Zittle (1997), intimacy is dependent on nonverbal factors and immediacy is a measure of psychological distance that is developed by the communicator. Rettie (2003) states that the concepts of social presence, immediacy, and intimacy are interrelated. Behaviors that increase the feeling of immediacy are also used to create a sense of intimacy, in turn, enhancing social presence. Social connectedness can be an effect of an individual's attitude and relationship to others and can be a determinant in one's success in life and mental health (Rettie, 2003).

Recently, the ideas of immediacy, intimacy, connectedness and social presence have come to the forefront of computer-mediated communication as a lens with which researchers can study and understand the similarities as well as both the overt and covert differences between the myriad communication modalities. Biocca, Harms, and Burgoon (2003) support the inclusion of social presence theory in research regarding computer-mediated communication as noted below:

“By addressing issues of what essential attributes are needed to establish connection with others, we may arrive at a better understanding of how humans arrive at that sense of mutuality that underpins all communication between people and that is a prerequisite to establishing common ground” (p. 459).

Social presence theory thus offers a link into beginning to understand the properties of the communication that are similar and different between face-to-face and online counseling.

### **Telepresence**

Telepresence, the feeling of sharing the same interpersonal space in communication (Grohol, 1998), highlights the differences between the varying forms of communication and the capability to form meaningful relationships through technology. Biocca et al., (2003) explain that telepresence stems from the concept of social presence, the “sense of being with another” (p. 456). Videoconferencing offers the highest degree of telepresence, as it most closely simulates a face-to-face interaction. Email, or asynchronous chat, has the lowest degree of telepresence. Email takes place out of real time and does not offer a conversation capability that client and counselor can share at



the same time. The degree to which each communication modality allows for telepresence may differentiate the types and depth of relationships that may be built. Research comparing the impact of telepresence of different technology-assisted communications upon ability to build and maintain a therapeutic relationship is needed.

According to Grohol (1998), “as telepresence increases, clinicians and researchers need to allow that the subjective line between ‘being there’ in real-life and ‘being there’ via technology will become increasingly blurred” (p. 127). Ultimately, with advances in technology, communication is able to take place through modalities that simulate a face-to-face environment. As humans continue to utilize, as well as refine, these technologies a clear boundary of what constitutes meaningful communication will be blurred.

According to Knaevelsrud and Maercker (2006), “online therapy challenges our basic assumptions about what is needed to establish a therapeutic contact, such as (1) sharing the same physical space, (2) talking, and (3) synchronous real-time interaction” (p. 3). These assumptions are challenged with the provision of online counseling, as it may no longer be necessary to meet these expectations in order to provide counseling services.

### **Purpose of the Current Study**

Computer-mediated technology has been used in psychotherapy interventions for over a decade (Barak et al., 2008). Clients and counselors alike have begun utilizing technology to supplement face-to-face services, or provide stand-alone services solely through computer-mediated communication. However, this use came before a solid foundation of research regarding the utility and effectiveness of this new type of therapy. To date, little research is available that targets therapy provided through online or technological modalities.

Traditionally, counseling is a field structured around the human experience and relies, in part, on the therapeutic relationship developed between the client and counselor (Rogers, 1957). This human experience and relationship between the client and counselor has held true through research for decades (Duncan et al., 1999; Hubble et al., 2010). Until recently, however, the idea of how counseling was provided did not include videoconferencing, asynchronous, and synchronous chat through electronic means. Technology has caused a shift in the way humans interact with each other and their reality (Borgmann, 1984) which, in turn, has infiltrated the field of counseling. The question of what makes a counseling relationship different from other types of relationships may have been more cut and dry before the invention of the internet. However, with the constant development of new technologies, focused, intentional questions targeted to learn more about the intricacies of online counseling need to be asked. Chester and Glass (2006) ask such a pointed question: can a meaningful relationship be developed if a client and counselor do not share the same physical space?

Current research asserts that online counseling and face-to-face counseling produce similar client outcomes as well as similar results on therapeutic alliance measures. However, Chenault (1998) states “In the end, the argument should not be whether or not -- if -- CMC (computer-mediated communication) can properly foster interpersonal relationships. Instead, scholarship can move into the ‘how’ and ‘why’, and beyond the mere ‘if’” (p. 1). The current study examines the concepts of social presence and working alliance within the context of an ongoing therapeutic relationship, including how these constructs are similar or different through online counseling and face-to-face counseling.

## **Definition of Terms**

Chat-based individual internet counseling (Synchronous chat): Involves synchronous distance interaction between counselor and client using what is read via text to communicate (NBCC, 2001)

Counseling: Counseling is a professional relationship that empowers diverse individuals, families, and groups to accomplish mental health, wellness, education, and career goals (ACA, 2010)

Disinhibition: Any [online] behavior that is characterized by an *apparent* reduction in concerns for self-presentation and the judgment of others (Grohol, 2011)

Email-based individual internet counseling (Asynchronous chat): involves asynchronous distance interaction between counselor and client using what is read via text to communicate (NBCC, 2001)

Emoticons: A group of keyboard characters typically representing a facial expression or an emotion or otherwise conveying tone or attitude that is used especially in computerized communication (Merriam-Webster, 2010).

Face-to-face counseling (f2f): For individuals, couples, and groups involves synchronous interaction between and among counselors and clients using what is seen and heard in person to communicate (NBCC, 2001)

Internet (Online) Counseling: Involves asynchronous and synchronous distance interaction among counselors and clients using email, chat, and videoconferencing features of the internet to communicate (NBCC, 2001)

Technology: Electronically based hardware, software, video, and related products and knowledge, skills, and tools for learning and communication processes. Technology for counselor preparation encompasses distance learning and computer-based and other electronic applications (CACREP, 2001)

Telepresence: The feeling, or illusion, of being in someone's presence without sharing any immediate physical space (Fink, 1999)

Video-based individual internet counseling (videoconferencing): involves synchronous distance interaction among counselors and clients using what is seen and heard via video to communicate (NBCC, 2001)

Working (therapeutic) alliance: the extent to which a patient a therapist work collaboratively and purposefully and connect emotionally (Horvath & Luborsky, 1993)

### **Research Questions**

This study aims to develop a greater understand of the relationships between the working alliance, mental health status, and social presence experienced by participants of online and face-to-face counseling. The current study will address the following research questions:

- I. What are the demographic characteristics of study participants who use online and face-to-face counseling and how do the two groups compare?
- II. Do total scale social presence mean scores differ between online and face-to-face counseling groups?
- III. Do total scale general mental health mean scores differ between online and face-to-face counseling groups?

- IV. Do total scale working alliance mean scores differ between online and face-to-face counseling groups?
- V. What is the strength of relationship between the dependent variables working alliance, social presence, and general health for the online counseling group?
- VI. What is the strength of relationship between the dependent variables working alliance, social presence, and general health for the face-to-face counseling group?
- VII. What is the strength of relationship between the dependent variables working alliance, social presence, and general health for the total sample?

### **Sample Description**

A volunteer sample was utilized to obtain information about similarities and differences in demographics of online and face-to-face counseling clients. Eligible participants were at least eighteen years of age, and currently involved in either face-to-face (i.e. individual, group, couples, or family) or online counseling (i.e., synchronous chat, asynchronous email exchanges, or videoconferencing). In addition, all participants had completed at least three sessions with the same counselor. A minimum of three complete sessions was used as the benchmark as the literature notes an early, measurable working alliance can be developed within three sessions (Horvath & Greenberg, 1989). Fifty total participants were recruited; thirty-seven participants were enrolled in face-to-face counseling and thirteen participants were enrolled in online counseling. The sample consisted of both male and female participants, ages eighteen and over, with educational backgrounds of high school or beyond.

## **Data Gathering Procedures**

All participants were recruited through convenience sampling through online means. Recruitment posts with information about the study were published via Yahoo© support groups, Facebook, the Online Therapy Institute, a Counselor Education email blog, and by independent counseling practices on the internet. The practitioners of these sites were contacted with a similar introductory email asking if they would be willing to forward the study particulars onto their clients. Additionally, a snowball sampling effect became apparent as people discovered the study; they offered to pass information along to family, friends and others that they knew were providing or enrolled in either type of therapy.

Measurement instruments included the *Working Alliance Inventory-Short form*, the *General Health Questionnaire - 12*, and the *Networked Minds Social Presence Measure*. The obtained data were analyzed using Chi Square, *t*-tests for independent means, and correlational analyses to determine the differences between the types of counseling and the relationships between the measures.

## **Limitations of the Study**

While this study offers several strengths through the design and implementation, the following limitations exist for the current study:

- I. This study used convenience sampling, which may constrain the potential for generalizability of the results (Gall, Gall, & Borg, 2007).
- II. The volunteers who chose to participate in this study may be significantly different than those who did not (Gall et al., 2007).

- III. The current study was not able to detect participants who were not truthful about their counseling experiences.
- IV. Due to the nature of the study, it was not able to study the measures over time to see if the working alliance, general mental health status, and social presence changed or were stable over time in therapy.
- V. It was impossible to control for all extraneous variables and the results may be impacted by variables other than the variables being directly measured.
- VI. This study provides information into the relationships between the therapeutic alliance, mental health status and social presence; however it does not yield results that are directly linked to particular counseling strategies. Specific strategies and techniques are beyond the scope of this study.
- VII. Limitations in the measurements used, as each has specific restrictions with regard to internal consistency, reliability and validity.

### **Summary**

According to Borgmann (1984), technological communication has become “the characteristic way in which we take up with the world” (p. 35) which has directly impacted the way in which consumers of mental health services seek treatment from professionals. Counselors, doctors, and psychologists alike are providing services through computer-mediated communication. However, research on the impact of this change in services is currently scarce. In order to add to the current body of literature, this study attempts to understand one nuanced aspect of computer-mediated communication, social

presence, by looking at the differences and similarities between online and face-to-face counseling. This study highlights the working alliance as a central factor in better understanding the utility of online counseling. As the importance of the working alliance has been well documented in traditional counseling (Luborsky, 1994; Miller et al., 1997), the ability to create such an alliance through computer-mediated means requires more study. This study proposes that the concept of social presence will assist in gaining information and understanding of the working alliance in both online and face-to-face counseling.

Chapter one discussed the current issues surrounding the utility of online counseling, including potential benefits and liabilities, and how this type of service is being used by mental health professionals to meet client needs. Chapter one also outlined the theoretical underpinnings that support the notions of the importance of the working alliance in counseling and social presence as contextual factor of building an alliance through technology-assisted communication. Chapter two provides a literature review of the theoretical underpinnings of the study as well as an extensive overview of the online counseling literature. Chapter three outlines the current methodology as based upon the recommendations of current literature. Chapter four discusses the statistical analyses and findings while Chapter five provides a discussion of the implications and conclusion of the current findings within the context of current literature on counseling practice and in counselor education.



## **Chapter Two: Review of the Literature**

### **Introduction**

This review includes a brief introduction to the literature surrounding the theoretical underpinnings and the therapeutic alliance in counseling. This chapter also provides a critique of the literature related to the therapeutic relationship through online counseling.

### **Theoretical Integration and the Common Therapeutic Factors**

Over the past twenty years, psychotherapy integration has become a clearly delineated school of thought (Norcross, 2005) with a supportive backing of literature. Psychotherapy integration supports the notion that not one school of thought, one theory, nor one type of counseling is more effective than another type; a unification of different theories allows therapists to work effectively with a wide range of clients, all requesting services unique to themselves. The number of individual counseling theories has expanded to over 400, yet no single theory is able to claim exceptional utility or overall success when compared with the others (Norcross, 2005). Theoretical integration aims to be a theoretical base for which practitioners are able to integrate different counseling theories; and is characterized by a desire to look beyond a single theoretical orientation in order to incorporate other ideas and interventions from other orientations (Norcross & Newman, 1992).

This integration of theoretical orientations in psychotherapy and counseling requires a shift in research to a more holistic approach toward understanding the efficacy of counseling treatment, as opposed to a more traditional approach of comparing one single theoretical orientation to the next. To affirm the overall success of therapy, regardless of theoretical orientation, Wampold (2001) reported that across all types of therapy, when client outcomes were compared to a no treatment control group, results indicate an effect size of .80, indicating that the average client receiving treatment would be better off than 79% of clients who did not receive any treatment. Additionally, while the data is clear that psychotherapy treatment is more effective than no treatment, when specific treatment differences are controlled for, the outcome differences between specific types of therapy showed no significance (Wampold, 2010).

Researchers, ascribing to theoretical integration, continue to assess the common factors of what works in therapy, regardless of specific theoretical model upheld by the counselor. As the number of specific therapies is continually growing, the question becomes what binds these different therapies to produce client change. Lambert (1992), in a summary of years of psychotherapy reviews of outcome, described four common factors that contribute to client change, regardless of the specific theoretical orientation. The first factor is extratherapeutic change and client variables. This category accounts for as much as forty percent of client improvement during therapy. Extratherapeutic factors account for all client variables such as client personality, willingness to change, social support, severity of psychological symptoms, and all other personal factors unique to that individual. The second factor is the therapeutic relationship, accounting for thirty percent of client improvement. This category includes therapist variables and ability to provide

an environment in which warmth, acceptance, empathy, and encouragement are present. The third factor is specific counseling technique, accounting for up to fifteen percent of client improvement. These include techniques that aid a client in learning certain skills or working through a particular behavior or problem. The final factor, the placebo effect, also accounts for fifteen percent of client change. This factor accounts for the help that clients receive from feeling as though they are going to be helped, or the hope that they hold for the possibility for change.

As these factors have been well documented in the literature (Duncan, Miller, Wampold, & Hubble, 2010; Hubble et. al, 1999; Lambert, 1992), they highlight the crucial role of the therapeutic relationship in counseling. As Norcross (2002) states, “In my more strident moments, I have adapted Bill Clinton’s unofficial campaign slogan: ‘It’s the relationship, stupid!’” (p. 5). Regardless of theoretical orientation or counseling modality, the therapeutic relationship reigns as the crux of counseling.

### **The Working Alliance in Face-to-Face Counseling**

Person-Centered Counseling theory has “had an enormous impact on modern counseling practices and humanistic psychology” (Kensit, 2000, p. 347). Rogers (1951, 1957) hypothesized that the ideal qualities of a therapeutic relationship are respect, openness, empathic understanding, genuineness, and congruence. These qualities, by which Rogers determined to be the “core conditions”, are crucial in the development of a therapeutic alliance. Studies have shown that the presence of these conditions must be felt by the client and therapist in order to be effective in the development of the relationship (Duncan et al., 1997). In this regard, to effectively study the strength of a therapeutic

relationship within a therapeutic context, the focus should be placed on the clients' perceptions of the relationship.

The therapeutic relationship extends into the working alliance developed between a client and counselor. While the therapeutic relationship is built on the facilitative conditions explained by Rogers (1951, 1957) such as empathy, genuineness, and positive regard, the working alliance extends these conditions and includes the ability of client and counselor to work together toward an end goal. The therapeutic relationship is "far broader and inclusive than the alliance alone" (Norcross, 2010, p. 120), although the working alliance is considered an important piece of the relationship as neither is mutually exclusive of the other. The alliance refers specifically to the quality and strength of the collaborative relationship between the client and counselor. The therapeutic relationship provides a basic tenet of the counseling process, and as a counselor works toward providing the client respect, acceptance, positive regard the overall effectiveness of therapy increases (Norcross, 2010). The working (therapeutic) alliance encompasses an operationally defined and measurable piece of the overall therapeutic relationship, one that speaks to the mutual collaboration between the client and counselor.

Bordin (1976) conceptualized the working alliance as a construct that builds upon the therapeutic relationship. The working alliance is based on the assumption that the counselor and client are working together in therapy and have a joint acceptance of mutual goals and trust (Horvath & Bedi, 2002). Bordin (1976) outlines three parts of the working alliance: tasks, bonds, and goals. Tasks include the processes and behaviors within therapy that make up the actual work of therapy, as in what is set to accomplish within the sessions, and both the client and counselor must agree on these tasks and view

them as important. Bonds include the “interpersonal attachment between therapist and client of mutual trust, confidence, and acceptance” (Lambert & Barley, 2002, p. 25). Finally, goals include the mutually agreed upon objectives of what client and counselor are working toward in counseling as related to the client’s growth.

In a large meta-analysis, Horvath and Bedi (2002) studied the correlation between the working alliance and therapeutic outcome across 89 studies and found a median correlation of .21 indicating a positive relationship between a strong working alliance and positive therapeutic outcome. These data showed a median effect size of .25.

Additionally, Shirk and Karver (2003) studied the correlation between the working alliance and therapeutic outcome in therapy with children and adolescents over 23 studies and found a mean correlation of .20. According to Shirk and Karver (2003), “findings indicated that the association between the therapeutic relationship and treatment outcome was consistent across developmental levels and across diverse types and contexts of child and adolescent therapy” (p. 452). Norcross (2010) notes that a mean correlation of .20 and .21, found in the aforementioned studies, correspond with an ES of .45, or a medium effect size. These meta-analytic data summarize years of therapeutic outcome research that has highlighted the positive impact of the working alliance. Wampold (2001) concluded that the working alliance is a crucial part of the relationship that a client and counselor build, accounting for most of the outcome variance in the effectiveness of counseling in research.

These studies indicate the important role that the therapeutic alliance has in counseling efficacy, as significant, positive correlations have been drawn between therapeutic outcome and the strength of the working alliance (Horvath & Bedi, 2002;

Shirk & Karver, 2003). Differences between the therapeutic relationship and the working alliance have been clarified, and it is understood that the working alliance is one construct of the overarching relationship, the construct with the largest amount of literature supporting the relationship it has with the efficacy of therapy. While the positive correlation between the working alliance and client outcome in traditional, face-to-face counseling has been documented, the role that the working alliance plays in online counseling is yet to be clearly defined. The importance of the working alliance in the efficacy of face-to-face counseling is crucial as the field begins to investigate online counseling and how different counseling modalities rely on traditional counseling theory and practice.

### **Online Counseling**

The field of counseling has undertaken the investigation of a new modality of therapy, technology-assisted counseling, or online counseling. The central question under investigation is whether a therapeutic relationship can be established if the client and counselor do not share the same space (Chester & Glass, 2006). This central question begs further inquiry as the role of the therapeutic relationship and working alliance in traditionally therapy has been documented (Lambert, 1992; Wampold, 2001). As the therapeutic alliance is considered central to the therapeutic process (Rees & Stone, 2005) within face-to-face counseling, research investigating the role that it plays in online counseling is necessary. Due to the surge of new technology, the counseling field is beginning to question if online counseling has the potential to be consistent with the philosophical underpinnings of face-to-face counseling as “the beneficial effects and clinical relevance of a positive working alliance have been well documented in face-to-

face therapies, but almost nothing is known about how the therapeutic relationship operates online (Knaevelsrud & Maercker, 2006, p. 3).”

As the supply and demand increases around this new modality of serving clients, research on effectiveness is crucial. To reference such increases in supply and demand, Haberstroh (2009) completed a Google search of the term “online counseling” which received over four million websites and, by comparison, Sampson, Kolodinsky, and Greeno (1997) completed the same search and returned only four thousand counseling-related websites (Haberstroh, 2009). These examples show that in just over a decade, the available websites returned from an internet search increased by millions. The growth in service providers and treatment supports the growth in qualitative and quantitative inquiry as services are currently being offered ahead of a solid base of research in the field of online counseling (Anthony, 2003).

### **Qualitative Literature**

Several qualitative studies have been done to examine a wide array of aspects of online counseling. The first study was completed to investigate the cyber counseling experience from the perspective of both the client and counselor (Lewis, Coursol, & Wahl, 2003). This study set up an online counseling relationship between two counseling graduate students; one was assigned to be the client and the other was assigned to be the counselor. The student in the counselor role was in her second year of coursework and enrolled in her counseling internship while the student in the client role was in her first year of coursework and had not yet moved into her internship experience, thus creating a skills and knowledge hierarchy between the client and counselor. The volunteers were debriefed before beginning the process on their roles and what was expected of them

throughout their participation in the study. Furthermore, they were trained on the technological equipment before their experiences began as to ensure that lack of training was not a mediating variable in the experience and the results. The pair met for three, chat-only sessions for 45 minutes a week.

Several themes were found for both the client and counselor throughout the data collection. The counselor expressed feelings of a lack of depth with the counseling process as well as a lack of emotional connectedness with the client. However, the counselor expressed a need for acceptance of the differences between face-to-face and online therapy, and that once she accepted the differences she felt a greater appreciation for online counseling. The client observed that online counseling seemed more comfortable than face-to-face counseling and that she noticed an unexpected depth of conversation. This study found that although “both the client and counselor indicated that though they had a working relationship, they did not experience a strong emotional connection with each other (Lewis et al., 2003, p. 318).” In addition, the results suggest that clients are likely to initially react more positively to online counseling than counselors, and that online counseling allows the client to express concerns in an environment perceived to be less-threatening than a face-to-face environment (Lewis et al., 2003). One limitation is that this study investigated only one client and one counselor. It was, however, able to show distinct themes of these roles that may develop through the practice of online counseling. It also supports the results found by Rees and Stone (2005) that counselors may hold negative attitudes toward online counseling if they have not yet been exposed to incorporating it into services.



Haberstroh, Duffey, Evans, Gee, and Trepal (2007) utilized counselor education students as both clients and counselors in a qualitative study seeking to gain a better understanding of the perspective of the clients in online counseling. Seven first-year counseling students served as “clients” while five second-year counseling students served as the “counselors” in five, one-hour, synchronous chat online counseling sessions. The clients and counselors were separated by differences in training and clinical experience as the counselors were advanced by one year. The central research question posed to the participants was “What is the experience of receiving online counseling, from a client’s perspective” (p. 271). This qualitative inquiry was phenomenological in nature and investigated the perspectives of the participants throughout their experience. The participants were interviewed at the beginning, middle and end of the online counseling sequence, and participated in additional focus groups to triangulate the data.

Several participant themes emerged such as (a) technical obstacles, (b) reflections of the counseling process, (c) relating in a nonverbal environment, (d) communicating at a slower pace, (e) the convenience of online counseling, and (f) interacting from a person space (Haberstroh et al., 2007). These themes indicate that the clients were aware of technical obstacles that can get in the way of communication such as the internet shutting down and computer error. Also, some participants mentioned feeling more able to communicate with his or her counselor about personal issues; while some indicated the feeling of disinhibition and seemed less nervous in disclosing personal information. Several remarked on the convenience of online counseling and the potential for obtaining counseling services while in their own home and personal space. While this study did not use a clinical sample, it illuminates potential perspectives an online counseling client

might feel throughout this type of therapy. This study provides specific considerations of practitioners better understand how to address potential client feelings related to online counseling.

Haberstroh, Parr, Bradley, Morgan-Fleming, and Gee (2008) reported the perspectives of the six counselors in the same original study mentioned by Haberstroh et al. (2007). This qualitative inquiry was phenomenological in nature and investigated the perspectives of the participants. The participants were interviewed at the beginning, middle and end of the online counseling sequence, and participated in additional focus groups to triangulate the data. The central research question posed to the participants was “What is the experience of receiving online counseling, from a client’s perspective” (p. 271).

Several themes emerged including (a) technological barriers, (b) counseling without visual and verbal cues, (c) clinical concerns for appropriate online counseling, (d) theoretical approaches for online counseling, (e) time and content issues in online sessions, and (f) clinical training process and experiences (Haberstroh et al., 2008). These themes highlight potential issues that counselors providing online counselors may face as they incorporate technology into their services. Participants in this study noted the difficulties of communicating without nonverbal cues, and how these difficulties tie into clinical concerns in ensuring clients are an appropriate fit for online counseling. Several participants also noted the benefit that online counseling provides with regard to time to consider appropriate and reflective responses to match the client’s responses. Although the participant sample was not clinical, these results indicate potential experiences of online counseling providers.

These qualitative studies provide a specific window into the perspectives of both the client and counselor in online counseling, illuminating the importance of understanding the perspectives of both the client and counselor. The qualitative results indicate counselor and client sensitivity to concerns such as potential computer and technology malfunctions, lack of nonverbal information, and concerns for appropriate care if concerns are too great for text-only communication (i.e. suicidal and homicidal ideation). However, both the clients and counselors of these studies indicated observation and awareness of the potential for online counseling to offer positive aspects to counseling such as the feeling of comfort in discussing personal information in an anonymous format, the convenience of providing and receiving services, and the ability to connect and make relationships through computer-mediated communication.

These qualitative studies offer significant insight into the experiences and perceptions of both clients and treatment providers of online counseling. This insight allows for a more robust quantitative inquiry into particular unknown aspects of online counseling. While the experiences and perceptions of clients and counselors who have been involved in online counseling have been examined, research must begin to understand the attitudes and perceptions of potential consumers of this type of counseling.

### **Attitudes toward Seeking Online Counseling**

While online counseling services are on the rise and a growing number of practitioners and consumers are utilizing this type of counseling (Barak et al., 2008, Mallen et al., 2005), it has yet to win over a large portion of practitioners or potential consumers. Research suggests that practitioners and potential clients alike are wary of

this type of service, perhaps due to the unfamiliarity of the service or other reasons, and may harbor personal bias toward the entrance of computer-mediated communication into the counseling field (Rochlen, Beretvas, & Zack, 2004; Rees & Stone, 2005); while other research contends that initial perceptions of online counseling is positive (Lewis et al., 2003). While the literature regarding the perceptions of online counseling is scarce, several current studies are mentioned below.

Rochlen et al., (2004) investigated participants' comfort and discomfort levels of seeking both online and face-to-face counseling and compared these levels with general attitudes of seeking professional help, fear of intimacy, counseling interest, and social desirability. They surveyed 213 college student participants consisting of a Caucasian, female majority with a mean age of 20.72. Results showed significant positive correlations between positive attitudes toward general help-seeking behavior and the perceived value of both online and fact-to-face counseling, while significant negative correlations were found between positive attitudes toward general help-seeking behavior and discomfort with both online and face-to-face counseling. These results indicate that the more positive a person feels about seeking psychological help in general, the greater value they perceived in both online and face-to-face counseling, while their perceived discomfort with both types of counseling decreased. This study suggests that if people have positive attitudes toward seeking psychological help, they seem equally as likely to perceive online counseling as a potential modality for treatment. A homogenous college student sample was cited as a potential limitation as minority subsets were not analyzed due to a lack of representative participants. Additionally, as a portion of this study was

used to validate developing instruments, the authors cite the unknown reliability and validity of some of the instruments as a potential liability of the study.

Tsan and Day (2007) investigated extraversion, neuroticism and gender as predictors of online counseling and help-seeking behavior. They surveyed 176 college student participants (146 women, 30 men) with regard to their personality inventory and general attitudes toward seeking psychological help through different modalities: face-to-face counseling, videoconferencing, email, synchronous chat, and microphone (telephone). Results indicated that overall, women held significantly more positive attitudes toward seeking help than men. However, women held significantly more positive attitudes regarding seeking counseling via face-to-face and email, while no significant differences were found between men and women on attitudes toward seeking help via microphone, synchronous chat, or videoconferencing. When asked to rank preferences with regard to type of delivery both males and females chose face-to-face counseling as their most preferable modality of counseling. Additionally, the results showed that extroverts showed significantly more positive attitudes toward seeking counseling via microphone or telephone than introverts. However, this was the only modality that showed a significant difference between the personality types.

This study supported the notion that women hold more positive attitudes about seeking counseling in general; while women hold significantly more positive attitudes about seeking help specifically through the face-to-face and email formats and men and women hold similar attitudes with regard to receiving counseling through the other online modalities. Finally, it showed that regardless of gender, the participants in this study requested face-to-face counseling as their preferable modality of service. These results

show that while potential consumers are able to identify online counseling as a potential mode for obtaining mental health services, face-to-face counseling was still their first choice. One cited limitation of this study is the lack of instruments designed to specifically evaluate and assess online counseling. Another limitation is the homogenous convenience sample of college students that hinders the generalizability of the results.

These studies offer some insight into potential consumers' current perceptions of online counseling. These results indicate that while some feel open toward online counseling and receptive of using computer-mediated communication when seeking mental health services, others still are wary or unsure of receiving this type of support. These varying perceptions help ground future research by highlighting the notion that online counseling has not yet gained full acceptance of consumers or treatment providers within the realm of available mental health services. These views of technology-assisted counseling inform future research as the necessity to support online counseling with evidence of efficacy and utility to support consumers' needs is crucial for the development of the field.

### **Effectiveness of Online Counseling**

While perceptions may vary, research supports the notion that online counseling can provide a similarly effective treatment option to face-to-face counseling. Barak et al.'s (2008) meta-analysis, lends support to the hypothesis that online therapy and face-to-face therapy are equally as effective as one another. Barak et al. (2008) collected the articles published up to March 2006 (n=64) that examined the effectiveness of online therapy and completed a meta-analysis on all of the studies included in those articles (n=92). All included articles utilized actual implementation of a psychological

intervention through online communication, or computer-mediated communication. In total, all 92 studies examined 11,922 participants, 9,764 received the online interventions. The number of participants in each study ranged from six to 2,341 (mean=106; median=28). Results showed the average weighted effect size (ES) for all 92 studies, across all dependent measures was .53, which is considered to be a medium effect size. When the studies were separated out and analyzed by the specific type of outcome measure, the ES was as follows: “evaluation by expert” outcome measure, .93, “behavioral” outcome measures, .61, client “self-report”, .43, “physical” outcome measure, .19, and “other” outcome measures, 1.54.

Barak et al. (2008) separated twenty-seven studies that specifically studied the effectiveness of “etherapy”, the type of online counseling that engages two people fostering an ongoing relationship. The ES of the different communications are as follows: audio communication, .91; chat (synchronous communication), .53; webcam (videoconferencing), .31; email (asynchronous chat), .51; and forum communication, .34. Finally, fourteen studies compared internet-based interventions with face-to-face interventions, with participants being randomly assigned to each treatment modality. The average weighted ES of these fourteen internet-based interventions was .39 while the average weighted ES of the face-to-face interventions was .34. Barak et al. (2008) report these differences were not statistically significant, therefore showing similar effectiveness of each modality of counseling.

The limitations of this study include the potential to have included studies that have overestimated their effects, also known as a “file-drawer effect”, which results in an overestimation of actual effects found by the study (Barak et al., 2008). In addition, some

criticism exists of meta-analyses capabilities of evaluation the effectiveness of psychotherapy interventions. Finally, this study avoided particular selection criteria and included all studies in the time frame that had been accepted to peer-reviewed journals which may have introduced additional error variance into the results. However, as this study was the first comprehensive attempt to provide an overall meta-analysis of the effectiveness of online therapy and Barak et al. (2008) report, “on average, face-to-face psychotherapeutic interventions are not significantly more effective in producing change in clients” (p. 140) as the average ES of online therapy was comparable to the average ES of effectiveness of face-to-face therapies.

### **Working Alliance in Online Counseling**

Using data from Barak et al.’s (2008) meta-analysis, Hanley and Reynolds (2009) completed a second review using five of the studies specifically targeting the therapeutic alliance in online counseling, totaling 161 participants. These five studies utilized human-to-human ongoing therapeutic relationships that were maintained via computer-mediated communication. Four of the five studies used face-to-face comparison groups. However, several of these used the face-to-face groups on which the alliance measures were normed, and the final study compared the treatment group to the participant group that dropped out of therapy at an early stage. Three of these four studies showed that in comparison, the online alliance was rated higher than in the face-to-face comparison group (Hanley & Reynolds, 2009). This review supported the contention that a measurable therapeutic alliance can be formed through computer-mediated therapy. One limitation is the small size of the review, as it only incorporated five studies. However, this supports the need for more research in this area as only five studies were available



for this review. For further description, the five studies included in Hanley and Reynolds' (2009) review are described in detail below.

Cook and Doyle (2002) conducted a study comparing the working alliance between face-to-face and online counseling. Participants (n=15) were recruited through therapists' web pages or through emails sent via therapists to their clients. Participants ranged in age from 19 to 80 years (M=41.40; SD=15.99), were primarily white and well-educated (at least a high school diploma or GED and the majority had a college or graduate degree). All participants received individual counseling and communicated with their therapists via text-based communication, email or synchronous chat. The participants completed the *Working Alliance Inventory* (WAI) immediately after the third session with their counselor. The face-to-face comparison data in this study was the sample on which the WAI was initially validated. The results indicated that clients of email or chat-based therapy rated the therapeutic working alliance similar and even superior to that of face-to-face therapy. No significant difference in the *Task* and *Bond* subscales was found, indicating similar results in both counseling modalities. However, the *Goal* subscale and the composite score of the WAI were significantly higher in the online counseling group, indicating that participants perceived a higher degree of working alliance in the online counseling group for the overall working alliance as well as in the *Goal* subscale. However, several limitations exist with this study, including a small, homogenous sample size of fifteen participants (Cook & Doyle, 2002). In addition, this study used the sample that the WAI was initially validated on as the face-to-face comparison group. This may have implicated the findings as the groups did not share the

same characteristics and the data was procured from two different studies and then compared.

Prado and Meyer (2003) conducted a study to examine the working alliance perceived by clients involved in asynchronous online counseling. This study utilized twenty Psychologists with at least four years of clinical experience with basic internet knowledge and skills for use. Clients were excluded from the study if, after prescreening, they acknowledged suicidal tendencies, previous suicide attempts, if they were already in therapy, or if they consumed more than two alcoholic drinks per day. The participants were asked to have contact with their therapist at least once a week for fifteen weeks, and all communication was in an asynchronous format, resembling email. The participants were given the *Working Alliance Inventory* (WAI) at the fifth, tenth, and fifteenth session. The results indicated that the participants that finished the entire study showed moderate to strong therapeutic alliance scores while the participants that dropped out showed significantly lower therapeutic alliance scores than those who completed the study. This result supports the notion that the working alliance is stronger for those who complete therapy as a strong working alliance supports the continuation of treatment (Duncan et al., 1997). Also, the results support the claim that a moderate to strong working alliance can be formed through electronic means. One drawback of this study was the large dropout rate and the homogeneity of participants (70 percent were women, 80 percent were undergraduate university students). However, this sample makeup is similar to other studies mentioned in this section, which could highlight the demographics of actual online therapy consumers.

Another study completed by Reynolds, Stiles, and Grohol (2006) studied therapy conducted through asynchronous chat, or email, and compared the working alliance results with face-to-face results. This study utilized the *Agnew Relationship Measure* to measure the working alliance between the client and counselor, and the *Session Evaluation Questionnaire* to measure the impact of each therapy session. Sixteen therapists saw anywhere from one to ten clients and rated a total of 178 sessions while seventeen clients rated a total of 205 sessions on both measures. This study found the therapeutic alliance ratings in email-based therapy sessions to be similar to face-to-face therapy ratings for both therapists and clients; the results indicated that online clients rated the therapeutic alliance and session impact similarly to face-to-face clients. In addition, online therapists evaluated the “depth, smoothness, and positivity aspects of session impact and the confidence aspect of the therapeutic alliance, more highly than face-to-face counselors (Reynolds et al., 2006, p. 167).” The main limitation of this study is that it compared the online data with past face-to-face data. In addition, this study had a fairly homogenous sample with mostly Caucasian female participants. However, this study supports the notion that the working alliance formed between a client and counselor through email communication is perceived to be equally as strong with the working alliance developed through face-to-face therapy.

Knaevlesrud and Maercker (2006) investigated the “quality and predictive relevance of the therapeutic alliance for patients receiving a short-term, internet-based, cognitive-behavioral therapy program for posttraumatic stress reactions” (p. 1). Participants were recruited through radio and newspaper advertisements posted on websites for various groups who may have experienced traumatic events. After initial

dropout and meeting exclusion criteria, 91 participants were included in the study (48 in the treatment group, 43 in the control group). Two female psychologists with special training in the application of writing assignments for Post Traumatic Stress Disorder (PTSD) were utilized as the study's therapists. Each participant took the *Working Alliance Inventory-Short* (WAI-S), the *Impact of Event Scale*, and the *Symptom Checklist-90* after the fourth treatment session. Results indicated high alliance scores supporting the notion that the possibility exists to establish a stable and positive therapeutic through an online medium. In addition, the results showed positive correlations between the working alliance and therapeutic outcome, although statistical significance was not achieved. One potential methodological weakness is that a fourth session assessment of the therapeutic alliance may be too early in online therapy (Knaevelsrud & Maercker). Another limitation of this study is the small and homogenous sample. However, the findings of this study support the notion that a positive working alliance can be formed through online counseling early in the therapeutic process.

Rees and Stone (2005) compared the working alliance in face-to-face therapy with videoconferenced therapy. Thirty Australian clinical psychologists participated in this study and were split into observing either face-to-face modality or videoconference modality. The lead researcher videotaped a role-play face-to-face counseling session, and then reenacted the exact same session through videoconferencing. The participants watched one of the modalities and then rated that session with the *Penn Helping Alliance Rating Scale* (HAR). Results indicated that clinicians rated the working alliance in videoconferencing-based therapy lower than in traditional face-to-face counseling (Rees & Stone). The psychologists rating the face-to-face session rated the working alliance

higher in the HAR total score, and in each of the two subscales of the HAR. However, this may be due to inherent bias in the participants toward technology and its role within counseling, as most of the psychologists in this study had no experience incorporating technology into their sessions (Rees & Stone, 2005). Some other limitations include the fact that the participants/psychologists rating the therapeutic relationship were not involved in the relationship which may have skewed their ability to understand the actual therapeutic alliance. A final limitation is the small sample of this study and the difficulty in generalizing such a small sample to the field of therapy. This study supports the contention that psychologists hold negative views toward incorporating videoconferencing into their practices.

Mallen, Day, and Green (2003) compared relational and discourse variables in communication between online and face-to-face settings. Sixty four undergraduates, who did not know each other, were placed in either a face-to-face conversation or an internet chat conversation. After thirty minutes, the pairs rated each conversation on emotional understanding, self-disclosure, closeness, and depth of processing. Results showed higher rates of disclosure, closeness, and satisfaction with the face-to-face conversation experience than that with online conversation, though no difference in emotional understanding was detected between the two interaction modes. Several limitations of this study were mentioned. The first is that it was a non-clinical sample and undergraduate volunteers may not be generalizable to a clinical population. In addition, this study only had the pairs meet one time before they rated the session. It may take longer than thirty minutes to develop a working alliance or feelings of emotional understanding, self-disclosure, or closeness between conversation partners. This study

highlights intricacies of the differences between each type of relationship, and gives readers a better understanding of what to focus on when aiming to improve the quality of computer-mediated communication.

These results indicate the propensity for online counseling clients to rate perceptions of the working alliance similarly or, in some cases, stronger than clients of face-to-face clients; supporting the conviction that online counseling has the ability to foster meaningful, working relationships between counselor and client (Cook & Doyle, 2002; Reynolds et al., 2006). However, one study highlighted the inclination that many therapists may be wary in accepting new technologies and incorporating them into their practices (Rees & Stone, 2005). Although few in numbers, these studies set important groundwork for future exploration of the relationship formed between client and counselor through online means.

### **Client Satisfaction in Online Counseling**

Murphy et al., (2009) studied client satisfaction when compared to the *Global Assessment of Function* (GAF) for clients receiving either face-to-face or online counseling. This study utilized clients accessing services through Interlock, a Canadian Employee Assistance program that offers therapy services via online and face-to-face modalities. Twenty-six online clients were compared with a convenience sample of 101 face-to-face clients receiving services at the same time. The data suggested that, with the outliers removed, there was no difference between face-to-face and online clients' assessments of the valuable benefits of counseling. This supports the notion that online counseling clients are equally as satisfied with mental health services as face-to-face clients. The results also showed that final GAF scores, in each modality, were

significantly higher than beginning GAF scores, indicating that both modalities of counseling were able to help clients achieve positive outcomes. One limitation of this study is a failure to use an assessment specific to the therapeutic alliance. In addition, the client satisfaction survey utilized has never been tested for reliability or validity. Finally, the number of online clients was significantly smaller than the face-to-face comparison group. However, this study highlights the effectiveness of both modalities in producing positive outcomes.

Leibert, Archer, Munson, and York (2006) studied the working alliance and client satisfaction for clients who received online counseling services when compared with face-to-face clients. They recruited 81 participants through postings on Yahoo public, mental health support groups. The average age of the participants was 29.4, and the majority were female and Caucasian (82.7%). This study utilized the *Working Alliance Inventory-Short form* (WAI-S) and the *Client Satisfaction Inventory-short form* (CSI-SF) as well as a demographic questionnaire. Volunteers were asked to participate if they were currently involved in online counseling. The data from this study was compared with archived data from each of the measures, which may have caused additional extraneous variables to be uncontrolled.

The data indicated that the general Internet usage was significantly correlated with the use of online counseling, indicating that the more familiar one is with using the internet, the more likely they are to utilize online counseling for mental health services. The results showed that face-to-face clients felt significantly more satisfied than online clients. Also, face-to-face clients perceived a stronger working alliance than the online clients. However, when the variances of each sample were compared, they were found to

be significantly different, indicating differences within the two samples, indicating a methodological weakness as the two samples of data were not equal.

Leibert et al. (2006) found that the loss of nonverbal information was the main disadvantage to the experience; however, this loss of information was negated by the advantage of anonymity when divulging shameful personal information. The results indicated that the clients, primarily young White women, rated themselves as satisfied with online counseling and stated that they felt an established therapeutic alliance with their counselors. In the open ended questions, the clients reported experiencing greater ease with disclosing personal information through an online medium. These results indicate that in the few studies mentioned, contradictory results were found. Several limitations existed for this study, including the homogeneity of the sample including predominately White females. The second limitation is that this study did not specify the type of presenting issue that clients sought counseling, which may have confounded the results.

One study found similarities in client satisfaction between online and face-to-face counseling clients, while another found that face-to-face counseling clients perceived a higher level of satisfaction with their services. These differences indicate the need for future research in this area to understand more about the satisfaction of clients in both treatment groups. As the field begins to understand online and computer-mediated counseling, many aspects, including efficacy, need to be examined. The field of counseling, while moving toward identifying effective-based practices and treatment efficacy (Hubble et al., 2010), has been built upon the relational experience between the people in the room (Rogers, 1957). Social presence theory offers a new perspective on



the experience between a client and counselor working through computer-mediated modalities.

### **Relevance of Social Presence Theory**

Social Presence Theory was developed in the late 1970's by Short, Williams, and Christie (1976). This theory was constructed to understand nuanced differences in mediums of communication such as face-to-face and telephonic communication. Social presence is defined as “the degree of salience of the other person in the interaction and the consequent salience of the interpersonal relationships” (Short et al., 1976, p. 65). Understanding social presence allowed for discussion and research around a crucial difference between person-to-person and computer-mediated communication, the ability for the people communicating to share the same physical space.

The greater sense of presence, or awareness, each person in the communication dyad can perceive from the other, the stronger the relationship will be between the communicators. Essentially, social presence is the sense of awareness and engagement that one person feels when communicating with another person. In addition, it asserts that psychological, emotional, and behavioral components are involved in interactions that place even in communications lacking the face-to-face component (Biocca et al., 2001). Short et al. (1976) hypothesized that social presence alone did not decide the effectiveness of communication through specific modalities. Social presence “is a single dimension that is the aggregation and the cognitive synthesis of such factors that include physical appearance and posture, facial expression, direction of looking, mutual gaze and the feeling of intimacy and trust as perceived by the individual to be present in the medium” (Barkhi, Jacob, & Pirkul, 1999, p. 329). As such, social presence is interrelated

to other aspects of communication, yet encompasses the feeling of being aware of another person within a conversation.

Research in social presence indicates that the face-to-face medium of communication is highest in Social Presence followed by video, multichannel audio, speaker phone, and written text (Short et al., 1976). Communication that takes place through a medium characterized with a low social presence is characterized as “unsociable, insensitive, cold, and impersonal” (Barkhi et al., 1999, pg. 329). However, research has shown the capability to enhance communication mediums low in social presence with text, color, emoticons, inserting feelings through text in order to replicate traditional nonverbal communication (Alleman, 2002; Anthony, 2003; Gunawardena & Zittle, 1997).

The current study focuses on recent literature that specifically examines computer mediated communication as it relates to the current research questions. Social presence theory has been recently studied with regard to virtual communities and online learning communities, and research has not yet begun to explore social presence theory in combination with computer-mediated counseling relationships. Relevant literature is included in this section to give a brief overview of how social presence is understood in other computer-mediated relationships, with the expectation of identifying the potential role that social presence could play in online counseling relationships.

Barkhi et al., (1999) compared face-to-face and online communication through group process. Twelve, four-member groups, consisting of junior and senior undergraduate business students, were randomly assigned to each of the two experimental conditions, either face-to-face or computer-mediated communication. They found that

computer-mediated communication provided an efficient method to discuss problem specific information; however, the ability to communicate in a face-to-face modality resulted in better overall performance of the groups. The group members and group leaders of the computer-mediated communication group became significantly more frustrated with the process than the face-to-face group. The results indicated that leader performance was perceived as not significantly different between the two groups, indicating leader efficacy was similarly perceived within the two experimental groups. Finally, both treatment groups had similar completion times, indicating that one group was not more goal-orientated or able to complete the tasks in a shorter time than the other. The limitations of this study included a small sample of college students, influencing the overall generalizability of the results.

Lowry, Roberts, Romano Jr., Cheney, and Hightower (2006) studied the impact of group size and social presence in three types of groups: (1) face-to-face without computer-mediated support, (2) face-to-face with computer-mediated support, and (3) virtual groups with computer-mediated support. Participants consisted of 439 undergraduate students enrolled in an information systems class in a mid-western university. The group task was to use a specific technique called heuristic evaluation (HE) to evaluate a website with many subpages. The groups were asked to evaluate the webpage separately from one another and then come together, through the specified treatment medium, to discuss the evaluation results.

Face-to-face groups with computer-mediated support established higher levels of communication quality when compared to face-to-face only groups and virtual groups with computer-mediated support. These results indicated that face-to-face groups with a

computer-mediated communication component upheld the highest level of social presence. Communication openness was not significantly different between any of the treatment modalities, indicating both virtual and face-to-face groups felt the same level of openness when communicating with one another. These results support the notion that the possibility exists for computer-mediated technology to assist in the quality of communication developed between users. The findings suggest there may be no significant differences in the quality of communication regardless of the face-to-face or online modality. This study has restricted generalizability as it was completed in a controlled environment with undergraduate students.

Gunawardena and Zittle (1997) examined social presence as a predictor of student satisfaction within a computer-mediated classroom environment. The participants consisted of fifty university students who participated in an inter-university virtual conference (62% were female and the mean age=40). Each participant completed the distance education conference for an entire fall semester in which each was required to complete a research project to share with the group as well as participate in conference discussions throughout the semester. Upon completion of the semester, each participant filled out the *GlobalEd Questionnaire*, developed by the researcher, which inquired about potential influences on the satisfaction of the experience within the computer-mediated environment.

Results indicated that social presence was significantly positively correlated with overall satisfaction of the virtual conference experience. Results also indicated that a higher sense of social presence was related to the use of emoticons to express missing nonverbal cues. These results indicate that a strong socio-emotional experience can be

formed through computer-mediated communication, and that specific techniques play a role in supplementing the perception of social presence (Gunawardena & Zittle, 1997). Limitations of this study include a selection bias, homogeneity of the sample, as well as a small sample size. Additionally, the questionnaire used was developed by the researcher and did not have referenced reliability or validity which may have influenced the results.

While these studies do not specifically target computer-mediated counseling relationships, they offer insight into the quality of the relationship formed through other modalities of computer-mediated communication. These studies specifically targeted the effectiveness of communication regarding the completion of tasks of groups in a face-to-face modality when compared with groups in a computer-mediated modality. In these studies, some aspects such as leadership and time completion of tasks were observed to be similar between the computer-mediated and face-to-face groups. However, some aspects were observed to be different such as frustration with the process and ease of decision making. The authors contend that successful collaboration relies on effective communication (Lowry et al., 2006), and researchers are working toward understanding more about the potential for computer-mediated communication to support effective communication. Finally, social presence has been shown to increase satisfaction with computer-mediated communication. These findings are the grounding for further research regarding the role that social presence plays in developing high quality, meaningful relationships through computer-mediated communication.

### **Implications from the Literature**

The current literature provides a base from which to build a more robust understanding of online counseling. The studies discussed above offer important results

that guide future work, but also set the stage for more effective methodological designs. Though limited, the current literature generally supports the notion that online counseling can produce similar outcomes and provide a medium through which a therapeutic alliance can be forged between a client and a counselor (Cook & Doyle, 2002; Knaevelsrud & Maercker, 2006). In addition, online clients have been shown to be equally as satisfied with treatment as face-to-face clients (Murphy et al., 2009). Qualitative literature supports the notion that both clients and counselors experience similar feelings and conceptions about online counseling, and that once volunteers participated in an online counseling relationship, they reported increased positive feelings about using online counseling in the future. Finally, data has shown that online counseling can produce outcomes that are equally as effective as face-to-face counseling (Barak et al., 2008). These results offer support to the contention that online counseling can be an industrious addition to the field of counseling.

The aforementioned literature sites specific methodological problems that help guide future research such as small, homogenous samples (Cook & Doyle, 2002; Prado & Meyer, 2003; Rees & Stone, 2005; Reynolds et al, 2006). Several studies used archived face-to-face counseling data to compare the current online counseling data which may have confounded the results by exacerbating the differences in the two groups (Cook & Doyle, 2002; Leibert et al., 2006; Reynolds et al, 2006). Additionally, qualitative literature has used student volunteers as participants rather than clinical samples, which hinders the transferability of the results as non-clinical samples may not immediately simulate the experiences of actual online clients or treatment providers. While the aforementioned studies all added significant knowledge to the current understanding of

online counseling, future research can begin to amend the methodological weaknesses and improve research designs.

Social presence theory has offered a new way of understanding the utility and effectiveness of the relationships developed and maintained through virtual environments and online learning communities. This theory helps the field re-conceptualize functional and meaningful relationships through computer-mediated modalities. Previous contention included the idea that only face-to-face communication could produce an environment rich in contextual cues and nuance; however, recent literature is showing that computer-mediated communication and online learning communities are able to provide a similar type of environment that simulates nuanced aspects of face-to-face relationships (Barkhi et al., 1999; Lowry et al., 2006).

### **Summary**

Current literature highlighted both similarities and differences in therapeutic outcome, working alliance, and client satisfaction. While no finding is conclusive regarding the utility of online counseling, each study helps the field better understand what online therapy can offer to existing services. While current literature has found that outcome measures and therapeutic alliance measures produce similar results when compared between face-to-face and online therapeutic relationships; currently, it is not clearly understood what makes this possible. Further research in this area is needed for the counseling field to add to the depth and breadth of understanding of online counseling and the therapeutic relationship that can be facilitated through this medium (Chester & Glass, 2006).

McAdams and Wyatt (2010) consider that “our capabilities for applying technology in counseling and supervision clearly exceed our understanding of its full implications...” (p. 191). The literature mentioned in this chapter provides an overview of the current understanding of online counseling. Generally, studies suggested that online therapy is equally as effective as face-to-face counseling in producing positive client change (Barak, et. al, 2008). Also, the working alliance has been perceived as strong as the working alliance formed in face-to-face counseling. These studies set the stage for further research in the area of online counseling.

Social Presence Theory offers a fresh perspective into learning more about computer-mediated relationships. This theory offers a new way of understanding of nuanced similarities and differences of the two modalities of counseling regarding relational aspects based on the communication modality. While studies have been completed to examine the role of social presence in online learning environments, the field of online counseling has not yet been approached by this theory.

In summary, the current research supports a general knowledge that online counseling is no less effective in producing outcome or therapeutic alliance than face-to-face counseling. In order to study this more specifically, a comparison between face-to-face and online counseling needs to be conducted. Future research needs to increase the sample sizes and diversity within client populations. Additionally, future research should also attempt to obtain current participants of each type of counseling to be able to compare and contrast a sample of participants in the same study with the same study requirements and instruments. Research should continue to examine differences and similarities between face-to-face and online counseling with regard to working alliance



and efficacy of treatment modality. Taking the above conclusions into account, the current study aims to explore the idea of social presence and how it relates to the therapeutic alliance in both modalities of counseling to gain a greater understanding of what binds and separates computer-mediated counseling from face-to-face counseling.

## Chapter Three: Research Methodology

### Introduction

This chapter describes the methodology and research design utilized in the study. Included are the following subsections: *Participants, Instrumentation, Research Questions, Research Design and Analyses, and Procedures*. Finally, ethical considerations will be discussed.

### Participants

The typical demographics of online counseling consumers are still being determined. To this end, this study aimed to provide a better understanding of the population of consumers who use online counseling. A volunteer sample was utilized to obtain information about similarities and differences in demographics of online and face-to-face counseling clients. Eligible participants were at least eighteen years of age, and currently involved in either face-to-face (i.e. individual, group, couples, or family) or online counseling (i.e., synchronous chat, asynchronous email exchanges, or videoconferencing). In addition, all participants had completed at least three sessions with the same counselor. A minimum of three complete sessions was used as the benchmark as the literature notes an early, measurable working alliance can be developed within three sessions (Horvath & Greenberg, 1989).

Participants were recruited and data were collected through online methods, which will be described in a later section of this chapter. Fifty total participants were

recruited; thirty-seven participants were enrolled in face-to-face counseling and thirteen participants were enrolled in online counseling. The sample consisted of both male and female participants, ages eighteen and over, with educational backgrounds of high school or beyond. All participants had seen their current counselor during at least three sessions, which criteria specified by the researcher.

All participants were recruited through convenience sampling. Recruitment posts with information about the study were published via Yahoo© support groups, Facebook, the Online Therapy Institute, a Counselor Education email blog, and by independent counseling practices on the internet. The practitioners of these sites were contacted with a similar introductory email asking if they would be willing to forward the study particulars onto their clients. Additionally, a snowball sampling effect became apparent as people discovered the study; they offered to pass information along to family, friends and others that they knew were providing or enrolled in either type of therapy.

### **Instrumentation**

Four instruments were used to collect information necessary to complete this study. The instruments include: a demographic questionnaire, the *Working Alliance Inventory-Short Form* (Kokotovic, & Tracey, 1989), the *General Health Questionnaire-12* (Goldberg & Williams, 1970), and the *Networked Minds Social Presence Measure* (Harms & Biocca, 2004). The following section describes each measure with regard to the construct, test design, and technical adequacy.

**Demographic Questionnaire.** A demographic questionnaire was used to collect pertinent data, such as gender, age, race, completed education level, and presenting counseling issue, on the participants (See Appendix E). The demographic information

was used to assess significant personal information relating to the participants' counseling experience. Moreover, this obtained information allowed the researcher to describe both samples and study the similarities and differences in consumers of both types of counseling.

**Working Alliance Inventory-Short Form.** The second instrument employed is the *Working Alliance Inventory-Short Form* (WAI-S; Kokotovic, & Tracey, 1989). This scale was developed to measure clients' and counselors' perception of the quality of the therapeutic alliance, based on Bordin's (1980; as cited in Horvath & Greenberg, 1989), pantheoretical conceptualization of the working alliance. The pantheoretical concept pertains to the idea that regardless of the theoretical orientation, a working alliance between the client and counselor is a crucial part of the therapeutic process. According to Horvath and Greenburg (1989) the construct of the working alliance describes the degree to which the client and counselor join in a mutual counseling relationship to help the client change self-defeating behavior. Bordin (1980) defined three constructs within the working alliance; *bonds* (i.e., the degree of mutual trust, acceptance, and confidence between the client and counselor), *goals* (i.e., how closely the client and counselor agree on how to reach the treatment goals), and *tasks* (i.e., how closely the client and counselor are mutually engaged in the goals of therapy).

The original *Working Alliance Inventory* was published by Horvath and Greenburg in 1986. This original format is a self-report measure containing 36 stems answered on a seven-point Likert scale, ranging from *never* to *always*. Three subscales named *Bonds*, *Goals*, and *Tasks* are included, with twelve items in each subscale, as well as a total composite score resulting from all 36 items combined. The WAI-S was

developed by Tracey and Kokotovic (1989) to create a shorter instrument than the original, rendering it quicker and easier to distribute to clients. The WAI-S is a twelve item self-report form that maintains the same seven-item Likert scale format, ranging from *never* to *always* (See Appendix F). The WAI-S maintains the subscales in the WAI with 4 items per subscale. Raw scores range from 12 to 84, with higher scores reflecting increasingly positive perceptions of the alliance (Horvath & Greenberg, 1989).

While the technical adequacy of the WAI has been well-documented by over 100 published research reports, the WAI-S has little information published on its psychometric quality, aside from the initial findings reported by the developers (Busseri & Tyler, 2003). However, the WAI and WAI-S have been used interchangeably to measure the working alliance between client and counselor since its publication (Busseri & Tyler, 2003). In order to validate the interchangeability of the two instruments Busseri and Tyler compared the WAI and the WAI-S directly and showed support for the internal consistency of each subscale as well as the composite score as assessed twice during therapy. However, the current study will only use the WAI-S composite score, therefore the description of the instrument's technical adequacy will address only the total test score. The internal consistency of the total scale composite score at the fourth-session and final session, respectively, ranged from .91 and .92. Carmel and Friedlander (2009) found internal consistency for the composite score to be .93. These findings are similar to the technical adequacy reports of the WAI and further support the interchangeability of the instruments.

**The General Health Questionnaire-12** According to Goldberg and Williams (1988) *The General Health Questionnaire (GHQ)* was “designed to be a self-

administered screening test aimed at detecting psychiatric disorders among respondents in community settings and non-psychiatric clinical settings” (p. 1). The original General Health Questionnaire, which consisted of sixty items, has been developed into three shorter instruments, the GHQ-30, GHQ-28, and the GHQ-12. The GHQ focuses on two classes of change: the inability to carry out “normal and healthy” functions and the appearance of new distressing change. The GHQ does not ask for a time frame, thus providing a snapshot of functioning within the past two weeks (Goldberg & Williams, 1988). According to Goldberg and Williams (1988), the GHQ has been published in 38 languages. The GHQ-12 was developed from the original GHQ. It is balanced to have overall agreement with the original measure with the items signifying “physically ill” removed, leaving twelve questions indicating mental health and illness. The GHQ-12 is mostly used as a screening tool to indicate potential psychological disturbance or mental illness (LoBello, 1995)

The GHQ-12 consists of twelve questions that the participant is asked to answer based on feelings over the last two weeks (See Appendix G). Each question is evaluated on a four-point scale described as follows: “less than usual”, “no more than usual”, “rather more than usual, “much more than usual”. Each answer is assigned either a “0” or a “1” depending on if the answer indicates illness or health; a score of “1” indicates answers that denote illness. The measure can also be scored using traditional likert-type scoring with each answer earning a “0”, “1”, “2,” or “3”. Regardless of the type of scoring, the higher the total score on the GHQ-12 describes a more troubled and less healthy description of mental health status.

According to Mathers and Shipton (1993), “the GHQ is one of the most thoroughly tested mental health questionnaires, with high reliability and validity...” (p. 311). Mathers and Shipton (1993) found significant decreases in pre- and post-GHQ-12 scores sample of a forty-five university counseling clients indicating positive counseling outcomes as well as the ability of the GHQ-12 to be sensitive to this change. According to Goldberg and Williams (1988), the GHQ-12 has a split-half reliability of .83 and a test-retest reliability of .73.

**The Networked Minds Social Presence Measure** *The Networked Minds Social Presence Measure* (NMSPM; Harms & Biocca, 2004) was developed as a method to assess the concept of social presence in computer-mediated communication. Harms and Biocca (2004) defined the construct of social presence as: “...the moment by moment awareness of the co-presence of another sentient being accompanied by a sense of engagement with the other” (p. 2). The NMSPM is composed of thirty-six items that are answered on a seven point Likert scale, with anchors ranging from *strongly agree* to *strongly disagree* (See Appendix H). The instrument takes between ten and fifteen minutes to complete. A higher score on the instrument or its respective subscales indicate a stronger perception of social presence. The six subscales include: (1) Co-Presence; (2) Attentional Allocation; (3) Perceived Message Understanding; (4) Perceived Emotional Understanding; (5) Perceived Behavioral Interdependence; and (6) Perceived Emotional Interdependence (Harms & Biocca, 2004). In keeping with the previous instruments, the current study will rely on only the NMSPM composite score as a unified measure of social presence.

The support for the technical adequacy of the instrument is limited, yet the few available studies support the use of the instrument for research. Concurrent validity investigations support the ability of the instrument to detect differences in levels of social presence across different types of media (Biocca, Harms, & Gregg, 2001). In a study with 240 students at a Midwestern college/university campus, confirmatory factor analysis supported six distinct factors or subscales and the retention of 36 items out of the originally proposed 100. Confirmatory factor analysis showed each of the 36 items with factor loadings ranging from .52 to .81 on their respective scales. This confirmatory factor analysis confirmed the hypothesis that six distinct factors would collate from the data. These six subscales (individual factors) maintained internal consistency between .81 to .87. The current study will only use the total score. A limitation of this instrument is that it has not been thoroughly researched in the current literature; therefore, its technical adequacy has not been well-established. However, initial studies completed by the developers show initial support of the reliability and validity of the instrument with concurrent validity and internal consistency as evidenced by alpha levels of the subscales between .81 to .87. In addition, Harms and Biocca (2004) found that the instrument was able to distinguish between levels of computer-mediated and face-to-face levels of social presence.

### **Research Questions**

The current study is driven by a number of research questions. These questions were proposed by the researcher in order to better understand the relationships and differences between social presence, mental health status, and working alliance in online and face-to-face counseling contexts. Six research questions of interest are posed for this



study because insufficient prior research exists to postulate directional hypotheses. The following research questions were analyzed using two-tailed tests of significance.

- I. What are the demographic characteristics of study participants who use online and face-to-face counseling and how do the two groups compare?
- II. Do total scale social presence mean scores differ between online and face-to-face counseling groups?
- III. Do total scale general mental health mean scores differ between online and face-to-face counseling groups?
- IV. Do total scale working alliance mean scores differ between online and face-to-face counseling groups?
- V. What is the strength of relationship between the dependent variables working alliance, social presence, and general health for the online counseling group?
- VI. What is the strength of relationship between the dependent variables working alliance, social presence, and general health for the face-to-face counseling group?
- VII. What is the strength of relationship between the dependent variables working alliance, social presence, and general health for the total sample?

### **Research Design and Analyses**

The purpose of this study was to determine, through a descriptive design, the similarities and differences between online and face-to-face counseling outcomes as measured by the *Working Alliance Inventory-Short Form*, the *Networked Minds Social Presence Measure*, and the *General Health Questionnaire-12*. As a descriptive study,

analyses included frequency data, independent samples *t*-tests, and zero order correlations. Frequencies were computed to ascertain and describe the demographics of the volunteer sample. Independent samples *t*-tests were computed to investigate differences between online and face-to-face counseling clients on all three dependent measures, the WAI-S, NMSPM, and the GHQ-12. Finally, correlations were computed to discover the relationship between the three dependent measures.

While each measure has reported internal consistency from previous studies, reliability analyses of each of the dependent variables were conducted to attest to their utility in the current study. Internal consistency of each measure was investigated using the Alpha coefficient.

### **Research Procedures**

All data were gathered through online recruitment. The researcher developed a website that outlined the study and contained an embedded link that housed the informed consent and assessments (<http://wmpeople.wm.edu/site/page/cmholmes>; See Appendix C). The website link was advertised through Yahoo© online support groups, the Online Therapy Institute website and blog, independent online therapy practitioner sites, Facebook, and a counselor education blog targeting those who have participated in either type of counseling. Additionally, as people were contacted about the study, a snowball effect occurred in which those contacts passed the study onto family and friends who were either providing or enrolled in either type of therapy.

Volunteers clicked on an embedded link that brought them to the researcher's website homepage. This homepage explained the study and housed a link to the informed

consent and instruments. This homepage also contained a password to protect the survey, as was requested by the developers of the Working Alliance Inventory. If a volunteer decided to participate, the volunteer clicked on that link and completed the informed consent (See Appendix D).

This study employed Qualtrics, the College of William & Mary's on-site, electronic survey creation tool. The first page consisted of the Informed Consent document that outlined the rights of the participant. The informed consent explained the activities requested of the participants, highlighted potential harm to the participants, summarized the study's procedures, and described how the results will be conveyed. This document informed participants of their right to withdraw from the study at any time. Contact information was provided if participants had any questions or concerns. An electronic signature option was provided and if accepted, participants progressed onto the completing the instruments.

If the participant chose to take the assessments, he or she marked the "I agree" button and continued with the study. The assessments were administered in the order as followed: (1) demographic questionnaire, (2) WAI-S, (3) the Networked Minds Social Presence Measure, and (4) GHQ-12. All of the information obtained was captured in an electronic database that maintains the confidentiality and anonymity of the participants. The battery of measures took between twenty and twenty-five minutes for respondents to complete. At the conclusion of the study, results will be posted to the website so that all participants will be able to access the results if they desire. All participants were given the contact information for the researcher, the chair of the study, and the contact person for the Human Subjects Committee at the College of William & Mary.

### **Data Handling Procedures**

All data were kept confidentially and anonymously in the Qualtrics database which was password protected and accessible only by the researcher. Participants were able to email the researcher to request entry into the gift card drawing. These emails were kept separate from the results, allowing anonymity in responses and were kept within a password protected account online, accessible only by the researcher.

### **Incentive**

As an incentive, participants had the option to be entered into a raffle for a monetary sum in gift card form. Participants were able to discontinue their participation at any time without penalty. All information was kept confidential and anonymous. The participants were not asked to identify themselves in any way other than through a brief demographic questionnaire. The researcher was not able to connect specific participants with data as everything was kept anonymous through the online format. Therefore, if participants chose to be entered into the raffle, they were asked to email the researcher separate from their responses. This name and email address was entered into a raffle. Four gift cards were won by four participants, and the chosen participants were notified via email.

### **Participant Risk**

The risk to participate in this study was no more than the risk of usual daily life. This study sought to understand several aspects of clients of both online and face-to-face counseling through collecting data via survey design. If a participant began the study but did not feel as if they can or want to continue, they were informed of their right to exit the study without repercussion. In addition, the study offered direction to call the local police

department if they begin to feel in crisis while participating in the study on the informed consent page. Also, all information was kept confidential and anonymous and there is no risk of a participant's identity to be tied to the data.

### **Ethical Considerations**

In accordance with Section E of the American Counseling Association Ethical Code (1995), and the Human Subjects Board of The College of William & Mary, all necessary precautions were considered in protecting the welfare of the participants. Participants were provided a thorough explanation of the study's procedures and written informed consent was signed before participation was allowed. Although the study posed no unusual threats to the participants, participants were directed in the informed consent form to dial 911 if they felt any emotional discomfort. Emphasis was placed on the voluntary nature and it was explained that individuals may discontinue their participation in the study, without penalty, at any time. Confidentiality was ensured through the use of an anonymous computerized data system. None of the research material contained identifying information that can be traced to the participant and procedures were in place to keep the data separate from the participants who wished to enter into the drawing. Sound instrumentation was used in an appropriate manner and was scored and interpreted by qualified individuals and appropriate computerized software. Upon completion of the study, results will be made publically available through the research website.

### **Summary**

Chapter one introduced the focus of the proposed study, while chapter two reviewed pertinent literature establishing a need for further research. The preceding chapter has outlined the research design and methodology to be followed in conducting

the proposed study. It has been established that there is still much to understand about the similarities and differences between counseling that takes place through face-to-face interactions and counseling that takes place through computer-mediated communication. While limited, the literature studying online counseling points to the capabilities of counselors and clients to develop therapeutic relationships and achieve outcomes similar to those of face-to-face work. This study hopes to add to this literature and will look at the relationship between therapeutic alliance, therapeutic outcome, and social presence within face-to-face and online counseling as well as discover similarities and differences between the two modalities on these constructs.

The proposed research design intends to examine the relationships among these constructs within each treatment group in order to gain a more comprehensive view of development in gifted adolescents. Results will be used to expand upon the current knowledge and understanding of the demographics of consumers of online and face-to-face counseling, differences between these types of counseling in three constructs, and the relationships of these constructs within each type of counseling. This study will provide insight into the differences and similarities between face-to-face and online counseling and seeks to understand a nuanced aspect of computer-mediated communication, social presence, and how it relates to other aspects of the counseling relationship.

## **Chapter Four: Results**

This chapter presents the similarities and differences between the working alliance, social presence, and general mental health for clients who participated in face-to-face counseling and online counseling. A brief description of the sampling procedure is presented, followed by an overview of the demographics of the sample and statistical outcomes of the research questions and hypotheses. An alpha level of .05 was used for all statistical tests. Discussion of the results and implications of the findings will be discussed in chapter five.

### **Sampling Procedures**

Data were collected between November, 2010 and February, 2011. The study had been approved by the College of William & Mary's Protection of Human Subjects Committee in November of 2010 prior to the onset of data collection. To gather clients' self-report responses, the researcher launched a website designed to present information about the study and inform participants of the opportunity to participate (<http://wmpeople.wm.edu/site/page/cmholmes>).

Participation in the study was limited to a convenience sample of self-selected volunteers. The researcher began contacting independent online counseling practitioner websites to inquire whether practitioners would be willing to inform their clients of the opportunity to participate in this study. Additionally, the researcher posted the study URL on Facebook in an effort to generate participation. Moreover, the website URL was

posted on Yahoo© online support groups and on the Online Therapy Institute's website and professional blog. Participants were also recruited through a snowball sampling effort that asked willing participants to contact potential participants and extend the research opportunity to friends and family who were either providing or participating in online or face-to-face counseling.

Each interested person was directed to the researcher's website and if the person's decision was to participate in the research, he or she was directed to the study's informed consent page via an embedded link within the website, which outlined information about the study. In order to participate in the study, an electronic signature was required before the participant could take the assessments, which were presented in the following order: (1) demographic questionnaire; (2) *Working Alliance Inventory-Short Form*; (3) *Networked Minds Social Presence Measure*; and (4) *General Health Questionnaire-12*.

## **Descriptive Data**

### **Demographics**

Due to incomplete files, two participants were deleted from the final data set, resulting in a total of fifty (N=50) active participants. Of this sample, 72% (36) individuals indicated that they were participating in individual face-to-face counseling, 8% (4) individuals were participating in group therapy, and 10% (5) individuals were participating in marriage or family therapy. Additionally, 10% (5) individuals were participating in therapy via the telephone, 10% (5) individuals were participating in online synchronous chat-based counseling, 4% (2) individuals were participating in counseling via email or asynchronous chat, and 8% (4) individuals were participating in counseling via videoconferencing (i.e., Skype). These tallies sum to more than the total



sample number (N=50), because participants were allowed to indicate involvement in more than one type of counseling. All participants who indicated involvement in counseling via telephone, synchronous chat, asynchronous chat, and videoconferencing were coded as participants involved in the online counseling category (n=13), while all other participants were coded as participants involved in face-to-face counseling (n=37). Counseling via the telephone is considered an online counseling approach because it relies on technology for connection and is lacking traditional nonverbal and visual clues of face-to-face counseling.

The gender characteristics of the participants are reported in Table 4.1; 22% (11) of the participants were male, 78% (39) were female. This proportion of both genders in the current sample corresponds with the proportion of men and women who are engaged in counseling nationally, as referenced by current literature. The gender gap between males and females with regard to perceptions toward seeking counseling has shown women as having significantly more positive attitudes toward seeking counseling services than males (Cook, 1984). Additionally, The Substance Abuse and Mental Health Service Administration (SAMHSA, 2008) published a detailed report that supports the trend that women eighteen and older were significantly more likely than men of that age group to have experienced “serious psychological distress”, a non-specific indicator of past-year mental health problems, such as anxiety and depression, than their male counterparts (p. 2). While the SAMSHA study did not indicate a specific percentage of each gender enrolled in therapy, one may propose that a higher number of women sought treatment as a significantly higher percentage were affected by mental health problems generally.

The current study found that of the thirteen participants who used online counseling in therapy, five people used the telephone, five people utilized synchronous chat, two used email, and four used videoconferencing. Tyler and Guth (2003) found a slightly different frequency of use for the various types of online counseling services employed by clients. Tyler and Guth reported 78 percent of the online counseling services they studied used email-based counseling, 57 percent utilized synchronous chat, 47 percent used telephone services, and 12 percent used videoconferencing. While the two studies differ in the actual percentages of types used most frequently, the findings agree that four types discussed (i.e., email, chat, telephone, and videoconferencing) are the most frequently utilized in online counseling at this time. Additionally, Cook and Doyle (2006) found that 80% of their online sample used email as their primary communication modality with their counselor, while 20% used synchronous chat.

All age groups of adults, from 18 to 56+ years, were represented in the current sample, with 15% (8) of participants between 18-25 years of age, 52% (26) of participants in the 26-40 age group, 22% (11) in the 41-55 age group, and 10% (5) in the 56+ age group. Cook and Doyle (2002) had a sample consisting of online counseling participants ranging from 19-80 years in age ( $M=41.4$ ;  $SD=15.99$ ). Reynolds et al., (2006) used a client sample in which all clients were between the ages of 22 and 55 ( $M=39$ ). These age ranges are similar to the age range of the current study.

In the current study, 90% (45) of participants identified themselves as Caucasian, which is representative of the demographics reported in previous studies (Cook & Doyle, 2002; Leibert et al., 2006). The educational level of participants indicated that the entire group had at least a high school education. The current sample revealed that 8% (4)

participants had high school educations, 40% (20) had Bachelor's degrees, 38% (19) held Master's degrees, and 14% (7) of the sample had earned Doctoral degrees. Similarly, Cook and Doyle (2002) indicated that 100% of the participants in their study also had at least a high-school diploma, while more than 50% had at least a college degree. The over-proportion of highly educated participants may be attributed to the convenience nature of this sample, and that several universities were contacted to recruit participants.

This researcher gathered information regarding participants' presenting problem, or the reason each entered counseling in the first place. The clients' reports indicate a wide range of presenting issues. The results seem to be representative of the types and frequencies of issues generally found in the field of counseling. According to SAMSHA (2008), more than one-fourth of the adults in the United States have suffered from at least one of the following within the last year: anxiety disorders, mood disorders, impulse control disorders, and substance use disorders. Depression and anxiety were cited equally as presenting problems, with 52% (26) of participants endorsing the two disorders as initial concerns; relationship issues were the second-most common referral issue, with 46% (23) of participants indicating such a concern. Substance abuse issues were cited by 12% (6) participants and 4% (2) cited anger management.

The number of sessions participants reported with their current counselor showed that 36% (18) of participants had seen his or her counselor between three to eleven times; 64% (32) of participants had seen his or her counselor more than eleven times. These data support the use of the WAI-S, since this instrument is typically used after session three, when a working alliance has had time to form between the counselor and client. While 68% (34) participants reported that they were not taking prescribed mental-health

medication at the time of the survey, 32% (16) participants answered that they were taking this type of prescribed medication. Of the sixteen participants on medication, six were being treated for depression, seven for anxiety, two for both anxiety and depression, and one for ADHD (Attention Deficit Hyperactivity Disorder). These data are consistent with the aforementioned finding that the majority of participants began counseling to be treated for anxiety and depression.

Finally, the majority of online counseling participants had knowledge of their treatment provider's credentials. While 4% (2) did not know their therapist's credentials and 14% (7) indicated being unsure of their therapist's credentials, 82% (41) of participants indicated knowing the credentials of their treatment provider. The known credentials indicated there were 19 Master's level counselors, 13 Ph.D. level Psychologists, 7 social workers, and two therapists were from the medical field. Of the online counseling participants, eleven knew their counselor's credentials, one did not know, and one indicated that he or she was unsure. Shaw and Shaw (2006) hypothesized that, due to potential anonymity, online counseling has the potential to decrease transparency and communication between client and counselor with regard to credentialing and training. However, the current data refute their hypothesis; almost all of the online counseling participants in this study were aware of their counselor's credentials.

#### Table 4.1

*Sample, total and split by type of counseling, by Gender, Age, Ethnicity, Highest Completed Education, Presenting Therapy Problem, Number of Sessions with Current Counselor, Medication Status, Counselor's Credentials (N=50)*

	Face-to-Face	Online	Total
<b>Gender</b>			
Male	7	4	11
Female	30	9	39
<b>Age</b>			
18-25	6	2	8
26-40	22	4	26
41-55	6	5	11
56+	3	2	5
<b>Race/Ethnicity</b>			
Caucasian	33	12	45
African American	0	0	0
Asian	1	0	1
Native Hawaiian/ Pacific Islander	0	0	0
Native American/ Alaskan Native	1	0	1
Hispanic/Latino	0	0	0
Two or more	2	1	3
<b>Highest Completed Education Level</b>			
GED/Trade School	0	0	0
High School	1	3	4
Bachelor's Degree	16	4	20
Master's Degree	15	4	19
Doctoral Degree	5	2	7

Table 4.1 (continued)

<b>Presenting Problem (will add to more than 100 percent)</b>			
Depression	20	6	26
Anger Management	1	1	2
Addiction	2	4	6
Loss/Grief	6	2	8
Relationship Issues	18	5	23
Anxiety	22	4	26
Legal Mandate	0	1	1
Self Improvement	13	7	21
Sexual Identity	0	3	3
Other Mental Health Concern	5	0	5
<b>Number of Sessions with Current Counselor</b>			
1-2	0	0	0
3-10	17	1	18
11+	20	12	32
<b>Use of Medication for a Mental Health Concern</b>			
No	24	10	34
Yes	13	3	16
Diagnosis			
Depression	4	2	6

Table 4.1 (continued)

Anxiety	6	1	7
ADHD	1	0	1
Anxiety and Depression	2	0	2
<b>Knowledge of Counselor's Credentials</b>			
No	1	1	2
Not Sure	6	1	7
Yes	30	11	41
<b>Type of Credentials</b>			
Master's Level Counselor	16	3	19
Social Worker	6	1	7
Medical Field (i.e. RN)	1	1	2
Ph.D. in Psychology	4	9	13

### Instrument Quality

In order to investigate the quality of the instruments used in the current study, reliability analyses were completed. A total scale Chronbach's alpha of .94 was found for the *Working Alliance Inventory – Short form*, indicating strong internal consistency and error equaling less than 10% of the variance (i.e., 6%). This level of reliability is consistent with previous reliability analyses that suggested that the composite WAI-S internal consistency was above .91 (Busseri & Tyler, 2003; Carmel & Friedlander, 2009). Similarly, internal consistency was computed for each of the *Working Alliance Inventory-*

*Short form's subscales; for the Task, Bond, and Goal subscales, Chronbach's alpha coefficients of .86, .85, and .86 were obtained, respectively.*

A total scale Chronbach's alpha of .89 was found for the *Networked Minds Social Presence Measure*, indicating strong internal consistency and error, again, equal to about 10% of the variance (i.e., 11%). This finding supports using the NMSPM, which is especially beneficial because the psychometric properties of this instrument are only beginning to be studied. Additionally, a total scale Chronbach's alpha of .72 was found for the *General Health Questionnaire-12*, indicating error of less than 30% (i.e. 28%). These data indicate moderate internal consistency for this screening measure.

### **Research Questions**

**Research Question One:** *What are the demographic characteristics of study participants who use online and face-to-face counseling and how do the two groups compare?*

This study aimed to gain an understanding of the similarities and differences between the demographic characteristics of the clients involved in both online and face-to-face counseling. Table 4.1 presents a breakdown of the frequency and percentage of sample demographics, contrasting the two groups of online and face-to-face counseling participants. Chi Square analyses were completed to analyze the null hypothesis that each type of counseling had equal distributions of participants. A Chi Square analysis showed that the percentage of participants that were involved in each type of counseling did not differ significantly by age,  $X^2(3, N = 50) = 4.20, p > .05$ , supporting the null hypothesis of equal proportions. A second Chi Square analysis showed that the percentage of participants that were involved in each type of counseling did not differ significantly by



gender,  $\chi^2 (1, N = 50) = .787, p > .05$ , supporting the null hypothesis of equal proportions. A third Chi Square analysis showed that the percentage of participants that were involved in each type of counseling did not differ significantly by race/ethnicity,  $\chi^2 (3, N = 50) = .797, p > .05$ , supporting the null hypothesis of equal proportions. A final Chi Square analysis showed that the percentage of participants that were involved in each type of counseling did not differ significantly by education level,  $\chi^2 (3, N = 50) = 5.63, p > .05$ , supporting the null hypothesis of equal proportions.

**Research Question Two:** *Do total scale social presence mean scores differ between online and face-to-face counseling groups?*

The construct of social presence was measured using the 36-item *Networked Minds Social Presence Measure* (NMSPM; Harms & Biocca, 2004). Each of the 36 questions is answered on a scale from one to seven, one indicating lower social presence and seven indicating higher social presence; total scores can range from 36 to 252. Means and standard deviations for both samples are reported in Table 4.2.

To test this research question, a *t*-test for independent means was conducted. The total NMSPM mean scores were compared between the independent groups of online and face-to-face counseling. A Levene's test for equality of variances was non-significant, supporting the null hypothesis of equal variances for each group. A two-tailed *t*-test for independent means was non-significant between the two counseling groups [ $t(48) = .515, n.s. p > .05$ ]. This analysis indicated that both counseling groups rated the social presence of the counseling relationship similarly.

Table 4.2

*Networked Minds Social Presence Measure (N=50)*

	N	Mean	SD
Total Sample	50	188.46	22.37
Face-to-Face Counseling	37	189.43	22.72
Online Counseling	13	185.69	22.00

**Research Question Three:** *Do total scale general mental health mean scores differ between online and face-to-face counseling groups?*

The construct of general mental health was measured by the *General Health Questionnaire-12* (GHQ-12; Goldberg & Williams, 1988). The GHQ-12 is a twelve-item measure that is intended to assess a person's self-perceived overall mental health functioning. Each item is answered on a four point likert-scale and each answer is assigned a number from zero to three, depending on the severity of the symptom. A higher score indicates a lower level of overall mental health, while a lower score indicates a higher level of mental health. Scores can range from zero to 36, with higher scores indicating a greater degree of mental health distress. Means and standard deviations for the current sample can be found in Table 4.3.

This research hypothesis was tested using a *t*-test for independent means. Composite GHQ-12 scores were compared between online and face-to-face counseling participants. A Levene's test for equality of variances was non-significant, supporting the null hypothesis of equal variance for each group. A two-tailed *t*-test for independent

means was non-significant [ $t(48) = -1.205$ , n.s.  $p > .05$ ]. These results indicate that the two groups had similar levels of general mental health functioning at the time of the study.

Table 4.3

*General Health Questionnaire-12 (N=50)*

	N	Mean	SD
Total Sample	50	21.26	5.81
Face-to-Face Counseling	37	20.68	5.58
Online Counseling	13	22.92	6.36

**Research Question Four:** *Do total scale working alliance mean scores differ between online and face-to-face counseling groups?*

The construct of the working alliance was measured by the twelve-item *Working Alliance Inventory-Short form* (Tracey & Kokotovic, 1989). Each of the twelve items is answered on a seven-point likert-type scale, with higher total scores indicating stronger working alliances between the counselor and client, as perceived by the client. Total scores can range from twelve to 84. Means and standard deviations for the current sample are found in Table 4.4.

A *t*-test for independent means was conducted to compare total scores on the WAI-S between online and face-to-face counseling participants. A Levene's test was nonsignificant, supporting the null hypothesis of equal variances of each group. This analysis indicated a significant difference between the two groups [ $t(48) = -2.017$ ,  $p < .05$ ]. These data revealed that the online counseling participants rated their working alliance

significantly stronger than did the face-to-face counseling participants. A Cohen's *d* statistic was used to examine the effect size of this outcome. An effect size of .63 was found for this analysis, indicating a strong and meaningful result in the difference between the two groups.

Originally, the researcher did not intend to analyze the *Task*, *Bond*, and *Goal* subscales of the WAI-S; however, due to the significant difference found in the composite score, separate *t*-tests for independent means were computed for each of the subscales between the two counseling groups to further explore the cause of the total test mean score differences. Mean and standard deviations are found in Table 4.4. All three subscales indicated non-significant Levene's tests for variance equality, thereby indicating equal variances across samples. The *Task* subscale analysis indicated no significant difference between the two groups [ $t(48)=-1.484$ , n.s.  $p>.05$ ]. The *Bond* subscale analysis also indicated no significant difference between the two groups [ $t(48)=-1.834$ , n.s.  $p>.05$ ]; however, the *Goal* subscale analysis indicated a significant difference between the two groups [ $t(48)=-2.196$ ,  $p<.05$ ]. These data show that online counseling clients perceived a significantly stronger alliance through the *Goal* subscale than the face-to-face counseling participants. The effect size, as indicated by Cohen's *d* statistic, showed an effect size of .68 indicating a large, meaningful effect. The online counseling group indicated a stronger perception that the goals for treatment were agreed upon and shared between the client and counselor, and that the goals are mutually known and understood.

Table 4.4

*Working Alliance Inventory-Short form (N=50)*

	N	Mean	SD
Total Sample	50	69.24	9.87
<b>Composite Score</b>			
Face-to-Face Counseling	37	67.62	9.84
Online Counseling	13	73.85	8.72
<b>Task Subscale</b>			
Face-to-Face Counseling	37	22.32	2.97
Online Counseling	13	23.85	3.74
<b>Bond Subscale</b>			
Face-to-Face Counseling	37	23.41	3.66
Online Counseling	13	25.46	2.88
<b>Goal Subscale</b>			
Face-to-Face Counseling	37	21.89	3.84
Online Counseling	13	24.54	3.41

**Research Question Five:** *What is the strength of relationship between the dependent variables working alliance, social presence, and general health for the online counseling group?*

Pearson correlations were used to analyze the relationships between the dependent measures for the participants in online counseling. A nonsignificant correlation was

found between the NMSPM and the WAI-S for the online counseling group ( $r = .25$ ,  $p > .05$ ). A nonsignificant correlation was found between the NMSPM and the GHQ-12 for the online counseling group ( $r = .38$ ,  $p > .05$ ). Finally, a nonsignificant correlation was found between the WAI-S and the GHQ-12 for the online counseling group ( $r = -.08$ ,  $p > .05$ ).

**Research Question Six:** *What is the strength of relationship between the dependent variables working alliance, social presence, and general health for the face-to-face counseling group?*

Pearson correlations were used to analyze the relationships between the dependent measures for the participants in face-to-face counseling. A significant positive correlation was found between the total NMSPM and the WAI-S in the face-to-face counseling group ( $r = .53$ ,  $p < .01$ ). These data show a significant positive relationship in the working alliance and social presence for participants in the face-to-face counseling group. A correlation of this magnitude indicates that 27% of the variance was shared between the two instruments for the face-to-face counseling group.

A significant correlation was not found between the WAI-S and the GHQ-12 ( $r = .28$ ,  $p > .05$ ). These data indicate no significant relationship in the working alliance and the general mental health of face-to-face counseling participants. Additionally, a significant correlation was not found between the NMSPM and the GHQ-12 ( $r = .17$ ,  $p > .05$ ). These data indicate no significant relationship in social presence and the general mental health of face-to-face counseling participants.

**Research Question Seven:** *What is the strength of relationship between the dependent variables working alliance, social presence, and general health for the total sample?*

This research question was analyzed using a Pearson correlation to investigate the relationship between the *Working Alliance Inventory-Short form* (WAI-S), the *Networked Minds Social Presence Measure* (NMSPM), and the *General Health Questionnaire-12* (GHQ-12). To examine this research question, Pearson correlations were conducted to analyze the relationships between the dependent variables for the total sample. The first Pearson correlation analyzed the composite scores of the WAI-S and the NMSPM within the total sample. A significant positive correlation was found between the total NMSPM and the WAI-S ( $r = .43, p < .01$ ). These data indicate a significant, positive correlation between the two measures within the total sample. A correlation of this magnitude indicates that 18% of the variance was shared between the two instruments for the total sample. These results support that both measures have low error variance and high specific variance, indicating that differences in the data are due to actual differences, as opposed to instrument error. A shared variance of 18% indicates that the measures are similar enough to hold a relationship with one another, yet are not measuring the same construct.

A significant correlation was not found between the WAI-S and the GHQ-12 ( $r = .22, p > .05$ ). These data indicate no significant relationship between general mental health and the working alliance within the total sample. Finally, a significant relationship was not found between the NMSPM and the GHQ-12 ( $r = .21, p > .05$ ). These data indicate

a nonsignificant relationship between social presence and general mental health in the total sample.

### Summary

This chapter provided a description of the sample population that participated in the current research study on a number of demographic variables. Table 4.1 offered a detailed description of the frequencies of the total sample, along with a breakdown of the sample by treatment group (i.e., online or face-to-face counseling). Chi Square analyses found nonsignificant differences in each of the treatment groups, confirming the null hypothesis of equal distributions between each of the treatment groups.

This chapter also provided statistical analyses of the similarities and differences between the dependent variables when compared between the two types of counseling, online and face-to-face. Several *t*-tests for independent means were conducted to investigate significant differences between the dependent variables and both treatment groups. Nonsignificant differences were found between face-to-face and online counseling on the NMSPM and the GHQ-12. However, significant differences were found between the two counseling groups on the WAI-S, [ $t(48)=-2.017, p<.05$ ]. These data indicate that online counseling clients perceived their working alliance with their counselor as significantly stronger than face-to-face clients. Additionally, *t*-test analyses comparing the *Task* and *Bond* subscales between the counseling groups yielded nonsignificant results. However, *t*-test analyses comparing the *Goal* subscale between counseling groups yielded a significant difference, [ $t(48)=-2.196, p<.05$ ]. These data indicated that the online counseling group maintained a stronger perception of the degree



to which the client perceives that the goals for treatment are agreed upon between client and counselor, and that the goals are mutually known and understood.

Additionally, correlational analyses examined the nature of the relationships between each of the dependent measures, both for the total sample as well as for each treatment group. Pearson correlations yielded nonsignificant results when comparing the NMSPM and the GHQ-12, as well as when comparing the GHQ-12 and the WAI-S. However, a significant, positive correlation was found when comparing the NMSPM and the WAI-S, ( $r = .43, p < .01$ ). A correlation of this magnitude indicates that 18% of the variance was shared between the two instruments for the total sample.

Nonsignificant correlations were found when comparing all three dependent measures in the online counseling treatment group. Additionally, nonsignificant correlations were found when comparing the NMSPM and the GHQ-12, and the GHQ-12 and the WAI-S in the face-to-face counseling group. However, a positive, significant correlation was found when comparing the WAI-S and the NMSPM ( $r = .53, p < .01$ ). These data revealed a significant positive relationship in the working alliance and social presence for participants in the face-to-face counseling group. A correlation of this magnitude indicates that 27% of the variance was shared between the two instruments for the face-to-face counseling group.

This chapter provided an in-depth analysis of the proposed research questions and hypotheses. The following chapter will provide a discussion of the results relative to the research literature on online counseling as an addition to the field of counseling. The following chapter will also address limitations of the current study, possible implications of the current research, and suggestions for future research based on the current findings.

## **Chapter Five: Discussion and Conclusion**

### **Introduction**

Chapter one provided an introduction to the current study as well as an overview of topics as they related to the practice of online counseling. Chapter two provided a literature review highlighting current research in the areas of working alliance, both in face-to-face and online counseling, the effectiveness of online counseling, and social presence theory. Chapter three outlined the current study's methodology and specific research questions while Chapter four reported the specific data analyses completed and the results of these analyses. This final chapter will provide a thorough discussion of the current research findings and an interpretation of how these findings relate to previous literature. Additionally, this chapter will provide a general overview of the current study, discussion of major research findings, limitations of the current study, and recommendations for future research.

### **Overview of the Current Study**

This study examined the similarities and differences between online and face-to-face counseling. Over the past decade, online counseling has increasingly been used to offer services to consumers in the mental health profession (Barak et al., 2008); as such, it has produced a significant debate within the profession about utility, best practices, ethical obligations, and efficacy (Mallen et al., 2005; Rochlen et al., 2004). Counseling is defined as "a professional relationship that empowers diverse individuals, families, and

groups to accomplish mental health, wellness, education, and career goals” (ACA, 2010). However, this definition does not specify the modality of how counseling is offered, thus allowing for computer-mediated counseling practices to develop under this umbrella definition.

Chapter one highlighted specific potential benefits and liabilities of online counseling, along with other pertinent current issues within the field. Together, this information guided the current study to a clear focus pertaining to the therapeutic relationship and how it is perceived through an online counseling context. The counseling field is only beginning to investigate how relationships that were previously established and sustained through face-to-face interactions now coexist with social technology, thus creating a new genre of interpersonal relationships” (Kraut et al., 1998).

Counseling, from a Rogerian perspective, is a profession built upon the relational aspect of human nature. Person-Centered counseling is built on the assumption that if a facilitative, “growth-promoting climate” can be fostered within the therapeutic relationship, then a client can utilize innate resources for self-understanding and personal growth to produce personal change (Rogers, 1986). However, it is the importance of this perceived human to human relationship that creates a theoretical rift when conceptualizing the utility of online counseling. According to Langas (2005), “One of the biggest challenges facing the field of e-therapy today is how the relationship that develops between therapist and client over the internet can fulfill its important function in the process of therapy” (p. 3). To that end, the current study examined the concepts of social presence and working alliance within the context of an ongoing therapeutic

relationship, including how these are similar or different when compared between online counseling and face-to-face counseling.

The theoretical underpinnings of this study offer further insight into the meaning of the therapeutic relationship and why it is crucial piece of understanding the online counseling puzzle. The common factors approach to counseling indicated that thirty percent of positive therapeutic outcome in face-to-face counseling stems from the formation of a working alliance between client and counselor (Hubble et al., 1999; Wampold, 2010). Under this assumption, in order to be considered a viable extension of face-to-face counseling, online counseling would offer an alternate platform for developing a working alliance between client and counselor. Although not much literature exists to date, several studies have shown that online counseling clients rate their working alliance with their counselor equal to, or stronger than, face-to-face clients (Cook & Doyle, 2002; Leibert et al., 2006; Reynolds et al., 2006).

This study aimed to build on the previous research by obtaining a current sample of both online and face-to-face participants, as prior research did not use current comparison samples recruited for the same study. The present study also obtained specific demographic information in order to compare and contrast the demographics of clients that often seek each type of counseling. Finally, the working alliance was used as an important crux of potential difference between the treatment groups, while incorporating a new construct of social presence in order to gain more information about the perceptions of each type of client on his or her relationship with a counselor.

This study consisted of a convenience sample of 50 current counseling participants, enrolled either online (n=13) or face-to-face counseling (n=37). The sample

consisted of 22% (11) male participants and 78% (39) female participants. The age range of the sample included participants from 18 to 56+ years, specifically, 15% (8) of participants between 18-25 years of age, 52% (26) of participants in the 26-40 age group, 22% (11) in the 41-55 age group, and 10% (5) in the 56+ age group. Additionally, 90% (45) of participants identified themselves as Caucasian, which is representative of the demographics reported in previous studies. These demographics are similar to the description of previous research samples in this topic area (Cook & Doyle, 2006; Reynolds et al., 2006).

All of the volunteer participants were recruited through online solicitation. Four instruments were used in the data collection: (1) demographic questionnaire; (2) *Working Alliance Inventory-Short*; (3) *the Networked Minds Social Presence Measure*; and (4) *the General Health Questionnaire-12*. The battery of instruments was administered through an online survey design, Qualtrics, and took between twenty and thirty minutes to complete. The data was analyzed through Chi Square analysis, *t*-tests for independent means, and Pearson correlations. A full description of the statistical analyses is presented in Chapter four. The following section provides a discussion of the implications of the current research findings in relation to other research.

### **Discussion of Major Research Findings**

**Research Question One:** *What are the demographic characteristics of study participants who use online and face-to-face counseling and how do the two groups compare?*

As discussed in Chapter four, statistical analyses found no significant differences in age, gender, race/ethnicity, or education level between the online and face-to-face

counseling participants. The majority of the participants in the current study identified as Caucasian and female, between the ages of 26-40, and all had at least a high school education while the majority held a Bachelor's degree or higher. The demographic similarities of the participants between the groups may stem from a methodological issue that typically renders volunteers from non-volunteers on issues such as gender and educational level (Gall et al., 2007). Additionally, the gender gap shown in the current data has been documented in prior findings indicating that women hold more favorable attitudes toward seeking counseling (Cook, 1984; Tsan & Day, 2007).

These findings coincide with previous online counseling studies citing homogenous samples of Caucasian, college-educated women as a methodological weakness (Cook & Doyle, 2002; Leibert et al., 2006; Prado & Meyer, 2003). While the literature touts the utility of online counseling to reach clients who are physically, geographically, or financially compromised (Layne & Hohenshil, 2005; Ragusea & Vandercreek, 2003) whether these are the clients who are actually seeking this type of service remains unclear. More research is necessary to understand how providers of online counseling can reach other populations besides educated, Caucasian females.

The majority of female internet use is driven by interpersonal communication, while male internet use is driven by entertainment and leisure (Weiser, 2000). A difference in general help-seeking attitude has been found between men and women (Tsan & Day, 2007), which is translating into online help-seeking behavior. These distinctions could play a role in shaping the consumer base of online counseling. Additionally, the requirement for some level of computer literacy, as well as the ability to communicate via text (Hackerman & Greer, 2000; Suler, 2001) may preclude some

clients from seeking online counseling services. Finally, economic resources for online access may be another reason that potentially disenfranchised clients are not seeking services through online counseling modalities (Mallen et al., 2005). If online counseling is to reach the underserved populations, specific attention needs to be paid to the “comfort and use patterns” (Sanchez-Page, 2005; p. 894) of these populations in order to provide targeted interventions and specific outreach to serve these clients.

**Research Question Two:** *Do total scale social presence mean scores differ between online and face-to-face counseling groups?*

As little to no research exists in the literature examining social presence within the context of online counseling, this research question sought to establish a baseline understanding of the role that social presence may play in online counseling relationships when compared to face-to-face counseling relationships. The *t*-test for independent means showed a nonsignificant difference between the online and face-to-face counseling groups, indicating that both groups rated the perceived social presence of their counselors similarly. As social presence is defined by, “...the moment-by-moment awareness of the co-presence of another sentient being accompanied by a sense of engagement with the other” (Biocca et al., 2001, p. 2), the current data support the notion that clients who developed relationships with their counselor through computer-mediated communication perceived a similar sense of awareness and engagement of their counselor throughout the relationship.

These results coincide with Walther (1995) who found that users of computer-mediated communication felt a similar sense of social presence as users of face-to-face communication. Biocca et al., (2001) assert that psychological, emotional, and behavioral

components are involved in computer-mediated communications, even though they lack a face-to-face component. The current study supports this notion as clients of both treatment groups expressed a similar level of perceived social presence. These data will help the field to begin to reevaluate the “essential attributes that are needed to establish connection with others” (Biocca et al., 2003, p. 459), as many of these attributes can be supplied through computer-mediated communication.

Previous unfamiliarity with computer-mediated communication has waned; humans have become digital creatures. The current study sought understanding of the perception of the awareness of others within a counseling relationship. The findings indicate a shift in the perception of connection and interpersonal awareness formed between two people through electronic means. The data do not render the face-to-face therapeutic relationship obsolete, or conclude that online counseling can offer the identical nuance of a traditional relationship (Langas, 2005). However, findings do support the notion that online formats supplement face-to-face counseling, come close to providing a similar type of relationship, and extend the field’s utility in reaching clients when face-to-face counseling is not a good personal fit or physically accessible (Layne & Hohenshil, 2005).

**Research Question Three:** *Do total scale general mental health mean scores differ between online and face-to-face counseling groups?*

The *t*-test for independent means indicated no significant difference between the two groups with regard to their general mental health, an interesting finding for several reasons. First, this finding indicates that clients from either type of counseling are not significantly different with regard to overall mental health. The second interesting



finding, supplementing the first, is that both groups achieved over the two-three point cut-off for the GHQ-12 (Makowska, Merecz, Moscicka, & Kolasa, 2002), the face-to-face group achieved a mean of 7.4, while the online group achieved a mean of 8.6. These results also indicate that the current sample had lower mental health than the general population. Considering the sample was clinical in nature, meaning all participants were actually participating in therapy, this observation is congruent with expectations.

However, ethical obligations require online treatment providers to be cautious when treating clients with severe mental illness as “severe pathology and risky behaviors, such as lethally suicidal conditions, may not be appropriate for online work” (Suler, 2001, p. 678). Such an intensive level of care may not be provided through online counseling. Also, if the potential for harm to self or others is apparent, a counselor has ethical obligations to inform authorities (ACA, 2005), which may be difficult if a counselor is not in the same location as a client. Frequently, people seeking counseling are looking for help regarding a mental health issue. Online counseling providers need assessment modalities in place to best serve the client with appropriate care. If online counseling is not the best fit due to severe pathology or harmful behaviors, the counselor ascertain this information in the beginning of an online relationship in order to best help that client (Suler, 2001). However, if the client is deemed appropriate for online work, a counselor should proceed with the ethical codes in mind to be prepared for potential issues that may be raised throughout online work.

**Research Question Four:** *Do total scale working alliance mean scores differ between online and face-to-face counseling groups?*

This research question served as the crux of the current study. The working alliance encompasses an operationally defined and measured piece of the overall therapeutic relationship, one that speaks to the collaboration between the client and counselor. The working alliance is based on the assumption that the counselor and client are working together in therapy based on the acceptance of mutual goals and trust (Horvath & Bedi, 2002). When the working alliance scores were compared between the online and face-to-face counseling groups, the results indicated a significant difference with the online counseling participants reporting a stronger working alliance. These results indicate that a working alliance can be formed whether or not the client and counselor share the same physical space. The data confirm previous research contending that online counseling clients perceived the working alliance equally as strong as or stronger than face-to-face clients (Cook & Doyle, 2005; Knaevelsrud & Maercker, 2006; Reynolds et al., 2006).

After the total working alliance scores were found to be significantly different, comparisons were run between the groups and each of the three subscales, *Task*, *Bond*, and *Goal*. No significant difference was found between the groups on the *Task* and *Bond* subscales indicating that both groups rated these subscales similarly. However, the scores of the *Goal* subscale were significantly different indicating that online counseling users perceived a stronger alliance with regard to mutual understanding of and work toward specified counseling goals. These same results were also found by Cook and Doyle (2005). Online therapy, particularly synchronous chat and email, may be particularly effective in setting agreed upon and clear goals between the counselor and client due to

the written nature of the sessions. This method of communication could leave less room for ambiguity than a verbal agreement can in face-to-face counseling (Cook & Doyle).

The humanistic, Rogerian theoretical foundation “gives priority to human experience, values, intentions, and meanings while promoting personal growth and change” (Kutash & Wolf, 1986, p. 195). This theoretical foundation places firm responsibility onto the therapeutic relationship to create the environment for a person to work toward personal growth and self-exploration. Without a relationship based on trust, genuineness, and unconditional positive regard between a client and counselor, the therapeutic processes cannot move forward. Through this theoretical perspective, the current findings add support to the contention that online counseling may provide a space for therapeutic relationships to form. Some literature suggests that therapies more focused on behavioral change as opposed to the development of interpersonal relationships or personal insight may be better matches for online therapy work (Barak et al., 2008; Mallen et al., 2005). However, the current study offers evidence to support the use of various types of counseling through computer-mediated communication.

The common factors research highlights the role that the therapeutic relationship plays in traditional therapy (Duncan et al., 2010; Hubble et al., 1999) and the field would be remiss to not begin to conceptualize the process of online relating. The current results suggest that online counseling is a modality in which the therapeutic relationship can be developed. As individuals and societies become more digitally fused and interconnected, therapeutic services are only going to grow in strength, number, and modality. Relationships are changing and ever-evolving with the development of new technologies. The field can no longer only adhere to traditionalist ideas of how relationships are formed

or maintained, even in therapy. Perhaps the quest is not to determine if computer-mediated or face-to-face relationships are “better” or “worse,” but how are they “different” (Langas, 2005) and how can the field expand to encompass these different types of needs.

**Research Questions Five, Six, and Seven:** *What is the strength of relationship between the dependent variables working alliance, social presence, and general health: (RQ 5) for the online counseling group, (RQ 6) for the face-to-face counseling group, and (RQ 7) for the total sample?*

No significant correlations were found between the working alliance, social presence and general health in the online counseling group. This finding is interpreted to mean that generally, for the online counseling group, each dependent variable did not have a significant relationship with the others. Therefore, for example, participants could have strong feelings about their working alliance with their counselor, while their perceptions of social presence or general mental health were not significantly tied to the perceptions of the working alliance.

While the majority of the results remained the same for the face-to-face counseling group, the one difference lay in the relationship between social presence and working alliance, as this was the only correlation that showed a significant positive correlation between the dependent measures in each of the two groups. The same results were true when correlations were run for the total sample; social presence and working alliance had a significant positive correlation in the total sample and the face-to-face group. These findings are supported by Rettie (2003) who incorporated the concepts of immediacy and intimacy into the discussion of social presence. Immediacy is a “measure

of psychological distance” defined by non-verbal behaviors such as nodding and smiling that are used to enhance psychological closeness while intimacy is the “interpretation of interpersonal actions” by each member of the conversation (Rettie, 2003, p. 1). The relationship between social presence, intimacy and immediacy is as follows: immediacy behaviors are used to create and maintain intimacy, while immediacy behaviors also enhance social presence (Gunawardena, 1995). In face-to-face counseling, these immediacy and intimacy behaviors are more readily available and observable by the client, therefore allowing them to be more closely tied to the development of a working alliance.

In her research on online distance education, Gunawardena (1995) concluded, “in spite of the low social context cues of the medium, student perceptions of the social and human qualities of the medium will depend on the social presence *created* by the instructors/moderators and the online community” (Gunawardena, 1995, p. 164). This perspective highlights the responsibility that online counseling practitioners have to intentionally develop social presence within their relationships. The need for intentionality in developing social presence within computer-mediated communication could explain why the relationships between working alliance and social presence were not significantly related within the online counseling group; the counselors had not deliberately developed a clear social presence within the context of the relationship. Further research in what specific techniques and skills can help counselors be more effective and strategic in developing a social presence is necessary.

### **Other Findings**

Several other important findings not represented by the research questions were illuminated through the current research. The first is that eleven of the thirteen online counseling participants knew their counselor's credentials and were able to cite them. In a study using an ethical checklist with online counseling providers, Shaw and Shaw (2006) found that less than 75% of sites listed counselor degrees while less than 90% listed the counselors' full names. While not fully representative of the online counseling client population, the current study indicated that online counseling clients were largely informed of their counselor's credentials. The findings suggest some progress toward ethical and transparent communication between online counselor and client.

A final important finding highlights a potential area for growth in the area of online counseling. The online participants of this study were separated into this category even if they had participated in face-to-face counseling in the past or in conjunction with online counseling. While this can be seen as a limitation of the current study, and will be discussed in that context in the following section, it can also be seen as important information about the utility of online counseling to supplement traditional face-to-face counseling.

In a study looking at the impact of computer-mediated communication on group work, Lowry et al., (2006) found that the groups that met both face-to-face and used computer-mediated technology to supplement their work produced the fastest finishing times and showed higher perceptions of quality and value of their experiences than the groups that used only one of the mediums. Additionally, the potential for clients to benefit from computer-mediated communication in between face-to-face sessions with their counselors has been well documented in the literature (Castelnuovo, Gaggioli,

Mantovani, & Riva, 2003; Mallen et al., 2005). The results of the current study show that the online counseling clients reported a significantly stronger working alliance than the face-to-face clients. The data support the use of online counseling and computer-mediated communication for therapy both as a standalone treatment option, but also as a robust addition to face-to-face treatment.

### **Strengths and Limitations of the Current Study**

The current study adds new information to the relatively new field of online counseling. The results indicated significant differences between online and face-to-face counseling users, as well as some important similarities. One noted strength of the current research design including the concurrent sample of both face-to-face and online participants. Past research used research designs in which current online counseling data have been compared against old face-to-face data (Cook & Doyle, 2002). A second strength is that the current study found robust psychometric properties for the *Working Alliance Inventory-Short* and the *Networked Minds Social Presence Measure*. The high internal consistency of the current measurements helps to strengthen the current results as the potential for error variance decreases when instruments with high internal consistency are used. While this study offers several strengths through the design and implementation, several limitations exist and are discussed in terms of research design, sampling and instrumentation.

### **Research Design**

The current study was designed as a survey, asking participants to answer only once about their experiences. Therefore, the methodology of the current study rendered it unable to study the measures over time to see how or if the working alliance, general

mental health status, and social presence changed over time through therapy. The results collected are indicative of the overall feelings of participants at the specific time they took the study; however, this research design was not able to track the therapeutic process over time.

Another limitation was the inability to control for all extraneous variables and the results may be impacted by variables other than the variables being directly measured. As each volunteer was recruited online, each was able to participate at any time from any place. Also, the researcher made herself available for questions via email; however, as no standardized instruction was given other than what was typed within the study and the informed consent; as such, each participant may have interpreted the study differently. Without standardized directions and parameters of participation, extraneous variables may have impacted the results. Finally, many therapeutic variables could not be controlled for, such as all therapist variables, specific treatment variables, and other client variables. This issue highlights what general research in the fields of counseling and psychotherapy face, as an overwhelming number of individual variables cannot be controlled in clinical studies (Duncan et al., 1999; Hubble et al., 1997).

Finally, this study provides information into the relationships between the therapeutic alliance, mental health status and social presence; however it does not yield results that are directly linked to particular counseling or counselor education strategies. Specific strategies and techniques to build a working alliance and increase social presence are beyond the scope of this study. Future research can address specific techniques and skills that practitioners can use through online counseling that improves client perception of the working alliance and the social presence of their counselor.



## Sampling

All participants in this study were recruited through convenience sampling. Convenience sampling can potentially constrain the generalizability of the results as the volunteer sample may not be representative of the target population (Gall, Gall, & Borg, 2007). The current sample lacked diversity, and was small in number (N=50), with even smaller participant numbers in each group (n=37, face-to-face; n=13, online), although the current sample appears to be similar in demographics to previous studies on online counseling (Cook & Doyle, 2002; Reynolds et al., 2006).

Moreover, the participants could have participated in both online and face-to-face counseling, as opposed to *either* one or the other. Many participants separated into the online counseling group included in the demographic questionnaire that they had engaged in face-to-face counseling prior, or in addition to their current online counseling. Due to the small sample size, any participants that mentioned current participation in an online counseling category were split into that treatment group for all data analyses. This overlap of services could potentially compound the results, and future research should begin to study dual treatment that is using a combination of online and face-to-face counseling as a separate treatment category.

Additionally, the volunteers who chose to participate in this study may be significantly different than those who do not. Gall et al. (2007) support that research volunteers may be significantly different than potential volunteers who did not offer to participate in some of the following ways: volunteers tend to be more educated, volunteers tend to have higher educational statuses, and volunteers tend to be more likely

to be female. To discover how current volunteers differed from non-volunteers is impractical, although the mention of the possibility that the two groups may be significantly different from one another is important. Finally, the current study was not able to detect participants who are not truthful about their counseling experiences. As all recruitment was completed online, potential exists for participants to have been not truthful about their involvement in therapy.

### **Instrumentation**

Limitations in the instruments used may have influenced the results of the current study. The *Working Alliance Inventory-Short* has been well documented in the literature with regard to reliability and validity. The current study found the internal consistency to be .94, allowing for 6% error variance. Little empirical evidence regarding the *Networked Minds Social Presence Measure* existed prior to this study. The measure had been used before in prior work to analyze social presence, and factor analysis had supported the overall construct and the six subscales (Biocca et al., 2001). The current study found support for the internal consistency of the NMSPM to be .89, allowing for only 11% error variance. Additionally, the current study found the internal consistency of the *General Health Questionnaire-12* to be .72, allowing for almost 30% error variance. These results indicate that a range of internal consistency coefficients were found for the current instruments, which may have influenced the results to some degree. This may be especially true in the analyses including the GHQ-12, as it was found to have the lowest internal consistency, allowing for the most potential error variance.

### **Recommendations for Future Research**

This study was intended to achieve a better understanding of the similarities and differences between face-to-face and online counseling with regard to working alliance, general mental health, and social presence. The results of this study provide a framework from which to examine face-to-face and online counseling more thoroughly. Based on the results of the current research, recommendations on how to further this line of inquiry are offered below.

### **Investigating the Working Alliance**

The current study added to the current literature that supports the possibility for the working alliance to be fostered between client and counselor through online counseling. Further research should investigate the therapeutic relationship formed through computer-mediated communication to a deeper extent. Further understanding of the adequacy of the therapeutic relationship is essential because clinical evidence suggests that the relationship is one of the largest and most consistent factors predicting successful counseling outcome (Wampold, 2001). Phenomenological qualitative research would target clinical participants who have only met their counselors through chat or email in order to gain a deeper understanding of their perspectives and experiences of the therapeutic relationship through online counseling. Correspondingly, phenomenological qualitative research should target clinical providers of online counseling in order to gain a more robust understanding of their perspectives and experiences of conducting therapy through computer-mediated communication. Until now, the majority of the qualitative literature in this topic has recruited university counseling students who have role played a client-counselor relationship through chat over time (Haberstroh et al., 2007; Haberstroh et al., 2008; Lewis et al., 2003;).

Quantitative research examining the working alliance should include larger samples and compare online clients with face-to-face clients. Specifically, a replication of the current study would solidify the current research findings and add to the knowledge of the current research results. Additionally, a third category of type-of-counseling can be added to include clients who have completed both online and face-to-face counseling with the same treatment provider. This hybrid-type of counseling, where online counseling is used to supplement face-to-face services is becoming more popular (Langas, 2005). The decision to include a separate hybrid category is important in further research.

### **Investigating Therapeutic Outcome**

Evaluating treatment outcome has become an important part of the counseling field. Barak et al., (2008) compiled an extensive meta-analysis targeting the effectiveness of internet-based psychotherapeutic interventions. While the results of the meta-analysis supported the use of internet-based interventions with therapy clients and found the outcomes comparable to outcome studies completed on face-to-face counseling effectiveness, outcome studies need to be continued. Barak et al. focused mostly on internet-based interventions that were more standardized in nature and provided by online programs. These web-based programs are important to substantiate in the literature, as they are offered by health professionals as behavior modification programs. However, the meta-analysis (Barak et al.) did not include many studies that included an ongoing human-to-human relationship through online counseling. This ongoing human relationship formed between a client and counselor is the crux of a counseling

relationship and outcome studies that target this type of relationship need to be completed.

The current study, per the methodological design, could not track participants over time. Yet in order to understand therapeutic outcome and the development of the working alliance over time, clients need to be tracked over the course of therapy. A recommendation for future research is to discover more about the therapeutic process over time, focusing on treatment outcome and the working alliance over the course of therapy. To do this, clients would be followed through the course of therapy over several weeks or months. Current online counseling clients could be tracked with a therapeutic outcome measure and a working alliance measure after the first counseling session, and then at following sessions up until treatment ends. Through these methods, the field will gain a significant amount of information about the development of a relationship through online counseling, as well as the effectiveness of treatment. Further, learning more about the long term process of online counseling is crucial to appropriate use and regulation by accrediting bodies.

### **Investigating Social Presence Theory**

This study was the first one of its kind to integrate social presence into the theoretical underpinnings of online counseling research. Social presence theory offers a new way of understanding of nuanced similarities and differences of the two modalities of counseling regarding relational aspects based on the type of the communication. The current study's results found no significant differences between the two types of counseling, indicating that a high level of social presence can be perceived regardless of the modality of counseling. Future studies would benefit from recruiting more

participants from the various modalities of online counseling. This would allow a valid comparison of the social presence experienced by participants in the different online counseling modalities (i.e. email, synchronous chat, videoconferencing, and telephone). As noted in Chenault (1998), “In the end, the argument should not be whether or not -- if -- CMC (computer-mediated communication) can properly foster interpersonal relationships. Instead, scholarship can move into the ‘how’ and ‘why’, and beyond the mere ‘if’” (p. 1). The current study offers social presence theory as a potential piece of “how” and “why” the online counseling modality has the ability to foster a working alliance between client and counselor.

Future research should incorporate social presence as a lens with which to view the relationships formed through online counseling. Further validation of the *Networked Minds Social Presence Measure* is necessary to continually refine a reliable and valid instrument that measures the particular construct of social presence. Inquiries should run both exploratory and confirmatory factor analysis to confirm and solidify the factor structure. Additionally, supplementary correlational analyses should be completed to discover and solidify the potential relationship between social presence and working alliance. Another potential investigation is the relationship between social presence and overall satisfaction with computer-mediated communication. As it has been showed in previous literature (Gunawardena & Zittle, 1997), perceived social presence may play a role in how consumers perceive and feel about their overall satisfaction with the relationships built through online counseling.

### **Research in Counselor Education**

The field of counselor education is directly impacted by developments in counselor practice. Herr and Best (1984) observed, “The changes brought about in the counselor’s role by computer technology must be examined, and standards of training must be updated to reflect these changes” (p. 193). While the current study did not directly address particular training needs of counseling students, or the changing expectations of counselor educators, this area is ripe for further research as counselor education programs must begin to consider the inclusion of material, skill building and curricula that prepare students for the technological nature of future clinical practice (McAdams & Wyatt, 2010).

Counselor educators can incorporate training modules including lessons on ethics and basic information on how to carry out online clinical practice. Quantitative inquiry can begin to examine the success in producing learning outcomes and overall perception of the incorporation of technology into traditional counseling practices. From the gathered information, coursework and training can be modified and adjusted to increase positive, structured exposure of technology into counseling, in turn, impacting the potential for future ethical and effective online practice. Additionally, qualitative research should target current online counseling providers about particular skills necessary in practicing this type of counseling which would then translate into skills and knowledge taught to counselors-in-training. Phenomenological inquiries can begin to address the experiences of current online counselors and gain further understanding about how they have built online counseling practices as well as therapeutic relationships with clients. This research can translate into training modules for current counselors-in-training as they can learn from current providers.

The field of Counselor Education must gain more information on how to close the gap between the client population currently seeking online counseling, including White, educated, women and begin to target vulnerable, underserved populations. Qualitative focus groups including current online counseling practitioners may offer insight into how clinicians can expand and tailor services to a wider range of clients. These focus groups could also include representative participants of underserved populations, including lower socioeconomic groups and clients with diverse racial and ethnic backgrounds. The information gained from these target client groups would allow practitioners specific information about what these groups would need in order to be able to utilize online counseling services. These focus groups would help the field gain perspective of how the online counseling field could improve and expand services to reach these underserved populations.

### **Conclusion**

While the provision of online counseling services is on the rise (Barak et al., 2008; Mallen et al., 2005) it has not yet made a unanimously supported entrance into the field of counseling and mental health services. Some research suggests that practitioners and potential clients alike are wary of this type of service, perhaps due to the unfamiliarity of the service, and may harbor personal bias toward the entrance of computer-mediated communication into the counseling field (Rees & Stone, 2005; Rochlen et al., 2004). This point is made to ground the current research in the reality that while this type of service is gaining popularity, it is not without critics or the rightfully wary. Langas (2005) aptly observed,



“It is not, however, anticipated that traditional psychotherapy will one day become obsolete. Throughout the literature, no one is suggesting that e-therapy is better than working with a therapist face-to-face...it is generally agreed that it will never replace the unique experience of forming a continuing face-to-face relationship with a psychotherapist” (p. 2).

While the suggestion is not that online counseling will render face-to-face counseling obsolete, the current study aims to highlight that a better understanding of online counseling as it has already begun to blossom within the counseling profession as both a supplemental and standalone service.

As “human service professionals are still trying to understand just how human relationships change when they are mediated by computers” (Lundberg, 2000, p. 142), the current study offers a window into the experience by obtaining more knowledge about the working alliance and the role it plays in online counseling. Further, the study examined social presence as a potential mediating factor in developing a strong working alliance. The results of this study indicated that a strong working alliance can be formed through computer-mediated communication, and that clients perceive a similar social presence of their counselor regardless of the modality of counseling. The data clearly imply that a therapeutic bond can be formed if a client and counselor do not share the same physical space, and thus supporting field of counseling moving forward within the new millennium.

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Appendix A: Permission to use the *Working Alliance Inventory-Short Form*

SIMON FRASER UNIVERSITY  
THINKING OF THE WORLD

Ms Courtney Holmes  
The College of William & Mary  
Counselor Education  
1986 Algonquin Trail  
Williamsburg VA  
23185  
USA

October 14, 2010

LIMITED COPYRIGHT LICENSE (with CONDITIONS) 2001, 2002

Dear Miss Holmes

You have permission to use the Working Alliance Inventory (WAI) for the investigation:

"An Examination of the Similarities and Differences in Therapeutic Alliance, Therapeutic Outcome, and Social Presence between Face-to-Face and Online Counseling"

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

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

Dr. Adam O. Horvath  
Professor  
Faculty of Education and  
Department of Psychology

Ph# (778) 782-3624  
Fax: (778) 782-3203  
e-mail: horvath@sfu.ca  
Internet: <http://www.educ.sfu.ca/alliance/allianceA>



Appendix B: Permission to use the *General Health Questionnaire-12*

# Granada Learning

## PRO FORMA

INVOICE ID:  
Account No 124154

Courtney Holmes  
Doctoral Candidate  
The College of William & Mary  
301 Monticello Avenue  
WILLIAMSBURG  
VA23185  
United States

DELIVER TO:  
Account No 124154  
Courtney Holmes  
Doctoral Candidate  
The College of William & Mary  
301 Monticello Avenue  
WILLIAMSBURG  
VA23185  
United States

Our Order Number 616713	Order Processed By sgiles
Order Date 16 November 2010	Customer Order Number Holmes1611

Qty	Reference	Product	Platform	Unit Price	Disc %	VAT %	Final Price
1	25195	Permissions - Prof Sir D Goldberg - 50% - No VAT	n/a	£18.00	0	0.0	£18.00
		Permission to use 50 administrations of GHQ-12 in the study Therapeutic Alliance, Therapeutic Outcome and Social Presence				0.0	£0.00
1	25205	Permissions Administration Charge - Excl. VAT	n/a	£50.00	0	0.0	£50.00
1	2760700511822	GHQ - A Users Guide	Pub	£79.00	0	0.0	£79.00
1	P4	Postage and Packaging - Overseas	n/a	£11.85	0	0.0	£11.85
						0.0	£0.00
						0.0	£0.00
						0.0	£0.00
						0.0	£0.00
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						0.0	£0.00
						0.0	£0.00
						0.0	£0.00

This is a Pro Forma Invoice

Total	£158.85
Discount	£0.00
VAT	£0.00
<b>Final Price</b>	<b>£158.85</b>

Payment Accepted via Cheque Credit Card or BACS.  
 Cheques made payable to Granada Learning Ltd  
 BACS: Barclays Bank Plc A/c No: 10435317 Sort Code: 20-75-95  
 Bank Swift Code: BARCGB2107L (for international use)

VAT No. GB 511 5417 59

## Appendix C: Participant Recruitment Website

### Opportunity to Participate in Research

Welcome, this website is the construction of Courtney Holmes, a doctoral candidate at the College of William & Mary. This site has been designed to solicit participation in a dissertation research project studying the similarities and differences between traditional, face-to-face counseling, and online counseling. This research project has been approved by the Human Subjects Protection Committee of William & Mary.

Technology and the internet have allowed for the counseling field to expand in many ways and with new opportunities, come the need for research that informs how counselors better serve their clients.

This study utilizes a short demographic questionnaire which will ask several questions about your background, and three other assessment tools including an instrument that will ask about your relationship with your counselor, an instrument that will ask you about your perception of your interactions with your counselor, and finally an instrument that will ask about your general health over the past few weeks.

Thank you for your interest in this project. If you would like to participate, please note the following requirements:

1. You must be over 18 years of age.
2. You are participating in either face-to-face or online counseling (telephone, email, synchronous chat, or videoconferencing).
3. You must have seen your current counselor at least 3 times

If you meet the above requirements please **click on the following link** that will take you to the research. It will prompt you for a password which is: ***counseling***.  
[https://wmsas.qualtrics.com/SE/?SID=SV\\_71A6Gk8yNFjN9wo](https://wmsas.qualtrics.com/SE/?SID=SV_71A6Gk8yNFjN9wo)

There will be a consent form outlining specific details of the study followed by three short survey instruments. In its entirety, it will take between 20 and 30 minutes.

Thank you again and please email me ([cmholmes@email.wm.edu](mailto:cmholmes@email.wm.edu)) or my dissertation chair, Dr. Victoria Foster ([vafost@wm.edu](mailto:vafost@wm.edu)) with any questions or concerns. Finally, if you have questions about participation in this study, please contact Lee Kirkpatrick, Chair of the Human Subjects Protection Committee at William & Mary ([lakirk@wm.edu](mailto:lakirk@wm.edu) or 757-221-3997).

#### Appendix D: Informed Consent

I agree to participate in a study on my experiences as a client in either online or face-to-face counseling. The purpose of the study is to better understand the experiences of clients in both types of counseling. I understand that this study is being conducted as part of the requirements for the dissertation of Courtney Holmes who is completing her PhD. in Counselor Education at the College of William & Mary. The results and data will be published. As a participant, I understand I am entitled to receiving a copy of the results and if I want them, I can email the researcher at [cmholmes@email.wm.edu](mailto:cmholmes@email.wm.edu).

As a participant I am entitled to being entered in a drawing for one of four \$25 Visa gift cards. If I would like to be entered into this drawing I need to email the researcher at [cmholmes@email.wm.edu](mailto:cmholmes@email.wm.edu) with my name with “study” in the subject of the email. These emails are in no way tied to the data or information entered into the study, maintaining the anonymity of the data.

I understand that I will be expected to participate in completing three survey instruments, which will take approximately between 20 and 30 minutes. I have been informed that any information obtained in this study will be confidential and anonymous. All efforts will be made to conceal my identity in any report of the study results and to keep my personal information confidential.

I understand there is little to no risk in participating in this study and if I feel emotionally distraught at any time I can dial 911 for assistance.

I understand that I am free to withdraw my consent and discontinue participation in this study at any time by simply closing my webpage. If I have any questions or problems that arise in connection with the study itself or its results, I should contact

Courtney Holmes at [cmholmes@email.wm.edu](mailto:cmholmes@email.wm.edu) or Dr. Victoria Foster, the dissertation chair, at 757-221-2321 or [vafost@wm.edu](mailto:vafost@wm.edu). If I have any questions or concerns about participation in this study, I should contact Lee Kirkpatrick, Chair of the Human Subjects Protection Committee at William and Mary ([lkirk@wm.edu](mailto:lkirk@wm.edu), 221-3997).

Clicking the “I agree” button below signifies that I am least 18 years of age, that I have read and understood this consent form, and that I consent to participating in this study.

## Appendix E: Demographics Questionnaire

1. Age  
18-25            26-40            41-55            55+
2. Gender  
M      F
3. Race/ethnicity (check all that apply)  
Caucasian      African-American      Asian      Native Hawaiian or  
Pacific Islander      Native American or Alaskan Native  
Hispanic/Latino            Two or more  
Other: \_\_\_\_\_
4. Highest education level completed  
GED/Trade School  
High School  
Bachelor's Degree  
Master's Degree  
Doctoral Degree
5. What type of counseling are you participating in?  
Face-to-Face: individual      Online: synchronous chat (i.e. Chat room)  
Face-to-Face: group      Online: asynchronous chat (i.e. email)  
Face-to-Face: couples/family      Online: videoconferencing (i.e. Skype)  
Face-to-Face: telephone
6. Presenting problem (check all that apply)  
Depression      Anxiety      Relationship Issues      Grief/Loss  
Addiction      Anger Management      Sexual Identity  
Self-Improvement      Legal Mandate  
Other mental health concern: \_\_\_\_\_
7. Number of sessions with current counselor  
1 or 2  
Between 3 and 10

Over 10

8. Are you currently on medication for a psychological/psychiatric issue?
  - Yes
  - No
  - If yes: what diagnosis are you treating? \_\_\_\_\_
9. Do you know your counselor's professional credentials?
  - Yes – what are they?
  - No
  - Don't know

If you are seeing a counselor face-to-face, please answer N/A to the following two questions. If you are seeing an online counselor, please choose as many answers that fit your situation.

- A. Why did you choose online counseling?
  1. Anonymity of Personal Identity
  2. Credentials of your counselor
  3. Convenient access to services
  4. More Affordable Cost
  5. Another Professional Referred You
  6. You Prefer Discussion Personal Issues Through Text format
  7. Other: \_\_\_\_\_
  8. N/A
- B. What is your biggest concern with participating in online counseling?
  1. Privacy with personal material being sent online
  2. People finding out that you are participating in counseling
  3. Not knowing the identity of your counselor
  4. Not being able to be understood through text communication
  5. I have no concerns
  6. Other: \_\_\_\_\_
  7. N/A

## Appendix F: Working Alliance Inventory-Short Form (Tracey &amp; Kokotowic, 1989)

**Working Alliance Inventory Short Form (C)****Instructions**

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

Below each statement inside there is a seven point scale:

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

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

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

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

Thank you for your cooperation.

1. \_\_\_\_\_ and I agree about the things I will need to do in therapy to help improve my situation.
2. What I am doing in therapy gives me new ways of looking at my problem.
3. I believe \_\_\_\_\_ likes me.
4. \_\_\_\_\_ does not understand what I am trying to accomplish in therapy.
5. I am confident in \_\_\_\_\_'s ability to help me.
6. \_\_\_\_\_ and I are working towards mutually agreed upon goals.
7. I feel that \_\_\_\_\_ appreciates me.
8. We agree on what is important for me to work on.
9. \_\_\_\_\_ and I trust one another.
10. \_\_\_\_\_ and I have different ideas on what my problems are.
11. We have established a good understanding of the kind of changes that would be good for me.
12. I believe the way we are working with my problem is correct.

## Appendix G: General Health Questionnaire

**GENERAL HEALTH QUESTIONNAIRE****GHQ 12****HAVE YOU RECENTLY:**

<b>1-been able to concentrate on whatever you're doing?</b>	better than usual	same as usual	less than usual	much less than usual
<b>2-lost much sleep over worry?</b>	not at all	no more than usual	more than usual	much more than usual
<b>3-felt that you are playing a useful part in things?</b>	more so than usual	same as usual	less useful than usual	much less useful
<b>4-felt capable of making decisions about things?</b>	more so than usual	same as usual	less so than usual	much less capable
<b>5-felt constantly under strain?</b>	not at all	no more than usual	more than usual	much more than usual
<b>6-felt you couldn't overcome your difficulties?</b>	not at all	no more than usual	more than usual	much more than usual
<b>7-been able to enjoy your normal day-to-day activities?</b>	more so than usual	same as usual	less so than usual	much less than usual
<b>8-been able to face up to your problems?</b>	more so than usual	same as usual	less able than usual	much less able



<b>9-been feeling unhappy and depressed?</b>	not at all	no more than usual	more than usual	much more than usual
<b>10-been losing confidence in yourself?</b>	not at all	no more than usual	more than usual	much more than usual
<b>11-been thinking of yourself as a worthless person?</b>	not at all	no more than usual	more than usual	much more than usual
<b>12-been feeling reasonably happy, all things considered?</b>	more so than usual	about same as usual	less so than usual	much less than usual

---

## Appendix H: The Networked Minds Social Presence Measure

*Instructions:* The following questions are concerned with your interaction with {your partner}. For each one, please select a number from 1 to 7, depending on the degree to which you agree or disagree with the statement. A 7 means that you *strongly agree*, a 6 means you *agree*, a 5 means you *slightly agree*, a 4 means that you are *neutral or unsure*, a 3 means that you *slightly disagree*, a 2 means you *disagree*, and a 1 means you *strongly disagree*. You may select 1, 2, 3, 4, 5, 6, or 7.

7-----6-----5-----4-----3-----2-----1  
 Strongly -----Agree-----Slightly-----Neither Agree----Slightly-----Disagree----Strongly  
 Agree                      agree                      nor disagree                      disagree                      disagree

### *Social Presence*

#### *Copresence/Awareness Sub-factor*

1. I noticed (my partner).
2. (My partner) noticed me.
3. (My partner's) presence was obvious to me.
4. My presence was obvious to (my partner).
5. (My partner) caught my attention.
6. I caught (my partner's) attention.

#### *Attentional Allocation Sub-factor*

7. I was easily distracted from (my partner) when other things were going on.
8. (My partner) was easily distracted from me when other things were going on.
9. I remained focused on (my partner) throughout our interaction.
10. (My partner) remained focused on me throughout our interaction.
11. (My partner) did not receive my full attention.
12. I did not receive (my partner's) full attention.

*Perceived Message Understanding Sub-factor*

13. My thoughts were clear to (my partner).
14. (My partner's) thoughts were clear to me.
15. It was easy to understand (my partner).
16. (My partner) found it easy to understand me.
17. Understanding (my partner) was difficult.
18. (My partner) had difficulty understanding me.

*Perceived Emotional Understanding Sub-factor*

19. I could tell how (my partner) felt.
20. (My partner) could tell how I felt.
21. (My partner's) emotions were not clear to me.
22. My emotions were not clear to (my partner).
23. I could describe (my partner's) feelings accurately.
24. (My partner) could describe my feelings accurately.

*Perceived Emotional Interdependence Sub-factor*

25. I was sometimes influenced by (my partner's) moods.
26. (My partner) was sometimes influenced by my moods.
27. (My partner's) feelings influenced the mood of our interaction.
28. My feelings influenced the mood of our interaction.
29. (My partner's) attitudes influenced how I felt.
30. My attitudes influenced how (my partner) felt.

*Perceived Behavioral Interdependence Sub-factor*

31. My behavior was often in direct response to (my partner's) behavior.
32. The behavior of (my partner) was often in direct response to my behavior.
33. I reciprocated (my partner's) actions.
34. (My partner) reciprocated my actions.
35. (My partner's) behavior was closely tied to my behavior.
36. My behavior was closely tied to (my partner's) behavior.

## Vita

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