# Adolescents' Willingness to Utilize Online Counseling

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## Abstract

This study was a descriptive examination of the likelihood that adolescents would utilize online counseling to address their school counseling needs as compared to face-to-face counseling. Ninth to twelfth grade students at a suburban high school with proximity to a large metropolitan city were chosen for this study. This convenience sample was chosen due to the high academic profile of the students, the integration of computers into the school curriculum, the strong utilization of the counseling program, and the high counselor/student ratio.

The research questions were explored using a two-part questionnaire with a sample size of 300. Individual Internet frequency and type of use as well as knowledge of the services that were available to them at their school were assessed. Counseling style preference for either online or face-to-face counseling was compared for specific school related issues. Frequency tables and cross tabulations were used to analyze the data.

As would be expected, analyses showed that students were frequent users of the Internet as well as frequent users of email and instant messaging. They were mostly unaware of the counseling services that were offered at their school and

completely unaware that there were counseling services available online. Students said they would not go to a school counselor either online or in person for any of the specified issues. However, more students reacted positively about having access to a school counselor at times of the day and night that went beyond the traditional school hours.

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# CHAPTER 1

# INTRODUCTION

As technology continues to evolve, the epigenesis of interactions between the rapidly expanding world of Information Technology (IT) and the health professions is predicted to continue to grow at an ever-increasing rate (Granello, 2000). While the relationship between technology and health care has existed for decades, it was not until the 1990's that counselors in the United States took an interest in the use of computer technology as a counseling tool (Granello, 2000).

This information technology revolution has resulted in communication and information delivery via computer sources (typically called the Internet or World Wide Web) to a large percentage of homes around America and the developed world. Currently, millions of people are accessing healthcare information from the World Wide Web (Gross, 2001; Nickelson, 2000). People are able to communicate with their health care providers and access information at any chosen time and place using the Internet.

Today's adolescents are the first generation to have grown up learning about the World Wide Web (WWW) as part of their academic curriculum, and they are comfortable with its use. In many schools throughout the United States, computer instruction starts in elementary school and, increasingly, Internet competency has become a requirement for high school graduation. Lenhart (2001), in her study of teenage life online, reported that 17 million youth, or 73% of youth in the United States, ages 12-17, used the Internet. Ninety-two percent

of those 17 million described themselves as frequent users of email. They reported that the Internet played a major role in their relationships with friends, family and school (Lenhart, 2001). Study groups are formed online, dates are made and broken via the written word, and problems are shared and discussed using the new computer language that couples the written word with visual symbols (e.g. :- ) means happy, pleased and ;- means just kidding) ( Daniels, Tyler, & Christie, 2000).

There are many Internet sites designed for adolescents where they can access information about health issues such as AIDS, alcohol use and abuse, smoking, suicide, grief and stress (Bosworth, 1995; Hayes, 2001, Bloom, 2000). According to a study published by the Kaiser Family Foundation (2001), two out of three individuals aged 15-24 who access the Internet have retrieved health information online.

Additionally, interactive online counseling sites are beginning to appear. One web site, Metanoia (http://www.metanoia.org/), lists more than 80 sites where some form of counseling or psychotherapy purport to occur (Bloom, 2000). The American Counseling Association (ACA), the National Board for Certified Counselors (NBCC), the American Psychological Association (APA), and the Council for Accreditation of Counseling and Related Educational Programs (CACREP) all serve as role models for the formation of ethical and national standards for online counseling (Sattem, Reynolds, Berndordt, & Burdeshaw, 2001).

While the Internet provides a place to access self help information, students in the United States have access to school counseling and guidance programs to help address their academic and personal needs. In the past 25 years these programs have been designed not only to develop their academic strengths, but to help students become responsible and productive citizens. Comprehensive guidance programs are replacing traditional vocational programs and are putting school counselors in the uniquely structured position to assist students in responding to their academic and personal needs (Gysbers, 2000; American School Counselor Association, 2003).

These comprehensive guidance programs incorporate the Internet as part of their mission in addressing students' academic needs. Many counselors currently use computer-assisted programs to help address the school to work issues presented by their students. These interactive computer programs allow for unlimited possibilities for the students to address who they are in relation to the world of work (Refvem, Plante, & Osborne, 2000). This effective and efficient use of the Internet is an integral part of a successful comprehensive guidance program (Sabella & Booker, 2003).

## *Problem Statement*

The marriage between computers and the health industry is on an upward trend. More people are accessing information from the Web. People of all ages

are researching health information and patients are accessing their physicians and records from the Internet.

Given this positive relationship between health and computer usage and the fact that adolescents are growing up in an age where computers are not only accessible, but play an important role in their social relationships, it is not surprising that adolescents look to the Internet to find information and answers about their health related issues. They chat with others and look up information about mental health issues such as drug use and misuse, suicide, and grief and loss.

Interactive counseling sites have begun to surface throughout the country. They provide a unique opportunity for people to access counseling services without the historical constraints of time and logistics. The interactive sites offer the user a sense of privacy and anonymity that cannot be accessed by traditional counseling (Maheu & Gordon, 2000).

The schools provide a structured atmosphere where students can address their academic and personal issues. School counselors are currently using the Internet to address students' school to work issues and continue to incorporate computer technology into their guidance and counseling programs (Refven, Plane, & Osborne, 2000).

Given all of the above, it would be reasonable to expect that adolescents would be potential users of online school counseling. However, while there are online counseling sites that offer services to adolescents, there is little information about using online counseling in the school setting. How likely is it

that students would contact a counselor online? Would they be more or less likely to contact their school counselor online as opposed to face-to-face? As the counseling profession continues to move forward into the age of technology, these are questions that the counseling community needs to know in order to more effectively and more comprehensively serve the adolescent population.

### *Purpose of the Study*

The purpose of this study was to look at adolescents' potential use of online counseling as a school counseling option. Specifically, the following questions were addressed:

1. To what extent are adolescents aware of online counseling?
2. To what extent are adolescents willing to utilize the available face-to-face school counseling services?
3. To what extent are adolescents willing to utilize online school counseling services if they were available?
4. How does the willingness of online vs. face-to-face counseling services compare?

Additionally, is there a difference in gender or grade level in response to the above questions? These questions were addressed using students from a private school with a high computer literacy and an active counseling program.

## Definition of Terms

Adolescents – The time of life that begins with the onset of puberty and concludes with full adulthood. The exact period, which varies from person to person, falls approximately between the ages of 12-20 (Berk, 1999).

Counselor – a trained professional who works with individuals, families, groups and organizations in a collaborative effort to help clients identify goals and potential solutions to problems which cause emotional turmoil (ACA, 1999).

Electronic Mail (Email) – a method for transmitting data or text files over communication networks. The electronic mail systems may be confined to a single computer network or may have gateways to other computer systems, allowing users to send electronic mail anywhere in the world (Webopedia, 2004).

Internet or World Wide Web ( WWW; the "web") – The global information system that is linked together by unique address space based on Internet Protocol (IP) and provides high level services layered on the communications and related infrastructure (Federal Networking Council, 1995).

Online counseling (Cybercounseling e-counseling) – "the practice of professional counseling and information that occurs when client(s) and counselor(s) are in

separate or remote locations and utilize electronic means to communicate over the Internet" (NBCC, 1997).

## Assumptions

It was assumed that adolescents participating in this study were competent using the Internet. They were presumed to have had basic computer literacy skills, access to a computer, and access to the Internet. This is a reasonable assumption given the site for this study.

## Delimitations

This study was limited to adolescents from one independent, secular high school in the Northern Virginia geographical area who had ready access to computers. In addition, it was limited to adolescents enrolled in high school who also had ready access to counseling services. The study only focused on willingness to participate in online and face-to-face school counselor relationships. It was not intended to investigate potential outcome, problems, or benefits of online counseling.

## Summary

The information from this study will aid educators and other researchers in understanding some of the potential avenues for helping adolescents with their

school counseling needs. If adolescents are willing to use online counseling to address their mental health needs, counselors and other professionals will have an additional tool to reach these teens and potentially impact many of the adolescents who are currently not using the available counseling services.

There are also implications for the future direction of counseling and counselor training. Interactive sites specifically designed for adolescents could be established. Counselors who work with adolescents will be able to work from remote sites and provide service(s) across the globe virtually at any time of day or night. The written word would become the vehicle of communication and accountability. Counselors in training would need to learn computer literacy, including web site development, and training would emphasize responding to clients in writing as opposed to verbally and relying on non-verbal communication. Privacy and security will be issues to be addressed.

Five chapters are presented. A presentation of the background material necessary to support the need for a study that looks at adolescents' potential for online counseling use was in this chapter. Chapter 2 includes a complete and comprehensive review of the literature, which is divided into two main sections. Section one reviews topics relating to adolescents, including adolescent development, current issues of adolescents, adolescent computer usage, and school counseling services for adolescents. Section two reviews computer technologies, including the historical relationship between computers and counseling, Internet counseling, and related research studies that measure the effectiveness of Internet counseling.

Chapter 3 contains a complete description of the methods used in the study. A restatement of the specific research questions is followed by a description of the participants, including the site and the community. An explanation of the instruments used in the study is followed by a description of the procedures and an explanation of the data analysis procedures.

Chapter 4 addresses the results of the study, first presenting a profile of the participants, including demographic data, Internet usage, and knowledge of counseling services. The second section addresses adolescents' awareness and willingness to use online counseling as related to the research questions.

Chapter 5 presents a summary of the results of the study. A discussion of the results is followed by the limitations of the study. Implications for practice and further research are presented. The chapter concludes with a summary.

# CHAPTER 2

## REVIEW OF THE LITERATURE

For most adolescents, access to the Internet, writing and receiving email and chatting online is not new. According to a study by the Kaiser Family Foundation (2001), at least 73% of adolescents ages 12-17 have used the Internet, with the most prominent activity sending and receiving email. Most adolescents have private email accounts in their homes, and many high schools and colleges are providing individual email accounts for their students. Email has become a powerful source of communication for today's youth. While the telephone still remains a popular form of communication for adolescents, sometimes the youth hang up the phone and turn to email to "talk" about more embarrassing, gossipy or intimate issues (Yager, 2002). Adolescents are making online friendships, which may or may not include offline contact (Wolak, Mitchell & Finkelhor, 2002), and are starting to look to the Internet for help with emotional problems (Gould, Munfakh, Lubell, Kleinman, & Parker, 2002).

This literature review is divided into two main sections. The first is about adolescents, and includes pertinent theories of adolescent development, current issues surrounding this period of rapid physical, social and intellectual change, computer usage and the history and responsiveness of school counseling to adolescent issues. The second section is about computer technologies and counseling. After sections on the historical context and Internet counseling, online or e-counseling is discussed with the focus on the advantages, obstacles

and regulations for the profession. The section concludes with a review of studies that focus on using the Internet as a counseling tool.

## *Adolescents*

The classification of adolescence as a period of development is relatively recent in many Western societies (Hine, 1999). The word originally came into the English language in the 14th century and meant someone who was still growing but not necessarily a teenager. Since the turn of the 20th century, however, adolescence has meant a specific period of life. It is generally assumed that this period starts at puberty and is often characterized as a period fraught with many difficult challenges (Hine, 1999). The end of adolescence is marked with the transition to adulthood characterized by full-time work, marriage and family. With the increase in the proportion of youth obtaining college and post-graduate education, the smaller family size and the growing affluence in the United States, the period of adolescence is expanding and a new phase "post adolescence" or "emerging adulthood" has been identified (Mortimer & Larson, 2002).

This section begins with a review of the developmental theories of adolescence followed by a review of the current issues that surround adolescent growth and development. Adolescent computer usage is discussed highlighting frequency of use and Internet activities. The section ends with a review of the counseling services that are available to adolescents in the schools.

***Adolescent Development***

Like all other stages in development, adolescent development is characterized by physical, cognitive, and social changes. It is these developmental changes that allow young people to "cross the divide" from childhood to adulthood. Adolescence is a period of intense excitement and growth of many kinds. It is the stage when growth and development is more rapid than during any other developmental stage except that of infancy (Jackson & Davis, 2000). It is also a period characterized by egocentrism, invincibility and the ability to speculate, hypothesize, and fantasize (Bee, 1994; Berger & Thompson, 1995).

Physical changes often outpace the cognitive and social changes that mark adolescence. This time of rapid physical and sexual maturation, called puberty, changes the childlike body into one of adult size and proportions. Adolescent growth is distal-proximal (far to near). The adolescent's hands and feet lengthen before their arms and legs do. The torso is the last part to grow which often leaves the adolescent appearing gangly and short-waisted (Bee, 1994; Berger & Thompson, 1995).

As the definition of adolescence developed in the 20$^{th}$ century, so did the developmental theories. Freud was the first theorist to stress the role of early experiences as a determinate of successful maturity. Adolescence was the final stage in his psychosexual theory. He thought that if development was successful throughout the child's first 11 years of life then adolescence led the way to

successful marriage, sexual maturity and child rearing (Freud, 1938, reprinted 1973).

One of Freud's disciples, Erikson expanded Freud's theory of development to include eight stages. Each stage in Erikson's psychosocial theory is surrounded by a conflict that needs to be resolved along a continuum from positive to negative. The outcome of the conflict determines the healthy or maladaptable contribution the person makes to society. Erikson's adolescent conflict is characterized by identity versus confusion. He defines adolescence as a period of moratorium, or a time when young people can integrate their skills, their knowledge of themselves and the perceptions of their contemporaries (Erikson, 1968). It is during this stage that the adolescent tries to answer the question of who he or she is and how he or she fits into society. According to Erikson, positive outcomes for this conflict lead to positive vocational goals and secure personal identity and negative outcomes lead to confusion about future roles (Erikson, 1968).

It is during this struggle for identity that the adolescent's relationships with family and friends shift (Hine, 1999). It is a time when peers replace parents as the authorities. The peer group serves as the social institution that eases the transition from childhood to adulthood. Peers present a forum where adolescents can discover which personality characteristics and behaviors are accepted and admired. It is a time when teens look outside the home for answers and advice. In a recent survey conducted by KidsPeace, fewer than 20% of teens surveyed

would feel “totally comfortable” discussing difficult issues with their parents (Hayes, 2001).

The developmental bonding with peers does not negate the influence of parents and adults. While many adolescents have conflicts with their parents, there are many similarities between parents and adolescents (Berger & Thompson 1995). Most young people favor the same political candidate as their parents and attend the same church or synagogue. In addition, academic success is highly correlated with parental academic success (Berger & Thompson, 1995).

It was well into the 20th century that the cognitive theories of Piaget were accepted into the American child development culture (Berk, 1999). He denoted four age-related cognitive developmental stages. He is credited as the first theorist to recognize the adolescent’s capacity to think abstractly, rather than concretely (Berk, 1999). Piaget called this formal operational thought and described it as the point in development where the adolescent began to speculate and fantasize. He postulated that the adolescent could move from concrete facts and knowledge into the realm of possibilities. This is in contrast to Piaget’s earlier stage of concrete operational thought where the child would have difficulty moving away from or arguing against their personal beliefs and self interests (Piaget, 1952). Piaget’s theory of cognitive development set the groundwork for additional social/cognitive theories.

Elkind first described the trait of adolescent egocentrism (Elkind, 1984). He hypothesized that as the cognitive development progressed through the

stages identified by Piaget, the characteristics of egocentrism also progressed (Muuss, 1982). He said that adolescent egocentrism was the way adolescents saw themselves as more significant or more central then they actually were. As a result of this, the adolescent developed what Elkind called a “personal fable” or imaginary audience. The existence of this imaginary audience declined with age (Elkind, 1994).

Selman’s role-taking theory posited that children gained a richer understanding of themselves and of other people as they acquired the ability to discriminate their perspective from those of other people. He believed that in order to really know another person, one had to first be able to assume the other person’s perspective and to understand the other’s thoughts, feelings, intentions and motives. As adolescence progressed, the adolescent could not only assume the perspective of another person and anticipate how that person would react to his perspective but could consider that perspective in relation to the larger social system (Selman, 1980).

Another developmental theorist, Lawrence Kohlberg (1969), studied the development of moral reasoning in children, adolescents and adults. He presented sets of hypothetical stories that posed ethical dilemmas. Kohlberg could then examine how people reasoned morally. He found three levels of moral reasoning with two stages at each level. According to Kohlberg, people advance on a moral hierarchy as they become mature. It is during adolescence that teens try to figure out the “right” thing to do and they feel guilty when they do the “wrong” thing (Kohlberg, 1969).

### *Current Issues of Adolescents*

Adolescence is a time for firsts. During these years the adolescent may first question intellectual and moral matters. It may also be a time when adolescents first become involved in a life-long career interest. This may also be the time they first experience sexual or romantic love. The period is ripe for exploring new ideas, concepts and feelings. It is also ripe for the challenges that accompany this exploration. This exploration or risk-taking behavior can lead to issues that can be consequential for adolescents. Substance use and abuse, sexual exploration, violence to themselves and others, changing families and technology are all issues that surround today's adolescents.

Illegal drug use is a major problem for adolescents. Substance use and abuse has been on the rise in the United States since 1992 (Johnson, O'Mally & Bachman, 2000). Alcohol is the most commonly used drug among adolescents. A national survey of drug use showed that approximately 50% of high school seniors had reported using alcohol in the 30 days preceding the survey and one-third reported heavy drinking (five or more drinks on one occasion) in the previous two weeks. About 40% of adolescents are known to initiate alcohol use by the eighth grade and 60% by the ninth (Johnson, O'Mally & Bachman, 2000). Data also indicate an increase in heavy or binge drinking (Substance Abuse and Mental Health Services Administration, 1999).

In addition to the increase in alcohol consumption, data indicate an increase in younger smokers over the past several years as well as an increase

in the use of “designer” drugs (Johnson, O’Mally & Bachman, 2000). A recent survey of high school seniors showed that one in five high school seniors smoked one or more cigarettes a day within the prior month. And, when asked if they will quit, many say they will quit within five years. However, experience shows that five years later they will still be smokers.

In 1993, 42.3% of high school seniors surveyed said that they had used an illicit drug in their lifetime, with marijuana being the most prevalent (Kaminer, Burleson, & Goldberger, 2002). Other illicit drug use includes cocaine and crack, amphetamines and hallucinogens. Additionally, teens report experimenting with inhalants, such as correction fluid, paint thinner, shoe polish, fuel, antiperspirants and coronary dilaters. In this 1993 survey, 17% of high school seniors reported using inhalants in their lifetime.

One of the perplexities of adolescence lies in their sexuality. Adolescence, by definition, means continuing to be a child, a period of moratorium, where physical and sexual powers are to be delayed. It is also the time when their bodies are telling them otherwise. Young people who are nearing their physical and sexual peak during adolescence are asked to delay using them (Hine, 1999). At the same time, television, magazines and films are saturated with seductive imagery of teens. Today’s young people live in an atmosphere where their bodies are used to sell everything (Hine, 1999).

Consequently, today’s adolescents are sexually active. Among seventh and eight graders, about one in six reports having had sexual intercourse, while among ninth through 12$^{th}$ graders, the reports indicate nearly half have had

intercourse (Hine, 1999). Sexually transmitted disease (STD) rates, birth rates and abortion rates are higher for adolescents in the Untied States than for adolescents in almost all other developed nations (Annie E. Casey Foundation, 1998; Panchaud, C., Singh, S., Feivelson, D., & Darroch, J. E., 2000). And, while the number of actual AIDS cases among adolescents is low, the high rate of sexually transmitted infections (STI) among adolescents indicates that this generation is especially vulnerable to HIV infection (Ozer, MacDonald, & Irwin, 2002).

The overall rate of teenage pregnancy is lower today than it was in 1950 (Hine, 1999). The difference is that in 1950, marriage either preceded or followed soon after conception. Today, a great majority of teenage pregnancies involve women who are not married. Due, in part to the antidiscrimination legislation known as Title IX, this trend is more visible. Before the 1972 legislation, women who became pregnant were expelled from high school. Motherhood was seen as incompatible with being a student. Title IX guaranteed equal treatment of men and women in school and consequently programs were set up in high schools for teen mothers.

Perhaps, as an indirect result of the attention to female equality, adolescent girls strive for the perfect female body that has no fat and a high degree of muscle tone. By the early 1980's anorexia and bulimia became life-threatening illnesses (Hine, 1999). Today, eating disorders are among the most widespread disorders associated with the onset of adolescence for females. The

prevalence ranges from 1% to 3% of females ages 15-19 (American Psychiatric Association, 2000).

The sexual content and activities offered on the Internet can be attractive to adolescents. One quoted statistics says that 80% of all hits on the Internet are to pornographic sites (Aitkenhead, 1998). This can be a problem even for those adolescents who do not intentionally seek out pornographic materials. Adolescents who use the Internet to find materials concerning health and sexuality information will inevitably find pornographic sites. In a study by Finkelhor, Mitchell and Wolak (2000), 25% of 10-17 year olds said they had experienced undesired exposure to pornographic material. While filtering software is available, the Internet is highly resistant to outright censorship and adolescents will continue to have access to wanted and unwanted pornographic material (Hellenga, 2002).

Today's adolescents are confronted with an increasingly violent world; they have become more violent, and are more likely to be victims of violent crime (Hine, 1999). In fact, violence in the United States has reached epidemic proportions and has become the number one cause of death in some communities (Centers for Disease Control and Prevention, 1997). Children and adolescents in America suffer battering by their parents, experience or witness violence in their schools, parks, playgrounds, and communities (Veenema, 2001). There are no clear numbers of how often adolescents experience violence, but according to Trickett and Schellenbach (1998) it is "disturbingly frequent". Guns, the weapons of choice, have replaced the fists and knives of

generations past. Fitzpatrick and Boldizar (1993) conducted a study of 221 low-income African American youth between the ages of 7-18. More than 70% of their respondents reported being victims of at least one violent act, and almost 85% reported witnessing at least one violent act. Exposure to violence is related to the health and well being of adolescents. Being victims of and being witness to violence are strong predictors of post-traumatic stress disorder (PTSD), peer aggression and intrafamily conflict (Berton & Stabb, 1996; O'Keefe, 1997; Osofsky, Wewers, Hann & Fick, 1993; Attar, Guerra & Tolan, 1994; Fitzpatrick & Boldizar, 1993)

Paralleled with violence to others is violence to self. Each year at least 5000 teens commit suicide in the United States and for every success, it is estimated between 50-150 adolescents fail in the attempt. Suicide rates are higher among people aged 15-24 than any other age group (Miotto, DeCoppi, Frezza & Preti, 2003). Although girls attempt two to three times more often than boys, they are not as likely to succeed. This is due to the means, as males select more destructive methods such as guns and hanging, and females are more likely to choose pills as their method of choice. There is no such thing as a "typical" suicide youth. They come from all backgrounds with all different reasons (Sommers-Flanagan & Sommers-Flanagan, 1997).

Family circumstances and stressors have an impact on adolescents' well being. Many of today's adolescents come home to empty houses where both parents are working to keep up with the house payments (Hine, 1999). About half of American marriages end in divorce and three-forths of those involve

children (Berk, 1999). Parental divorce, marital conflict, maternal physical health problems, maternal depression, financial stress and mother-adolescent relationship difficulties all are known to substantially impact the adolescent (Wierson & Forehand, 1993; Forehand, Biggar & Kotchick, 1998). This impact comes in the form of poor academic performance, substance use and abuse and psychosocial adjustment difficulties (Foreland, Biggar, & Kotchick, 1998; Butters, 2002; Wierson & Forehand, 1993).

Media exposure has had a tremendous impact on adolescents. This includes expose to television, music, advertising and video and computer games. According to Villani, (2001) meta analytic studies were published in the 1990s that reviewed the effects that television and movies had on violence and adolescents. The researchers of one such study reviewed 28 research reports on children exposed to media violence. The authors concluded that exposure to media violence increased aggressive interactions with strangers, classmates and friends (Villani, 2001). Subsequent research has supported those findings. Centerwall (1992) examined the change in homicide rates following the introduction of television to South Africa in 1975. Based on his findings, he hypothesized that if television technology had never been developed there would be 10,000 fewer homicides in the United States each year, 70,000 fewer rapes and 700,000 fewer injurious assaults (Centerwall, 1992).

Several studies have looked at music preference and its relationship with adolescent turmoil and suicide. The initial studies of the 1990s demonstrated a clear association between heavy metal and hard rock music and reckless

behavior (Weidinger & Demi, 1991). Took and Weiss (1994) looked at the relationship between music choice and turmoil, and they added rap music as a preference category. While the initial studies showed a relationship between music preference and turmoil, when controlled for gender, only below average school grades and a history of counseling in elementary school remained statistically significant.

Advertising has had an impact on tobacco and alcohol use among adolescents. A 1995 study reported that the influence of advertising had a stronger impact on teenage smoking than the adolescents' relationship with peers and family (Evans, Farkas, Gilpin, Berry & Pierce, 1995). Alcohol research showed similar results. Children with more knowledge of beer brands and slogans held more favorable beliefs about drinking (Madden & Grube, 1994).

Video games and computer games are a multi billion-dollar business in the United States (Villani, 2001). The studies thus far have found little support for the theory that playing video games is an inducing factor in aggressive behavior (Scott, 1995). In fact, a study by Subrahmanyam & Greenfield (1994) found video games useful in teaching spatial performance.

### *Adolescent Computer Usage*

Adolescents participate in a variety of computer activities ranging from traditional educational pursuits such as writing and research to writing email, chatting online and surfing the Internet (Elise, 2001). Between 1993 and 2001 the number of children living in households with computer access increased from

32% to 71% (Wilhelm, Carmen, & Reynolds, 2002). Additionally, schools have experienced an increase in Internet access in recent years. According to data from the U.S. Department of Education the number of K-12 schools with Internet access increased from 35% in 1994 to 98% in 2000 (Wilhelm, Carmen, & Reynolds, 2002). This increase in computer access has allowed computers and specifically the Internet to become an important part of the development of adolescents (Subrahmanyam, 2001; Anderson, 2002).

Almost three quarters of adolescents (73%) ages 12-17 have used the Internet and the number increases to 95% for adolescents ages 15-17 (Kaiser Foundation, 2001). Adolescent boys are equally as likely as girls to go online (Kaiser Family Foundation, 2001) although some studies indicate that boys reported a more positive attitude towards computers (Kadijevich, 2000; Krendl & Broihier, 1992). In a recent survey conducted by the Pew Internet and American Life Project in 2000, adolescents were asked to report their Internet usage. The majority of teens reported going online most often at home, seconded by accessing the Internet at school. Other choices included a friend's house and the library (Lenhart, 2001).

Email is the most popular online activity with 94% of online adolescents reporting sending and receiving email (Kaiser Family Foundation, 2001; Annenberg Public Policy Center, 2000; Lenhart, 2001). More than half of online teens have more than one email or screen name. Other popular activities include accessing information on movies, music and TV, playing games, downloading

music and participating in chat rooms (Kaiser Family Foundation, 2001, Lenhart, 2001).

Lenhart's study (2001) shows that 26% of adolescents ages 12-17 have gone online to look for information about youth-related health issues. In another study (Kaiser Family Foundation, 2001), online adolescents ages 15-17 were asked whether they had ever gone online to look up health related issues. The study found that more that three-quarters (76%) had researched one or more health related topics including HIV/AIDS, drug or alcohol abuse, sexually transmitted diseases, smoking, pregnancy or birth control, and depression or mental illness.

The social impact of the Internet adds an additional component to adolescents' computer usage. Almost half of the adolescent Internet users report that the Internet strengthens their friendships (Kaiser Family Foundation, 2001; Bosworth, 1994). Intimate conversations online seem easier and difficult conversations are emotionally distanced. For many teens, they see the Internet as a way to keep in touch with a larger group of friends. However, most teens (67%) admit that the Internet is only modestly helpful in making new friends (Kaiser Family Foundation, 2001).

The rate of Internet diffusion into the American society since the creation of the World Wide Web surpasses that of any other form of communication technology (Howard, Rainine, & Jones, 2001). There are an estimated 30 million people now online (Jackson & Davidson, 2002). Scientists and military personnel have been using the computer to communicate with each other for

more than 30 years (Alleman, 2002). Internet use has become a significant conduit of communication for adolescents.

### *School Counseling Services for Adolescents*

The primary focus for adolescents' search for identity is learning more about themselves. They have the desire to explore interests, abilities, and new experiences. They are inexperienced and undergoing tremendous personal change (Carr, 1996). For many, it is the first time they are in a position to explore the world of work, career opportunities, and higher education. They are keen to find satisfaction in themselves and in the world around them (Refvem, Plante, & Osborne, 2000).

Adolescence is also the time when many children move from the security of the small neighborhood school where the student spends most of the day with the same teacher to a more impersonal school with different classmates and different teachers. This transition occurs at the same time that most adolescents are confronted with the issues of substance use, sexual exploration, and many of the other issues previously discussed. The schools have the potential to provide the building blocks to help adolescents make informed decisions relating to health and education. They have the potential to make a beneficial impact on the development of their students.

At the turn of the 20th century, school counselors did not exist (Campbell & Dahir, 1997). Individual teachers took the time to help students reach their vocational and academic goals. In the mid 1900s, the National Defense

Education Act (NDEA) provided funds to train school counselors. School counselors began as vocational counselors and consequently the programs were labeled vocational or guidance programs. Since then, programs have evolved to encompass all children in the academic setting with career/vocational guidance as only a part of the services. In 1990, the American School Counselor Association (ACSA) Governing Board moved to call the profession "school counseling" and their programs "school counseling programs". In 1997, ASCA published standards for the development of school counseling programs in an effort to promote a national reform of school counseling programs and to set national standards for school counseling programs (Campbell & Dahir, 1997). In 2003, the American School Counselor Association published a national model for school counseling programs. There are four components to this model: Foundation, Delivery System, Management Systems, and Accountability (ASCA, 2003). The Delivery System addresses how such a program will be implemented and includes the school guidance curriculum, individual student planning, responsive services, and system support.

The school guidance curriculum consists of structured developmental lessons designed to assist students in achieving competencies within the three broad domains (i.e., academic, career, personal/social). The guidance curriculum is presented systematically through classroom and group activities to provide all students with the knowledge and skills appropriate for their developmental level (ACSA, 2003).

Individual student planning includes activities that help individual students plan and manage their own learning. Counselors help students evaluate their academic, personal and career goals and help them transition from school to work. This can include test taking, college selection, behavior planning, interest inventories, academic course selection, or career decision-making. Counselors work with students individually or in small group settings.

Responsive services consist of activities to meet students' immediate needs that require counseling, consultation, referral, and peer mediation (ASCA, 2003). This part of the service is often initiated by the student but may be initiated by parents or teachers. The school counselors serve as advocates for the students as they consult with the appropriate parents, teachers and other community agencies. They also provide short-term individual and small group counseling for the students who have difficulty dealing with relationships or personal concerns. Referrals are made to community resources for long term needs.

The final component of the model is the system support that consists of the professional development, consultation, collaboration, and teaming, and program management and operation activities that establish, maintain, and enhance the school counseling program (ASCA, 2003; Gybers & Henderson, 2000).

Counselors, in delivering a school counseling program, are active both in and out of the classroom working with students, teachers, administrators, parents, and community members. School counselors provide workshops to

parents and informational sessions to the school community. School counselors have been on the forefront of helping students respond to the substantial changes in our economic, social and occupational structures (Gybers & Henderson, 2000). School counselors and other related professionals are adapting the Internet to help bridge the school to work gap (Refvem, Plante, & Osborne, 2000; Sattem, Reynolds, Berbhardt & Burdeshaw, 2000). There are numerous Internet sites devoted to career assessment and guidance. All one has to do is type in any related word in a search engine and thousands of web sites related to career exploration pop up.

In an effort to provide counselors and other professionals with a usable guide, Hohenshil and Brott (2002) developed a strategy to identify the best U.S. career web sites. Their review included the top 40 career development web sites in the U.S. One such program, Virginia VIEW, provides career information to students of the Commonwealth of Virginia. It is a " clear, user-friendly site with useful career information and career links for all citizens of Virginia" (Hohenshil & Brott, 2002, p. 146). For the fiscal year ending 2000, Virginia View reported 333,000 users covering 27,118 sites. Of those, 100,000 users were from senior high schools (www.vaview.vt.edu).

While the Internet will probably never replace the benefits of direct communication with a school counselor, the Internet is a tool that school counselors can use to better provide a Delivery System in a comprehensive school counseling program. As we enter the 21st century it is clear that school counselors will continue to be on the forefront of helping students respond to the

substantial changes in our economic, social and occupational structures (Gybers& Henderson, 2000).

## Computer Technologies and Counseling

### *Historical Context*

The relationship between computers and counseling is not new. Many significant technology breakthroughs occurred in the 20th century that enabled this change. The following were among those that played a significant role:

1. ENIAC became the world's first computer in 1946;
2. The Soviet Union launched the first space satellite in 1957;
3. The computer chip was patented by US scientists in 1959;
4. Microsoft Corporation was started by Bill Gates and Paul Allen in 1975;
5. Personal computers were mass marketed in 1977, and
6. The World Wide Web became part of the Internet in 1989

(Bloom & Walz 2000).

Mainframe computers were available in the 1950s. It was during this time that theorists like B.F. Skinner developed ideas about programmed instruction and distance education (Granello, 2000). However, these systems were expensive to use, were not user friendly, and were not readily accessible or affordable to the mainstream public.

The 1960s introduced minicomputers to the general population. These computers were more affordable and, therefore, access became more plentiful. Also, more user-friendly languages such as PASCAL and BASIC were developed. These program languages opened the way to the first computer-

aided instruction programs such as PLATO and ILLIAC. It is here that the counseling/computer relationship was launched (Granello, 2000).

ELIZA is an example of an early program that integrated computers with psychotherapy. Joseph Wizenbaum developed it in 1966. It was based on Carl Roger's client centered theories. The intent of the ELIZA program was to allow clients the ability to talk as they would to an in-person therapist. The computer was to respond using Roger's reflective techniques. The results were dissatisfying as the computer was unable to distinguish colloquialisms and other language irregularities (O'Dell & Dickson, 1984).

The 1970s and 1980s saw a large increase in the availability and use of the computer (Granello, 2000). The microcomputer was introduced in 1973 and since then has continually evolved with increased memory and cost reductions that have made the personal computer more popular and commonplace. During the 1970s computers showed up in businesses, libraries, schools, and homes. It was also a time when the counseling profession grew and diversified. Counselors started to look at the ways the computer could be used to enhance their profession. Counselors and therapists saw that while the computer could not replace the human interaction, it was a viable adjunct to their treatment. Certain problems could be addressed using a computer program. One example was PLATO (Programmed Logic for Automatic Teaching Operations) that was used to help clients who had trouble making decisions. The program provided a structured problem-solving model that clients could use to choose between two adverse alternatives (Wagman & Kerber, 1984).

PLATO was also used as one of the first computerized instructional aids. It was aimed at college-level instruction both in the United States and in Europe (Niemiec & Walberg, 1989). PLATO was significant to the counselor-computer relationship in that it was the first time non-programming experts could use the computer to input course material (Granello, 2000). This led to the use of computers aimed at counselor training. Computer applications were designed for skill development, exam administration, statistical analysis, and supervision (Froehle, 1984; Lee & Pulvino, 1988; Phillips, 1983). Untrained and inexperienced faculty as well as the uniqueness of the individualized courses impeded the further development of computer technology in the counseling field (Lambert, 1988).

By the end of the 1980s and the beginning of the 1990s, managed care entered the behavioral health field. Computers were used by non-professionals to track and approve service and compute third party payments. Treatment needed to be tied to the Diagnostic and Statistical Manuel (DSM) (American Psychiatric Association, 1994) so that treatment was predictable, coded, and properly inserted into a database for patient tracking. This impacted the counselor/client relationship in the areas of confidentiality and treatment planning. Many counselors reacted against this use of technology because they felt they should not be required to justify their effectiveness in a field that was not quantifiable or programmable (Granello, 2000).

The technological changes of the 1990s gave the counselor/computer relationship a boost. The boom of the World Wide Web (WWW) and the Internet

took computer access and put it in the hands of the every day user (Granello, 2000). Almost all professional counseling organizations have web pages, list servers, and consumer information links. Information is abundant and easily obtained on different therapies, different treatments and different counselor credentialing.

The new millennium is seeing an increase in mental health services available on line. Counselors are advertising and are developing practices that include online therapy. Clients who, in the past, were unable or unwilling to receive services are able to take advantage of this medium. Online counseling opens a new door to those who are in geographical locations where mental health providers are scarce, allowing those with physical or mental disabilities an opportunity to link into the system, providing access to those who might be better served by a specialist regardless of geographical limitations and providing support for those who are too busy, too burdened or too reluctant to venture to a therapist's office. It allows counseling to begin, evolve, and provide opportunities to those who currently have impediments for receiving mental health treatment through more traditional methods (Sussman, 1998; Harris-Bowlsby, 2000).

### *Internet Counseling*

The Internet and the World Wide Web (WWW) have become a part of our every day existence. It is no different for those in the helping professions. Computer connections are enhancing human connections. Professionals are finding the Internet an adjunct to managing their professional practices. Email is

the most common and preferred form of communication between colleagues; academic professionals in the counseling field are relying more and more on the Internet to supplement their course material; clinicians are using the Internet to conduct and support research (Smith & Senior, 2001; Nickelson, 2000). In fact, over the next decade it is predicted that computer-mediated communications such as email, websites and the Internet will play an even larger part in the delivery of behavioral health care (Budman, 2000).

The use of the Internet to provide counseling and psychotherapy is a recent phenomenon (Smith & Reynolds, 2002). The Internet sites use many different labels, such as “cyber-therapy,” “cyber-counseling,” “cyber-psychology,” “e-therapy,” and “virtual coach therapy” to advertise online therapy (Smith & Reynolds, 2002). There are several sites that are accessible simply by typing the word “e-therapy,” “psychotherapy,” “counseling,” or “therapy” into a search engine box.

The earliest known organized service to provide mental health advice online was called “ask Uncle Ezra”. This free service was named after Cornell University’s founder and was offered free to the students. It began in 1986 and has been in continuous operation ever since (Ainsworth, 2002). In 1993, Ivan Goldberg began fielding questions about depression online. His information was educational as it responded to questions about medications (Ainsworth, 2002). Since 1995, John Grohol has offered free mental health advice in his weekly public chat (Grohol, 1999). In mid 1995, fee-based mental health services entered the picture. Most services were geared to answering one question for a

small fee (Ainsworth, 2002). David Sommers is sometimes considered the primary pioneer of online therapy. He was the first to establish a fee-based Internet service that established long-term ongoing helping relationships. From 1995 to 1998 he worked with over 300 persons in his practice (Ainsworth, 2002).

There are four main methods of practicing online counseling: email, chat, web-based messaging, and video-conferencing (Dunaway, 2000; Grohol, 2003; Barak, 1999). Email is widely used due to its accessibility, logistical setting, ease of use and cost. Everyone who has access to the Internet has access to email. Since it is asynchronous, participants do not have to be online at the same time. Email becomes an ideal medium for those individuals with different time schedules, providing the opportunity for introspective responses. It can be used as an adjunct to traditional therapy (Kicklighter, 2000). The main drawback to using email is the potential insecurity of the information. Email accounts are sometimes shared between people and email can be easily compromised (Dunnaway, 2000; Grohol, 2003). While the technology for encryption is available, the software for it does not come installed on most home computers and is somewhat hard to install.

Chat is also a widely used online counseling forum although not as widely used as email (Grohol, 2003). The chat rooms provide a medium for several participants and can provide a virtual group session. Since it is synchronous, the participants have to be logged on at the same time, so scheduling and time become considerations. Security is again an inherent problem with chat, as confidentiality can be easily compromised (Dunnaway, 2000).

Web-based messaging is the newest form of online counseling. It allows the counselor and the client to interact in a secure, web-based environment using a third-party host. It offers the best of the asynchronous communication found in email with the security of a third party host. According to Grohol (2003), it is currently underutilized and will be the type of service to look for in the future.

Video conferencing offers the participants visual as well as spoken communication. It does, however, require the participants to sit in front of a camera and requires the participants to have compatible video equipment. The technology needed is more costly then that needed for chat or email and requires training and skill to use (Grohol, 2003).

The numbers of online practitioners has risen from a handful in 1996 to over 300 today, with as many as 200 Web sites offering access to about 350 online counselors (Lauerman, 2002). Some sites provide private, real time chat rooms and others list therapists who practice virtual counseling. There are also sites that provide discussion groups and sites where a psychologist will function as a mediator or group facilitator (Lauerman, 2002).

### *Implications of Internet Counseling*

Over the years clinicians have incorporated such innovations as the telephone, the one-way mirror, videotape and the pager into their practices (Bailey, Yager & Jenson, 2002). While these technological advances enhanced the ability to care for clients, they also presented challenges to the profession. Using the Internet as a counseling intervention is no exception.

***Advantages.*** Advocates cite the following as the most prominent benefits of online counseling: (a) the ability to reach clients without the constraints of time and logistics; (b) the ability to establish a permanent record of the therapeutic exchange; (c) the ability to access therapists with specialized training who may not be available in their locale; and (d) the ability for clients to more freely share information they might not otherwise share (Hughes, 2000; Smith & Reynolds, 2002; Hartwell-Walker, 2001; Gross, 2001).

Online counseling transforms the concepts of time and logistics. There is no traveling involved. There are no appointments to be kept. There is no rush hour traffic and no waiting room crowds with which to contend. This counseling medium allows access for those clients who might be disabled, ill or who lack transportation (Sampson, Kolodinsky, & Greeno, 1997; Occhetti, 2002). It enables those who live miles from the nearest town, those who work shift jobs, or those who have jobs that do not allow time off for an appointment to interact with a counselor when it is convenient for them (Robson & Robson, 2000). If synchronous dialogue is recommended, it allows both the client and the counselor to schedule a time that is mutually convenient.

The email based counseling allows both the counselor and the client the ability to take the time needed to find the word or phrase that best expresses their ideas and meanings (Hughes, 2000; Derrig-Palumbo, 2002). According to Dunaway (2000), e-therapy “decreases the typical inhibition of patients in a face-to-face session to fully disclose information and immediately get to the heart of the matter.” (p.3). There is also a written verification of the conversations. This

allows both the therapist and the client the opportunity to verify and refer back to what was previously written.

Cost is another benefit of Internet counseling. The cost of interactions via the Internet is lower given the decreased need for office space and overhead associated with face-to-face counseling (Dunaway, 2000).

***Obstacles****. The main obstacles surrounding online counseling are: (a) patient confidentiality; (b) licensing and out-of-state services; (c) truth in advertising; and (d) risk management (Dunaway, 2000; Hughes, 2000; Smith & Reynolds, 2002). Confidentiality is one of the major obstacles to providing online counseling (Smith & Reynolds, 2002). Internet communications are not secure unless both client and provider use encryption technologies to secure the information. This problem can be solved by installing the same encryption software that is used by banks and other at-risk entities. It is available to the public through such formats as PGP software and can be purchased at a reasonable cost (Dunaway, 2000). The drawback to this solution is that the software does not come installed on home computers and can be difficult to install (Grohol, 2003).*

Another hurdle for counseling on the Internet is the issue of out-of-jurisdiction counseling (Leslie, 2002). On the one hand, state licenses restrict clinicians to practice within the state. On the other hand, one of the advantages of using the Internet for counseling is that clients can come from anywhere on the globe. Is a counselor practicing without a license if they are counseling someone from a different state? How does it affect the client if something goes wrong?

Maheu and Gordon (2000) found that 78% of the practitioners they surveyed indicated they provided services to people living in a state other than that state where they were licensed or registered to practice. Additionally, only 68% reported that they checked the state regulations of the person for whom they were providing services.

The potential for imposters to falsely represent themselves is another obstacle of Internet based counseling. This can occur both with the therapist and the client. Neither party has the verifiable methods to ensure that the therapists or the clients are whom they say. Web sites offering help are not governed by regulations that restrict sites to only licensed counselors or therapists. There are, however, some rudimentary steps being taken to ensure the authenticity of counselors. Some web sites list the licensing credentials of the counselors. There is also a credentialing check service on the Metanoia web site that verifies the authenticity of online providers (Lauerman, 2002).

One of the frequent criticisms of online counseling is the lack of visual and verbal clues that would aid the counselor. Smith and Reynolds (2002) note two serious risk management issues regarding this lack of face-to-face communication. The first is the counselor's ability to assist the client when there is imminent danger. When a client becomes suicidal, it is the counselor's responsibility to ensure the client's safety. While the counselor can outline proper procedures via email, such as calling a suicide hotline or going to a nearby hospital, there is no way to ensure that the client will heed the advice. The second is the potential inability to provide the appropriate level of care. Smith

and Reynolds (2002) note that without the face-to-face contact with the client the counselor is unable to "fully assess a clients' mental status and determine an appropriate clinical intervention…" (p.23)

***Regulations.*** There is some evidence that there are several thousand mental health professionals with at least a portion of their practice on the Internet (Bloom & Walz 2000). Due to the fact that Internet counseling has the potential to harm consumers (Bloom 2000; Sampson, Kolodinsky, & Greeno, 1997), professional organizations have adopted guidelines for counselors. The American Counseling Association (American Counselor Association, 1999) and the National Board for Certified Counselors (Bloom & Sampson, 1998; NBCC, 1997) have approved ethical standards for on-line counseling. The American Psychological Association (1996) has published guidelines for clinicians and the International Society for Mental Health Online (2000) has not only published guidelines but is actively fostering continued research in the field of online counseling. Counselors and other professionals need to monitor the delivery of services on the Internet through their professional organizations (Lee, 2000).

One such study looked at professional counselors and their degree of compliance with the National Board for Certified Counselors' (NBCC) core standards for Internet Mental Health Practice. In this study, Heinlen, Welfel, Richmond & Rak (2003), looked at 138 web sites that offered counseling through computer chat rooms and email. They looked at what kinds of services were being offered, what kind of fees were collected, whether professionals were acting in compliance with the NBCC standards for practice and how the levels of

compliance compared between those with and without professional credentials. Their results indicated a low level of compliance with the standards set by the NBCC, with the modal number of standards with which they complied as three (out of 13). Not one of the sites was in full compliance with the standards. The standard with the highest compliance with the NBCC standard was the standard for provision of contact information for times when the counselor was off line. The standard with the lowest compliance percentage was the standard for identifying a counselor-on-call. Eight months after the original study was conducted, 37% of the counseling sites were no longer in existence. The authors of this study urge professional organizations to take an active role in sponsoring research into the effectiveness of online counseling. Their position is that having the standards in place without evidence of compliance leaves the public "with the mistaken impression that these services are helpful and endorsed by the leaders of the profession" (p.68).

***Research Studies***

According to Wolf (2003), computer-based practice will be one of the major trends in clinical practice over the next 10 years. Computer-using patients are asking for their practitioners email addresses, and they desire Internet services to augment their medical care (Grover, Wu, Blandford, Holcomb, & Tidler, 2002). In their study they distributed 600 surveys to clinical sites in the Colorado area. The results showed that patients not only showed a strong interest in computerized front desk services such as booking appointments and email reminders but also wanted access to back office services such as

requesting refills to medications and requesting referrals. The ability to send a message to their doctor also ranked high on their preference list. They showed moderate interest in virtual visits for simple or chronic medical problems (Grover, Wu, Blandford, Holcoomb, & Tidler, 2002). Subsequently, clinicians are increasingly using email as an adjunct to their practices. A study by Stroh (1999) reported that of 10,000 physicians sampled, 85% used the Internet as part of their practice and one-third exchanged emails with their patients.

Using email increases the frequency and amount of contact between patients and clinicians. It lets the patients know their clinicians are present and thinking about them in between sessions (Yager, 2002). It also enables patients to write and send messages whenever the inspiration strikes. The patient can reveal all they desire without interruptions. Studies have found that individuals feel freer writing to a computer than talking to a person (Negroponte, 1996).

One of the areas where research indicates a positive use of email is in the treatment of eating disorders (Tate, Wing & Winett, 2001; Wizenberg, Epstein, Eldridge, Wilfrey, Dasmahaparta, & Taylor, 2000; Zabinski, Pung, Wilfrey, Epstein, Winzelberg, Celio & Taylor, 2001; Yager, 2002). Yager (2002) worked with young patients diagnosed with anorexia nervosa. When his practice moved from Los Angeles to New Mexico, several patients asked if they could correspond with him via email. Since that time, Yager has incorporated email as a part of his ongoing treatment for anorexia nervosa. In between weekly visits, patients email daily recounts of their eating habits. While the benefits of email are difficult to specifically tease out due to the fact that that they are part of a

more comprehensive treatment plan, Yager sees the email as having been helpful in each of the cases (Yager, 2002).

Substance use and abuse is an area that is experimenting with computer-assisted strategies. As Orlandi, Dozier and Marta (1990) point out, the welfare of adolescents in the past two decades has been challenged by the availability of alcohol, tobacco and other readily available drugs. The difficulty that traditional treatment programs have had with abstinence have lead the way to interest in using computer-assisted strategies.

Brown and D'Amico (2002) examined the rate that youth voluntarily selected one of three alcohol intervention formats offered at their high school. The three formats were group discussion, individual sessions and computer Web sites. Components of the intervention included normative feedback, expectancy challenges, discussions of stressors among youth, identification of a personal need to change and/or self monitor drinking, and strategies to help communicate more effectively with peers, parents and other authority figures. Six 30-minute group sessions, four 30-minute individual sessions, and unlimited Web site access were promoted and offered at three high schools in San Diego, CA. Approximately 10% of the 4500 students participated in the project the first year it was offered. Of the youth who voluntarily used the interventions, 80% self selected the group format, 5% selected the individual format and 12% used the Web site. While the majority of students chose the group format, which stresses the appeal of discussion among peers, the Web based intervention was significant in reaching a portion of the students.

There are also studies that show the effectiveness of using Internet technology for treating anxiety disorders (Cohen & Kerr, 1998; Klein & Richards, 2001). In one study, Andrew and Erskine (2003) studied the use of computer support for treating anxiety and depressive disorders. They went a step further than just using the computer to provide patient education. They used the computer to deliver cognitive behavior therapy (CCBT). They designed a program and are currently conducting a large randomized trial that uses their computer program called CLIMATE. At present, there are five modules for depression that vary by age, sex and predicament and two for anxiety. The modules provide not only education about the disorder and the medication but also provide cognitive therapy via the computer. This includes information about graded exposure with homework printouts. Patients self monitor their level of anxiety and depression using various psychological distress scales.

In another study related to panic disorder, Newman, Kenardy, Herman and Taylor (1997) sought to determine whether the efficiency and cost-effectiveness of cognitive-behavioral treatment (CBT) could be improved by adjunctive computer assisted therapy. Participants were between the ages of 18 and 64 and were recruited through advertisements. Eighteen participants were chosen who met the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 1994) criteria for panic disorder. The participants were randomly assigned to a 12-session CBT condition or to a 4-session computer assisted CBT. Palmtop computers with a program developed to incorporate the principles of CBT were used. They carried the computer at all

times and continued to carry it for 8 weeks after their 4 initial sessions. Statistical analysis detected significant effects of both treatments at posttest and follow-up with no between treatment differences. Both treatments eliminated the presence of panic attacks.

A comprehensive study that focused on a wide range of therapeutic issues was conducted by Day and Schneider (2002). They compared process and outcome variables across three treatment groups: face-to-face, telephone and video psychotherapy. On the process side, Day and Schneider looked at the "working alliance", or emotional bond, between the client and therapist. On the outcome side, Day and Schneider looked at results assessed by both the clients' and the clinicians' point of view. Eighty subjects were randomly assigned to one of the three treatment groups or to a four to five week wait list that served as a control group. The problems most frequently reported concerned body image/weight, family relationships, self-esteem and work/school issues. Clients received five free sessions of cognitive-behavioral therapy. All the sessions were videotaped, even when the client and therapist did not see each other. In the face-to-face treatment group the client and clinician sat in the same room. In the video condition each member sat in a separate room and viewed each other over a closed circuit television monitor. In the audio condition, each participant used a hands-free audio-only system where they could connect and speak to a therapist who was in another room. The clients never knew that the therapists were in a room nearby. The videotapes were viewed by raters who watched three, five-minute segments of each videotape. The results showed no statistically

significant difference between the three delivery modes for either process or outcome. The only statistically significant difference was that clients in distance therapy participated more actively than those in face-to-face therapy. The researchers speculated that the clients in the distance modes perhaps made more of an effort to communicate, or took more responsibility for the interaction, or perhaps the distance made those participants feels safer.

### *Summary*

The relationship between counseling and computers has a history that dates back to the mid 20th century, when theorists like B.F.Skinner developed ideas about programmed instruction which became the historical antecedent to today's web-based distance education (Bloom & Walz, 2000). As the century progressed and the availability, accessibility and affordability of computers increased, the integration of computers into the counseling profession also increased. The 1950's saw the advent of the mainframe computer; the 1960's brought the more user-friendly programming languages; and, the 1970's and 1980's brought the invention of the microcomputer. It was then that computers started showing up in schools, libraries and other public places. In 1989 when the World Wide Web became part of the Internet, access to global information was in the hands of the every day user.

The schools are the perfect place for this enhanced computer - counselor relationship to thrive. Comprehensive school counseling programs have replaced

traditional vocational programs. National standards for the development of school counseling programs have been initiated that promote not only academic vocational (i.e. career) growth but academic and personal/social growth as well. High school counselors have access to adolescents and computers. Currently, many schools offer computer based interactive programs to help adolescents bridge the work to school gap (Refvem, Plante, & Osborne, 2000). There is a trend for school counselors to use computer technology for student advocacy (Hohenshil, 2000; Stone & Turba, 1999). Counselors are trained in computer usage and are in the perfect position to help students integrate computer support into their curriculum.

The period of development known as adolescence is significant for providing professional assistance in the schools as they struggle with a variety of developmental issues. For many it is a long period of education, exploration and deferred responsibility. Developmentalists refer to it as the period that bridges childhood to adulthood. As such, it is a time when many youth try out new behaviors and look to form their own identity. Drug use and abuse, increased violence to themselves and others, sexual identity and the pervasiveness of media and technology are all challenges that face adolescents in the 21st century.

Today's adolescents are computer savvy and have incorporated the Internet into their social and work life (Howard, Rainie, & Jones, 2001). Email represents the largest activity for adolescents who go online. Ninety-two percent of adolescents, who go online, read email (Lenhart, 2001). They go online at

home, in school and in the library. Adolescents are using the Internet as a way to communicate with each other, to find out information about health related issues and to explore the worlds of music and merchandising (Lenhart, 2001).

As the new millennium continues, a new door into the relationship between computers, adolescents and school counseling opens. Through email, web conferencing, video link and chat rooms, counselors are now assessing the viability of using the computer for interactive therapy (Dunaway, 2000). Currently, online counseling is being used in schools for educational purposes related to drug use and abuse, for adjunct treatment for persons with anxiety and depressive disorders, and for adolescents with eating disorders. Online computer counseling sites are available and Internet counseling is taking place throughout the United States (Smith & Reynolds, 2002). It is reasonable to envision an expansion of this trend to include additional online counseling as an adjunct to student support services in our high schools.

# CHAPTER 3

# METHOD

In this chapter, the methods that were used for this descriptive study of an independent college preparatory high school (grades 9-12) are outlined. The study was designed to investigate adolescents' willingness to utilize online counseling in comparison to adolescents' willingness to utilize current face-to-face counseling in a school setting. The topics addressed in this chapter include: (a) a restatement of the specific research questions; (b) the participants, including the site and the community; (c) an explanation of the instruments used in the study; (d) a description of the procedures; and (e) an explanation of the data analysis procedures.

## Research Questions

The research questions addressed in this study were:

1. To what extent are adolescents aware of online counseling?
2. To what extent are adolescents willing to utilize the available face-to-face school counseling?
3. To what extent are adolescents willing to utilize online school counseling services if they were available?
4. How does the willingness of online versus face-to-face school counseling services compare?

In addition, male and female responses were compared to check for the potential of gender differences. Responses were also compared to look at the potential for differences across grade levels.

## Participants

In order to get the best possible information, students active in online usage were needed. An independent college preparatory institution that educates boys and girls from junior kindergarten through 12th grade was chosen for this study. The school is one of five schools of the Church Schools in the Diocese of Virginia. It consists of three distinct campuses: a lower school housing a junior kindergarten through grade five; a middle school for grades six through eight; and an upper school that includes grades nine through twelve. The 2002/2003 total student enrollment was 1151.

The school is located approximately six miles outside of Washington D.C. The lower school campus sits on 15 acres in a quiet residential community. The 2002/2203 enrollment was 399 students. The middle school, which sits on seven acres adjacent to a city park, had a 2002/2003 enrollment of 314 students. The upper school campus is located in a residential community and occupies 35 acres. The 2002/2003 enrollment was 438 students. The male/female breakdown in the total student enrollment is almost 50/50, with 581 males and 570 females. Twenty percent of the student body is made up of students of

color. In total, the school encompasses 12 buildings, eight sports fields, eight tennis courts, and three gyms. There are 107 classrooms, 11 science labs, six art studios, six music studios, and eight computer labs. The maximum class size is 18 and many of the specialty classes (e.g., language, art, and advanced computer) enroll only eight to ten students.

The co-educational school setting is the result of the merging of two independent, single sex schools. The girls' school was founded in 1924, and the boys' school was founded in 1944. Both schools operated under the same governance system and merged in 1991 to become a college preparatory co-educational institution.

The mission of the school is to help students succeed in a "complex and changing world" (Student handbook, 2002)**.** To that end, the school balances a rigorous academic curriculum with a competitive sports program and a broad expanse of extracurricular programs. All interactions within the school are governed by an honor system that emphasizes the development of personal integrity, self-discipline, and personal dignity.

Admission to the school is competitive and follows a structured admission process. Students may enter the school at any grade level although openings are not guaranteed at all grade levels. Applying students are required to complete a standardized academic achievement test, a personal interview, and provide references from former school faculty. Each student's academic progress is reviewed yearly before a new enrollment contract is offered.

Ninety-nine percent of the students complete high school and the same percent plan to continue their education in a college setting. In 2001, graduating seniors were accepted at 64 different colleges and universities, including several Ivy League and nationally acclaimed universities.

**Counselors and Advisors**

The school employs a director of counseling who is available to all students and their families. In addition, each campus has a designated counselor who works in and out of the classroom. The counselors all hold at least master's level degrees in educational counseling. Their primary responsibility is to support the personal growth of each child. The counselors are located on site at the respective campuses. They provide groups for specialized populations such as children from divorced families as well as individual and family counseling. They also support open groups such as "lunch-bunch" groups in the elementary school. They are available before and after school and adhere to an open door policy for any student needing assistance.

In addition to the division counselors, the school provides college and academic counselors as well as two chaplains. The college counselors work with each student as they plan and prepare for college admission. The chaplains field issues that relate to ethical or spiritual concerns. They are available to all students and their families.

## Technology

For students, formal computer instruction starts in the elementary school, with word processing being a required course in the middle school. Before completing the eighth grade, all students are familiar with and have used the Internet for projects and work assignments. The High School strives to utilize the latest computer technology and upgrades its hardware and software resources yearly.

The High School offers courses in basic and advanced word processing, web page design, and basic and advanced programming. By the time students reach the 12$^{th}$ grade, they will have the opportunity to complete additional courses in graphic design, theater technology, and robotics. Advanced placement courses are offered in programming.

The High School houses an up-to-date computer lab. It is open for students before and after school and during non-classroom time. In addition to the computer lab, all subject classes have computer access, and the web is often used as a teaching tool in the classroom. Students are given email access.

According to the 2002/2003 annual parent survey, 98.2% of all the students also had Internet access in their homes. For those students attending the High School, the percentage of Internet access in their homes was 99.4%.

## Summary

The High School is a private, sectarian school located in a suburban neighborhood near a large metropolitan city. Before being admitted to the school,

students must demonstrate academic capability and are required to pursue academic goals in order to maintain enrollment.

The school promotes computer competency by mandating basic computer instruction in middle school as well as by offering a variety of advanced computer classes in high school. It is a setting where all students have access to computers and the Internet. Computers designed for student use are in the classrooms and in a designated computer laboratory.

The counseling program at the school offers a variety of services. There are college counselors, chaplains and support counselors. The counselors offer support in and out of the classroom and involve parents and families in their programs. Given the accessibility of counselors and the focus on computer competency, the school seems an appropriate choice for a study that looks at the willingness to use the Internet as a counseling support service.

As technology becomes increasingly interwoven into one's every day life, professionals need to make informed decisions about how and when to incorporate technology and its components into their profession. Counseling in the school setting is one place to look for a positive partnership.

## Instrument

The instrument used in this study was a questionnaire (see Appendix A). The questionnaire was divided into two sections. The first section looked at adolescents' Internet use. This set of items was used to document the frequency

of Internet use, the locations where adolescents connected to the Internet and the type of activity that occurred when the adolescents were connected to the Internet. These questions were designed to validate the adolescents' familiarity and adeptness with the Internet. The questions were adapted from two national questionnaires that looked at different aspects of adolescent online usage. The first was a research project conducted by the Pew Internet and American Life Project and Princeton Survey Research Associates (Lenhart, 2001). That survey looked at how adolescents and their parents viewed the Internet as it related to adolescent social development. The second was a research project conducted by the Kaiser Family Foundation (2001), that looked at adolescents' activities online. The adapted questions in the first section of the study's instrument had six response options, plus a "don't know " option. The rank ordered responses were from every day, two or three times a week, once a week, one or two times a month, less than once a month, and never.

The second part of the questionnaire consisted of items that dealt with service information. The first question in this section looked at the services that were available to the students at their high school. This was used to determine the extent to which students knew what services were available to them at their school. The school provided the list of five types of counseling services that are offered. Two additional items were added to tease out those respondents who might indiscriminately select all the items and/or who were simply guessing about available services.

The next two questions dealt with the willingness of adolescents to contact a school counselor either in person or online. Students responded twice to each of five different problem areas. The problem areas that were chosen were the areas that were repeated on both a list of the most frequent issues for adolescent mental health (Wilhelm & Reynolds, 2002) and those that were on the list of areas reported by S. DeLaurentis (personal communication, April, 2002), a counselor at the high school. Responses were coded using a 5-point Likert scale, from very likely to not likely at all. These questions were designed to address the research questions that looked at the willingness of adolescents to use online counseling services and face-to-face services.

Questions seven and eight addressed the question of adolescents' awareness of online counseling sites. Students were asked to indicate if they were aware of online counseling sites and whether they had ever accessed such a site.

Question nine was designed to assess adolescents' general attitudes about contacting a counselor either online or face-to-face. Students could rank the seven statements using four response options from strongly agree to strongly disagree plus a "don't know" option.

The next three questions were about demographic data. The purpose of this was to look at age and gender to determine the likelihood that these factors were relevant to the likelihood that adolescents' would prefer online or face-to-face counseling.

An open-ended section at the end of the questionnaire allowed students the opportunity to add any comments. The comments were sorted and, where appropriate, were categorized and coded.

## Data Collection Procedure

### *Human Subjects Protection*

Due to the involvement of human subjects, the University Institutional Review Board (IRB) was consulted for the appropriate procedures that would protect participants as well as protect the integrity of the study. A research protocol and approval document detailing the justification for the project, the procedures, and the risks and benefits was prepared and signed by the appropriate school official (see Appendix B).

### *Informed Consent*

A request for exemption of research involving human subjects was requested based on the fact that the research would be conducted in an established educational setting, the subjects could not be identified, and that the disclosure of their responses would not put the subjects at risk. The request for exemption was approved by Virginia Tech's Institutional Review Board (see Appendix C).

### *Administration of the Questionnaire*

Students meet in advisory classes for 15 minutes every Monday morning. The questionnaires were distributed by a school administrator to the advisors prior to the agreed upon Monday morning. A brief statement for advisors to read was attached. The introduction emphasized the purpose of the study as well as assured the adolescents of their anonymity and their voluntary participation. Students were asked to complete the questionnaire at that time and return it to their advisor. If a student did not want to complete the questionnaire, he or she had the option of handing in a blank paper, so it could not be discerned who participated. Each faculty advisor collected the completed questionnaires in a sealed envelope and returned them to the school administrator. Arrangements were made to collect the questionnaires at the end of the day.

## *Analyses*

This descriptive study was designed to assess adolescents' likelihood of utilizing online school counseling services. This willingness was compared across gender and grade. The willingness to use online counseling was also compared with the adolescents' willingness to use the available face-to-face counseling services.

All the numerical data from the items on the questionnaire were entered on an Excel spreadsheet. The spreadsheet data file was precoded with categories from the questionnaire as the columns and each case listed as a row.

Each responding adolescent was given a record number starting with one. The last question, which was open-ended, was analyzed and categories were created to reflect a positive or a negative attitude toward online counseling.

Using SPSS, version 11.5, frequency tables listing response percents and medians were presented for each item. Additionally, cross tabulations using chi-square analyses were used to compare responses for gender and grade with their likelihood for using online counseling. Cross tabulation was used to compare frequency of online users with willingness to use online counseling as compared with face-to-face counseling.

# CHAPTER 4

# RESULTS

The purpose of this study was to investigate the willingness to utilize online counseling in a school setting. A questionnaire was used to gather data about adolescents' computer usage, their awareness of online counseling, and their receptivity to both face-to-face-counseling and online counseling. This chapter begins with a profile of the participants, including demographic data about the participants and information about the participants' Internet usage and their knowledge of the counseling services that were available to them at their school. The second section reports the research findings in relation to the research questions. Students' awareness of online counseling and the likelihood that students would utilize either face-to-face or online counseling is described. This section also describes the students' awareness of online counseling as a counseling option and if they have ever visited an online counseling site. The chapter concludes with a discussion of the students' attitudes relevant to counselor contact.

## Participant Profile

### *Demographic Data*

The participants in this study were high school students, grades nine through 12, who were enrolled in a co-educational, private school located outside a large metropolitan area. The total enrollment of the high school for the 2002/2003 academic school year was 438 students. Questionnaires were handed out to all students present during an advisory period in April 2003, with 305 questionnaires being returned. Of those 305, five were discarded due to insufficient response data. Students who were absent that day or were not in the advisory period at the time the questionnaires were distributed were not accounted for. Based on the assumption that no students were missing on that day, the response rate for the questionnaire would be 69.6%. The actual response rate would be somewhat higher depending on attendance in advisory that day. Table 4.1 shows the demographic data of the participants.

As shown in Table 4.1, there was an almost even split between males and females, with slightly more male participants (53%) then female (45%). This reflects the overall male/female distribution of the school. There were slightly more 9$^{th}$ and 10$^{th}$ graders (30% for both) than 11$^{th}$ (20%) and 12$^{th}$ graders (17%) who responded to the questionnaire. The total distribution of the 438 students by grade was 109 (25%) ninth graders, 105 (24%) 10$^{th}$ graders, 111 (25%) 11$^{th}$ graders and 113 (26%) 12$^{th}$ graders. On the day that the questionnaires were distributed, 11$^{th}$ and 12$^{th}$ graders were allowed to leave their advisory to meet

with college advisors. This, coupled with absences and the students' refusal to complete the questionnaire, probably accounted for the lower participation of the 11th and 12th graders.

**Table 4.1 Demographic Information (N = 300)**

| Variable | | N | Percent |
|---|---|---|---|
| **Age** | | | |
| | 14 | 18 | 6.0 |
| | 15 | 92 | 30.7 |
| | 16 | 80 | 26.7 |
| | 17 | 55 | 18.3 |
| | 18 | 48 | 16.0 |
| | Missing | 7 | .3 |
| **Gender** | | | |
| | Male | 158 | 52.7 |
| | Female | 135 | 45.3 |
| | Missing | 6 | 2.0 |
| **Grade** | **(Enrollment)** | | |
| | 9 (109) | 90 | 30.0 |
| | 10 (105) | 90 | 30.0 |
| | 11 (111) | 62 | 20.7 |
| | 12 (113) | 51 | 17.0 |
| | Missing | 7 | 2.3 |

### *Internet Usage*

The responses from the questionnaire showed that the participants were frequent users of the Internet, with 84% using it at least 2-3 times per week. Well over half the participants accessed the Internet every day (60%). Only one student never used the Internet, with 8% not responding to this item. Table 4.2 shows the distribution of Internet usage.

*Table 4.2 Internet Usage of Participants*

| *Frequency of Internet Use* | **N** | **Percent** |
|---|---|---|
| Every Day | 179 | 59.7 |
| 2-3 times a week | 73 | 24.3 |
| 1-2 times a month | 15 | 5.0 |
| < once a month | 6 | 2.0 |
| Never | 1 | 0.3 |
| Missing | 25 | 8.3 |

Table 4.3 describes the location of students' Internet access, as well as different types of Internet activity. Based on responses to frequency of access of 1 = every day, 2 = two or three times a week, 3 = once a week, 4 = one or two times a month, 5 = less than once a month, and 6 = never, median values indicate that at least half of the students accessed the Internet at least once a day from home, at least once or twice from school, and rarely from other places. The most common activities were sending and receiving instant messages, with 60% doing so every day, and sending and receiving email (40% every day). Over three-fourths of the responses were evenly divided in using the Internet to research school information 2-3 times a week (26%), once a week (25%), or 1-2 times a month (28%). Respondents rarely used the Internet to visit a chat room, look for health related information, look for information on hard to discuss topics, or download study aids.

*Table 4.3 Internet Access Location and Activity of Participants*

| | Median Category | Percent[a] | | | | | |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 |
| ***How often did you access the Internet from…*** | | | | | | | |
| Home | Every day | 64.0 | 21.0 | 7.3 | 3.0 | 1.3 | 1.0 |
| School | 1-2 times a month | 6.0 | 12.3 | 18.0 | 19.0 | 20.7 | 18.7 |
| Friend's house | < 1 a month | 2.7 | 5.3 | 16.3 | 21.3 | 19.0 | 28.7 |
| Library | < 1 a month | 3.0 | 2.7 | 8.0 | 12.0 | 18.7 | 48.7 |
| Other | Never | 1.0 | .3 | .7 | 2.3 | 4.0 | 82.3 |
| ***When you went online, how often did you…*** | | | | | | | |
| Send instant messages | Every day | 60.3 | 17.0 | 6.0 | 3.7 | 4.0 | 7.7 |
| Send or read email | 2-3 times a week | 40.3 | 26.3 | 16.7 | 8.0 | 3.3 | 3.3 |
| Research school information | Once/week | 6.3 | 26.3 | 25.3 | 27.7 | 6.7 | 4.3 |
| Visit a chat room | Never | 4.7 | 2.0 | 3.0 | 5.3 | 13.7 | 68.0 |
| Look for health related information | Never | 2.0 | 2.3 | 6.7 | 7.7 | 19.0 | 57.0 |
| Look for information on hard to discuss topics | Never | 1.3 | 1.3 | 3.0 | 10.0 | 20.7 | 55.7 |
| Download study aids | Never | 3.0 | 4.3 | 7.7 | 7.3 | 12.0 | 60.3: |

[a] Responses are: 1 = every day; 2 = two or three times a week; 3 = once a week; 4 = one or two times a month; 5 = less than once a month; 6 = never

### *Knowledge of Services*

Students were asked to indicate their knowledge of the counseling services that were available to them at the school. The list was comprised of

seven items. Five of the items were obtained from the coordinator of counseling and two items that were not offered at the school were added to tease out those students who indiscriminately selected items. Table 4.4 shows the results of the students' knowledge of the five services that were available to them. It also shows how many students checked the services that were not available.

**Table 4.4 Knowledge of Counseling Services (N = 300)**

| | N | Percent |
|---|---|---|
| Available services | | |
| | 252 | 84.0 |
| Individual counseling | 132 | 44.0 |
| Study skills | 72 | 24.0 |
| Career | 38 | 12.7 |
| Divorce | 28 | 9.3 |
| Family counseling | | |
| Unavailable services | | |
| | 138 | 46.0 |
| Stress management | 75 | 25.0 |
| Time management | | |

The frequencies in Table 4.4 show that over 80% of the students were aware that individual counseling was available at the school. Almost half of the students (44%) were aware that groups for study skills were available and nearly one quarter of the students (24%) knew that career counseling was available. Most students were not aware that there were groups for children from divorced families (only 13% being aware) or that family counseling was available (9% were aware). However, almost half of the students (46%) thought that stress management groups were offered at their school and one quarter (25%) of the students thought time management groups were available. Neither of these was offered at this school.

Although interesting, the numbers in Table 4.4 provide a limited picture of the overall knowledge of services. To better understand this, two new variables were created. One was used to capture the total number of valid services that a student identified (from none to five). The other variable was a measure of whether students selected neither, only one, or both of the fictitious services listed. The cross tabulation of these two variables is given in Table 4.5.

**Table 4.5 Knowledge of Services by Amount (N = 300)**

| **Actual Services** | **Unavailable Services** | | | | |
|---|---|---|---|---|---|
| | **0** | **1** | **2** | **N** | **%** |
| **0** | 34 | 2 | 0 | 36 | 12.0% |
| **1** | 64 | 27 | 10 | 101 | 33.7% |
| **2** | 39 | 33 | 24 | 96 | 32.0% |
| **3** | 11 | 24 | 16 | 51 | 17.0% |
| **4** | 0 | 2 | 2 | 4 | 1.3% |
| **5** | 0 | 3 | 9 | 12 | 4.0% |
| **N** | 148 | 91 | 61 | 300 | |
| **%** | 49.3 | 30.3 | 20.3 | | |

Half of the students were unable to discriminate between those services that were available and those that were not, selecting at least one of each. Only two students selected only an available service. Twelve students checked all five available services. But, nine of the twelve also checked both fictitious services and the other three checked one fictitious service, indicating a lack of real knowledge. Nearly one third (30%) chose one of the services that were unavailable and 20% chose both of the services that were unavailable. Overall, only 38% of the students were not distracted by either of the invalid services

listed, but, at best, they knew of no more than three of the five counseling services that the school provided.

***Knowledge Score.*** In order to allow for future comparisons between knowledge and other responses, an artificial dichotomy was created. Students were identified as knowledgeable if they selected any of the five services that were available and neither of the fictitious services listed (N = 114 or 38%). Unknowledgeable included the rest of the students who selected fictitious services and/or recognized none of the actual services (N = 186 or 62%). Although only 38% of the students were categorized as at least somewhat knowledgeable, there was a statistically significant difference between males and females at the .10 significance level (Chi-square = 3.0, p = .084). Only 34% of the males were knowledgeable but 43% of the females were.

## Adolescents and Online versus Face-to-Face Counseling

### *Awareness of and Willingness to use Online Counseling*

The first research question dealt with the extent to which the adolescents were aware of online counseling. As Table 4.6 illustrates, nearly three-quarters (71 %) of the students were unaware that counseling was being offered online. Only 2% reported having visited an online counseling site. This shows that the majority of the almost 30% of the students who were aware of online counseling still did not visit an online counseling site.

**Table 4.6 Awareness and Accessing of Online Counseling (N = 300)**

| Variable | Frequency | | Percent | |
|---|---|---|---|---|
| | Yes | No | Yes | No |
| Awareness of online counseling | 81 | 212 | 27.6 | 70.7 |
| Visited an online counseling site | 6 | 288 | 2.0 | 96.0 |

The second, third and fourth research questions all dealt with the willingness of adolescents to utilize online and/or face-to-face counseling. The second research question was: to what extent are adolescents willing to utilize the available face-to-face school counseling? The third question was: to what extent would adolescents be willing to utilize online school counseling services if they were available? The fourth research question was: how does the willingness to use online versus face-to-face school counseling services compare?

These research questions were approached from three different avenues. The first was to look at the likelihood that students would contact a counselor either face-to-face or online in respect to specific identified issues; the second was to look at their willingness to contact a counselor either face-to-face or online given the assumption they wanted to contact a counselor and when no identified issues were presented; and, the third way was to look at students' attitudes relevant to counselor contact.

### *Likelihood of Counselor Contact for Identified Issues*

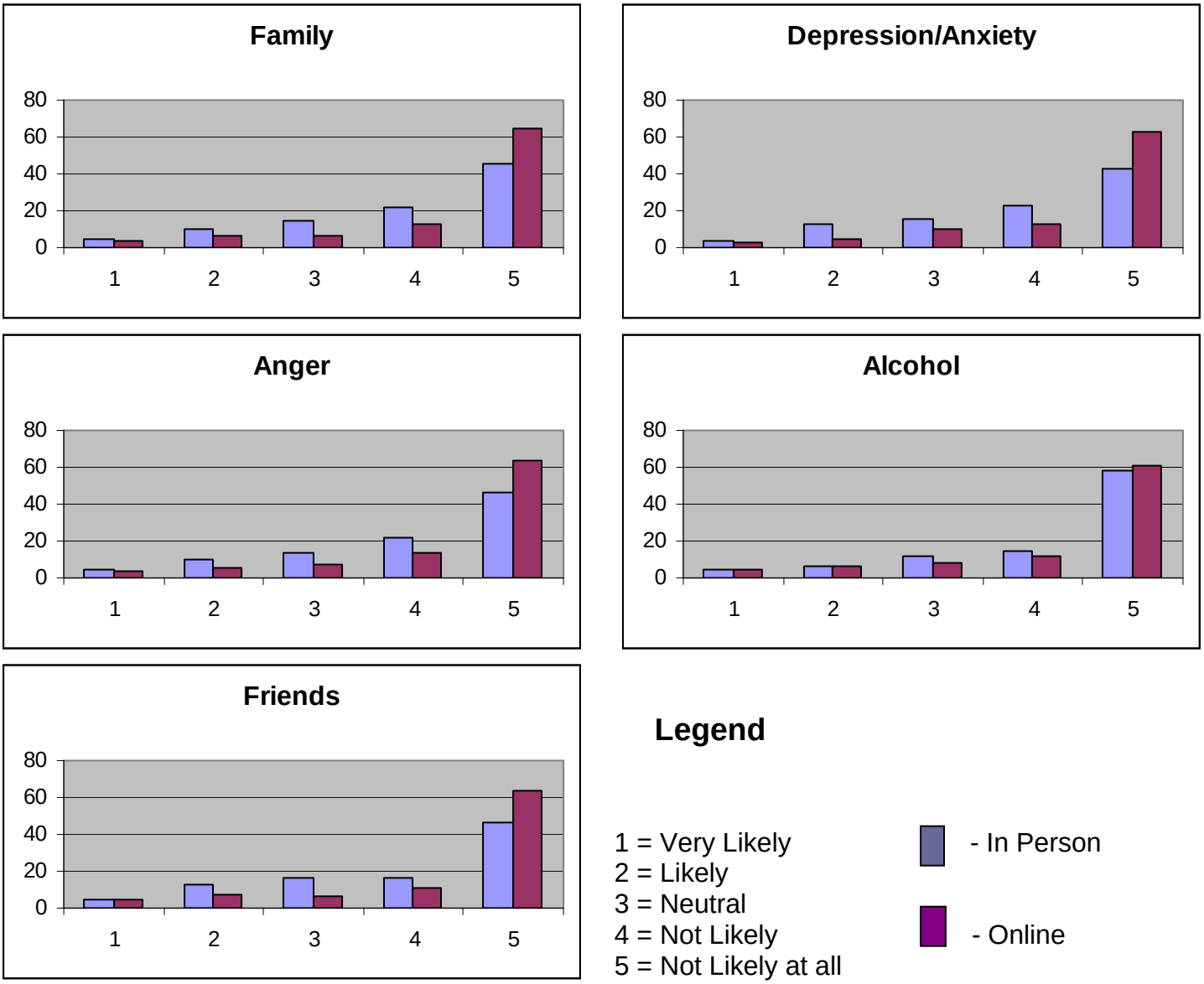
Students were asked the likelihood that they would contact a school counselor either face-to-face or online for those issues that were common to both

the list of most frequent issues in adolescent mental health (Wilhelm & Reynolds, 2002) and the list given by S. DeLurentis (personal communication April, 2002), a counselor at the school. These issues included family problems, depression or anxiety, anger, alcohol or drug use, and problems with friends. The results are shown in Figure 4.1. The results are very striking. They show that most students were not very likely to contact a school counselor either in person or online for any of these issues. Almost half were not at all likely to contact a counselor in person, while over 60% were not at all likely to do so online. Only about 5% were very likely to contact a counselor either in person or online. It is interesting to note that although there was the same percentage of students who would be very likely to contact a counselor either online or in person, it was not the same students who indicated that likeliness.

Taken as a group, the five likelihood items had a Cronbach's alpha reliability coefficient of .94 for online responses and .91 for in person responses. Average scores for the five identified issues were 4.3 for online and 4.0 for in person, where 1 = very likely and 5 = not likely at all. The average scores did not differ between males and female in either case ($t = -.31$, $p = .76$ for online and $t = .96$, $p = .34$ for in person).

Likewise, there were no statistically significant differences across grade levels for likelihood of contacting a school counselor online ($F = .46$, $p = .71$) or in person ($F = 1.78$, $p = .15$).

Figure 4.1 Comparison of In Person to Online Counseling




***Likelihood of Contact Given Knowledge of Service.*** In order to see if there was a relationship between knowledge about the available services and the likelihood that the students would contact a school counselor, knowledge of available services was cross tabulated with each of the identified problem areas. There was no statistical significance when knowledge of services was crossed

with the likelihood that students would contact a school counselor for any of the identified issues.

***Likelihood of Counselor Contact without Identified Issues***

When students were asked more general questions about meeting with a counselor (e.g. "if you wanted to meet with a counselor…), the responses showed more of a willingness to meet with a counselor in person, with 34% of the students likely or very likely to meet with a school counselor in person. However, only 16% of the students were likely to meet in person with a counselor who was not associated with their school. Over 60% of the students were not likely at all to contact a counselor on line, regardless of whether the counselor was or was not associated with their school. Almost three-quarters of the students were not likely at all to use a counseling chat room. Table 4.6 shows the frequency data for this question.

**Table 4.7 Likelihood of Counseling Options**

| | Median | Percent[a] | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| *How likely would you be to:* | | | | | | |
| Meet with a school counselor in person | Neutral | 14.0 | 20.0 | 20.0 | 14.7 | 27.2 |
| Meet with a non school counselor in person | Not likely | 5.3 | 10.7 | 15.3 | 18.3 | 47.0 |
| Contact an online school counselor | Not likely at all | 1.7 | 6.7 | 9.3 | 17.7 | 61.3 |
| Use a counseling chat room | Not likely at all | 1.0 | 3.7 | 9.3 | 13.0 | 69.7 |
| Contact a non school counselor online | Not likely at all | 2.3 | 8.3 | 8.0 | 12.7 | 65.3 |

[a]Responses are: 1 = very likely; 2 = likely; 3 = neutral; 4 = not likely; 5 = not likely at all

### *Attitudes Relevant to Counselor Contact*

When students were asked to respond to general statements related to contacting a counselor, the results were quite different from those responses when students were asked about the likelihood that they personally would contact a counselor either in person or online. Their responses showed that the students liked the idea of being able to email a counselor any time of the day or night (50% agreed or strongly agreed with this statement) and were more comfortable giving information about themselves when they were at home as opposed to a professional setting (39% agreed or strongly agreed with this statement). Almost 50% of the students liked the idea of sitting face-to-face with a school counselor. When asked to respond to statements about writing or talking about feelings, students did not show a preference. Only 11% of the students trusted the information they got from the Internet more than they trusted the information they got talking with someone. Table 4.7 shows the frequency data for these responses.

### Written Comments

Another way to assess attitudes was to categorize the written comments at the end of the questionnaire. Only 37 students (12%) chose to write comments. Of the 37 students, 8 (22%) of the comments were positive statements about online counseling. Most of the comments thought online counseling was a good idea. According to one student, “Online counseling would give teens a place to talk and get help while remaining anonymous”.

The remaining 29 (78%) students who chose to comment expressed negative statements about online counseling. Of those, the most common response was that they did not know if they could trust the person or the information they received online. One student's comment was interesting. "The whole point of counseling is to speak with a human being not through a computer but instead, face to face."

**Table 4.8 Attitudes Relevant to Counselor Contact**

| Statement | Percent[a] | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | DK |
| I like the idea of being able to contact a school counselor by email at any time of the day or night | 14.7 | 36.0 | 9.0 | 9.3 | 28.3 |
| I like the idea of sitting face-to-face with a school counselor to discuss my problems | 14.7 | 32.7 | 18.7 | 16.7 | 14.7 |
| I express myself better when I talk about my feelings | 14.0 | 28.0 | 19.7 | 13.0 | 21.0 |
| It is easier for me to write about my problems than to discuss them face-to-face | 12.7 | 24.3 | 23.7 | 15.3 | 20.7 |
| I am more comfortable giving information about myself when I am in my home setting | 10.0 | 29.7 | 21.0 | 14.0 | 22.0 |
| I am more comfortable giving information about myself when I am in a professional setting | 5.3 | 20.0 | 25.0 | 18.3 | 28.0 |
| I trust the information I get on the Internet more than I trust the information I get talking with someone | 2.7 | 8.0 | 27.7 | 39.7 | 19.0 |

[a]Responses are: 1 = strongly agree; 2 = agree; 3 = disagree; 4 = strongly disagree; 5 = don't know

## Summary

The 300 participants in this study reflected the overall male/female distribution of students at the school. All grades were represented, with a slightly lower participation rate for 11th and 12th graders. Given the total enrollment of

438 students, and the fact that not all students were present when the questionnaire was distributed, the response rate for the questionnaire was at least 70%.

The students who participated in this study were frequent users of the Internet, were avid users of instant messaging, and sent or read email two to three times a week. They accessed the Internet most frequently from home (64% doing so daily), with school access being a distant second (only 6% doing so daily).

Respondents were, for the most part, not knowledgeable of the counseling services that were available at the school. Only 38% of the students knew that one, two, or three of the counseling services were available to them. Only 12 students (4%) said they knew of all five of the services and even those students selected services that were not available, indicating a lack of real knowledge.

This knowledge of the services did not show a correlation with the likelihood that students would contact a school counselor either in person or online. For all of the five identified issues that typically present in the counseling office, the median values showed that students were not at all likely to contact a school counselor in either venue.

While unlikely to contact a school counselor for identified issues, students were slightly more positive about their generic attitudes relating to counselor contact. About half of the students liked the idea of being able to contact a counselor at any time of the day or night and almost 40% said they were more comfortable giving information about themselves in the home setting.

# CHAPTER 5

# DISCUSSION AND RECOMMENTATIONS

This chapter presents a summary of the results of the study, which are based on the findings from the analyses of the data. The implications of the results are discussed in relation to the current counseling practices. The chapter concludes with a discussion of recommendations for future practice and research. The goal of the study was to investigate the potential for online counseling as a school counseling tool for use with adolescents.

## Discussion of Results

In responding to the first research question about adolescents' awareness of online counseling, the data indicated that the participants in this study were mostly unaware of online counseling, with only 28% responding positively to the question. Subsequently, only 2% of the respondents reported ever having visited an online counseling site. This is not surprising given the newness of online counseling as a counseling option and limited number of online practitioners. According to Luaerman (2002), there were only a handful of practitioners with online sites in 1996 and about 350 online counselors today.

When students were questioned about their online activities, the students in this study reported sending instant messages and sending and reading email

as their most frequent activities. They were unlikely to access the Internet to look for health related information or to look for information about hard to discuss topics. The median response for both of these activities was “never”. While the most popular computer activities reported by the students in this study mirror the national statistics found in both the Lenhart (2001) study and the Kaiser Family Foundation study (2001), there is a difference in the number of students who used the Internet to look for information about health related issues. The Kaiser study (2001) reported that 76% of youth ages 15-17 had researched one or more health related topics on the Internet. In this study, fewer than 50% of the students said they looked for information about health related topics.

The second research question dealt with the students’ willingness to utilize the face-to-face counseling that was available at their school. Students were asked to respond to the question in relation to specified areas such as family problems, alcohol/drug use, and depression. The results indicated that students were not willing to use the available face-to-face counseling services. No more than 15% of the students were likely to contact a school counselor face-to-face. It is very interesting to note that the results also indicated that the students were not knowledgeable about the counseling services that were available to them at their school. No student was able to pick out the five services that were available without choosing either one or both of the unavailable services that were listed as distracters. When asked to indicate what services were available to them, only 38% of the students could discriminate between those services that were and were not available. Of this 38%, none of them knew of more than three of the

five services that were available. While there was no statistical significance when knowledge of service was cross tabulated with willingness to contact a school counselor, perhaps if students had more knowledge about the services they might be more willing to contact a counselor.

The third research question addressed the potential for students to use online counseling if it was available to them at their school. Again, the students were asked whether they would contact an online counselor, if one were available, in relation to the specified areas. Fewer than 10% of the students were likely or very likely to contact an online counselor if one was available.

However, when asked about their attitudes relevant to contacting a counselor in general, students showed a somewhat different profile. About 50% of the students liked the idea of being able to contact a counselor at any time of the day or night and almost 50% liked the idea of sitting face-to-face with a counselor. Additionally, about 90% of the students said they trusted the information they got talking with someone more than the information they received from the Internet.

Students today are taught about the perils of the Internet in their regular academic classes. They are taught not to “trust” the research information they glean from the Internet unless the information is from a sanctioned site. Children are taught in school and at home not to trust people whom they might meet on the Internet, and our newspapers report stories about Internet imposters whose goal it is to lure unsuspecting victims. The students, themselves, may have at one time or another assumed a false identity in order to access a prohibited

Internet site or to anonymously take part in a chat room conversation. The students' lack of trust was evidenced in the comment section of the questionnaire. Several students noted lack of trust as their main objection to online counseling. This lack of legitimacy surrounding Internet activity may account for the discrepancy in the students' responses. While the students liked the idea of being able to contact a counselor at home and at any time of the day or night, they would not be likely to contact one due to their lack of trust for that person's legitimacy.

The last research question compared the willingness of students to contact a counselor face-to-face versus their willingness to contact one online. While the responses leaned slightly towards face-to-face, as a whole, the students were unlikely to contact a counselor at all.

It is important to look at the results of this study in relation to the development of these adolescents and to the relationship that these students have with the counselors at their school. Adolescence is the time for exploration. It is the time when peers replace parents, when adolescent egocentrism develops, and when adolescents see themselves as invincible. Counselors and teachers are adults and, for many youth, adults are the last stop as they explore their identity. It is not perceived as "cool" to go to the counselor, especially to go to a counselor who works closely or has a personal relationship with their teachers. Many youth may fear that the information they share with their counselor may be information the school counselor will share with their parents or other teachers. Peers are seen as the ones with the answers. These may all

be reasons that they are unwilling to contact counselors face-to-face. And, while adolescents are using email to discuss their intimate concerns with each other, it may also be a reason they are not willing to use that same technology to communicate with adults.

It is also interesting to look at how the different functions of the counselor might impact the adolescents' willingness to contact their school counselor. The role of the counselor is not only to help the student with personal issues, but also to assess and direct the academic progress of the student. In general, the counselor is in a position to make recommendations about classes, about clubs and organizations and about entrance to college. Even though the school where the study was conducted has separate college counselors, the general counselors still play a role in the academic progress of the students. It is easy to see how a student might see their disclosure about drug/alcohol use or their problems relating with family as having a negative impact on their ability to advance in the academic arena.

In addition to the four research questions, responses were compared by gender and grade. No statistically significant patterns were found in relation to the research questions. Only one minor difference was evident: females were slightly more knowledgeable of school counseling services than males were.

## Limitations

The participants in this study were 300 high school students enrolled in a co-educational, private high school located outside of a large metropolitan city. The school was chosen due to the computer literacy of its students, the availability of the counselors, and the accessibility of the students. All students attending this school had taken a computer literacy class before entering high school and had used the Internet for school related projects. The counseling program offered personal and academic counselors in addition to designated college counselors. And, the adolescents were accessible. All students reported to an advisory teacher for a brief 15-minute period during the day. It was a time used for special activities and did not interfere with regular academic classes. However, due to the school's strong commitment to student as well as family privacy, the school placed restrictions on the length of the questionnaire that could be distributed and the types of issues the questionnaire could address. The school exercised the right to edit or otherwise delete questions they felt did not meet with their approval. The questionnaire had to be completed and collected at school, within the 15-minute advisory period. Additionally, in keeping with the privacy considerations, no focus groups or follow-up interviews were allowed. As such, it is not possible to generalize the results of this study to an entire population of adolescents. However, they should be illustrative of similar schools where students have a relatively high computer literacy rate.

## Implications for Practice

Although these survey results are limited in their generalizability, they reflect a number of implications and concerns regarding school counseling and providing counseling via the Internet. Visibility of counseling services is the foremost issue to be addressed. Students at this school, for the most part, were not knowledgeable of the services that were available to them. While they were aware that counseling was available, they were unable to distinguish what services were available to them and what services were not. This could have a major impact on whether or not students are willing to contact the school counselor. It is unreasonable to expect students to contact a counselor when they do not know what issues are appropriate for discussion. It is the responsibility of the counseling department to make sure the students know what kinds of services are available to them and how to contact the counselors. This can be done in a variety of ways. For example, it is not enough for schools to offer an assembly on drug and alcohol use and abuse or to conduct activities surrounding national drug prevention week. Counselors need to make sure their students know what specific types of services are available to them surrounding those and other issues. Will the counselors provide assessment and/or intervention? Are there peer support groups available? Or, is the counseling center a referral source, a place where the student can come to find an outside

resource? Who will have access to the information I share with you and how can I find out this information before I step inside the door?

One possible solution is for the counselors to go into the classroom or into an advisory period with planned activities that highlight the role, function and accessibility of the counselors. This could also help to make the counselors more approachable. Some students never have face time with the counselors and, therefore, may not know if the counselor is someone to whom they can turn to when they need assistance. Or the counseling department can create a link to the school's home page or frequently asked questions page, with information about the kinds of services that are offered to the students.

Given the high computer competency of adolescents and the high Internet usage of the students at school and at home, the Internet would appear to be an ideal conduit to increase the visibility of counseling services. A good place to start would be to offer the kind of program described by Brown and D'Amico (2002). They presented three different alcohol intervention options to students who self identified as wanting to change and/or monitor their drinking behavior. The three options were participation in peer group sessions, meetings with a counselor for individual sessions, or accessing an interactive, designated Web site. Using this type of program not only raises the visibility of the kinds of services offered to the students but also gives the students a voice in their treatment intervention. Students can choose the method they feel most comfortable with or can experiment with a new type of treatment within a safe environment.

Introducing students to this type of specified Internet program also serves another function. It begins to educate students about how and when to use the Internet for counseling purposes. Students and counselors have become comfortable with the career information they can access on the Internet. For example, in Virginia, some schools sanction and promote the use of career-oriented sites. One of these sites, Virginia VIEW (www.vaview.vt.edu), reported that 100,000 high school students accessed their career information site in 2000. Counselors can expand this education and comfort by providing and promoting student access to other developed sites, such as the BARN system (Bosworth, 1994), that address more interpersonal or health related issues. Counselors could also develop an "ask the counselor" site modeled after the "Ask Uncle Ezra" site developed by Ivan Goldberg in 1993 (Ainsworth, 2002).

In an initial conversation with the director of counseling at the research site used for this study, she emphasized how busy the counselors were. In fact, she explained how the school had increased their staff to accommodate the student need. If the students are reporting their unwillingness to contact a counselor and the counseling staff is busy, the question arises as to what activities are going on in the counseling office. Do the students see the counselors as inaccessible, too busy, or otherwise engaged? One of the reasons this site was chosen was due to the fact that there were designated counselors who worked with college admissions so other counselors would be more available to students for more interpersonal issues. What about schools where the counselors are required not only to see students for interpersonal

issues, but also have the responsibility to direct and process college applications?

One of the ways to start to answer these questions is for the counselors to identify what students know about the services at their school. They can then use this knowledge as a building block for increasing the students' awareness of what services are offered. This increased awareness coupled with an increased accessibility and approachability might increase students' willingness to use the counseling services either face-to-face or online.

## Implications for Research

It is clear that adolescents are faced with a myriad of issues that affect their development and their ability to be successful in school. Substance abuse has been on the rise in the United States (Johnson, O'Mally, & Bachman, 2000), with alcohol being the most commonly used drug. Almost 45% of high school seniors reported using an illicit drug in their lifetime (Kaminer, Burleson, & Goldberger, 2002). Birth rate and abortion rates are higher for adolescents in the United States than for all other developed nations (Annie E. Casey Foundation, 1998), and eating disorders are among the most widespread disorders associated with the onset of adolescence for females (Hine, 1999). The problems are there for many of the youth in the high schools. How come these adolescents are not willing to access the services that could potentially help them with these problems? The results of this study highlight this question. What is

the reason they are unwilling? Is it a confidentiality issue, or the anonymity issue, or is it the adolescent's gravitation toward their peers and away from adults? Is it the kinds of programs that are offered in the schools? Are the counseling programs perceived as tied into academic success so students are reluctant to approach school counselors with personal issues? It is striking that students are not likely to contact a counselor for any of the issues identified in this study. The results of this research beg for the "why" answers to these questions.

One of the limitations of this study was the fact that the study took place in a homogeneous school environment. All of the students performed at a similar academic level and computer usage was high at both the school and at home. It could be assumed that, for the most part, given the mission of the school, the students were from similar socio-economic backgrounds. This could have impacted the results of this study in a number of ways. Perhaps, students were not willing to contact a school counselor due to the fact that they had other avenues for addressing their problems that would not have any impact on the school community. Or, given the fact that the school was a church-based environment, perhaps the students were more likely to address their interpersonal needs within the church community. Similar research conducted in a public school environment where socio-economic status was heterogeneous and where the role of religion was less central would address these issues.

Given the results of the research, it is possible that the practice of using online counseling may be better suited for treating some disorders than for

others. Current studies show success in using the Internet, specifically using email, as adjunct therapy for treating eating disorders, depression, and anxiety disorders (Yager, 2002; Andrew & Erskine, 2003; Newman, Kenardy, Herman & Taylor, 1997). Perhaps, once a face-to-face counseling relationship is established, students would be more inclined to participate online. Or, perhaps online counseling is appropriate for only specific disorders as Yager (2002) points out in his work with anorexia nervosa patients. This study was not designed to investigate the problems or benefits of online counseling. Additional studies need to address the potential benefits and problems and the specificity of using online counseling in treating specific disorders as well as using online counseling as an adjunct treatment.

A follow up qualitative study could explore the discrepancies in the student responses in the data. For example, how might students, themselves, explain their apparent unwillingness to go to a school counselor but their positive attitudes about the access that online counseling would provide? Also, counselors' attitudes about online counseling could be explored. A follow up study could address the counselors' comfort level with interacting with students online, their attitudes about the advantages and disadvantages of online counseling and their opinions about the students' apparent unwillingness to contact a counselor either face-to-face or online.

## Summary

The absence of sufficient empirical research at this time makes it impossible to objectively evaluate the benefits of online therapy (Maheu & Gordon, 2000). This applies to using online counseling as a school counseling tool. What is evident is that using the Internet to access information for students interested in career information and in information about topics related to their physical and mental health is growing and the availability of that information will most likely continue to grow in the future. How school counselors use that information and how they make that information available to students deserves more attention and additional research. Adolescents, by definition, are transitioning into adulthood and are surrounded by new decisions, new experiences, and new possibilities. The computer and Internet access are now playing a big role in their development and decision making. This marriage between adolescents and technology can only grow and continue to infiltrate their development.

As the Internet continues to take a more central role in adolescents' development, additional research will continue to evaluate its place in the counseling programs in the schools. As teachers and counselors become better

trained and more proficient using computer technology, they will provide more online opportunities for their students.

In her evaluation of the benefits and drawbacks of providing counseling on the Internet, Martha Ainsworth (2002) stated that discussions about online therapy have shifted from “Should e-therapy be offered?” to “How should e-therapy be offered to be most effective and ethical?” The direction is clear. Computer-based practice will be one of the major trends in clinical practice over the next 10 years (Wolf, 2003). More and more people will continue to look to the Internet as a resource for dealing with their health related issues. Additional applications for using virtual reality in a counseling setting will inevitably be developed. Continued research in the use and applicability of online counseling will help shape the future of professional counseling.

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# APPENDICES

## APPENDIX A

Questionnaire

Adolescents and Online Counseling Opinions

# Adolescents and Online Counseling Opinions

*I am a doctoral student who is interested in adolescents, computer usage and the possibilities of online counseling. Your opinions are valuable to help determine how the Internet might be used in the future. I hope you will help me by answering the following questions, which should take no more than 10 minutes of your time, and will help establish a baseline for this area of study. Your answers will be anonymous and only summary results will be presented. No one's answers will ever be singled out. Thank you in advance for providing your answers and your thoughts on this important topic.*

Pat Lunt
patlunt@aol.com

## A. Internet Usage

For each item below, please circle the number that best describes your Internet use, using the following scale:
*1 = every day 2 = two or three times a week 3 = once a week 4 = 1 or 2 times a month*
*5 = less than once a month 6 = never DK = don't know*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1. In the past month, how often did you go online, use email or instant messaging? | 1 | 2 | 3 | 4 | 5 | 6 | DK |
| 2. When you went online, how often did you access the Internet: | | | | | | | |
| a. From home? | 1 | 2 | 3 | 4 | 5 | 6 | DK |
| b. From school? | 1 | 2 | 3 | 4 | 5 | 6 | DK |
| c. From a library? | 1 | 2 | 3 | 4 | 5 | 6 | DK |
| d. From a friend's house? | 1 | 2 | 3 | 4 | 5 | 6 | DK |
| e. From someplace else, like an Internet café? | 1 | 2 | 3 | 4 | 5 | 6 | DK |
| 3. When you went online, how often did you: | | | | | | | |
| a. Send or read email? | 1 | 2 | 3 | 4 | 5 | 6 | DK |
| b. Go to a chat room? | 1 | 2 | 3 | 4 | 5 | 6 | DK |
| c. Send "instant messages"? | 1 | 2 | 3 | 4 | 5 | 6 | DK |
| d. Look for health, dieting or physical fitness information? | 1 | 2 | 3 | 4 | 5 | 6 | DK |
| e. Get information about something that's hard to talk about? | 1 | 2 | 3 | 4 | 5 | 6 | DK |
| f. Do research for school assignments? | 1 | 2 | 3 | 4 | 5 | 6 | DK |
| g. Download study aids? | 1 | 2 | 3 | 4 | 5 | 6 | DK |
| h. Other? | 1 | 2 | 3 | 4 | 5 | 6 | DK |

## B. Service Information

4. Which of the following services are available to you at your school? Please check all that apply.
__ a. Groups to develop your study skills
__ b. Individual counseling
__ c. Groups for students whose parents are divorced or separated
__ d. Family counseling
__ e. Stress reduction groups
__ f. Career exploration counseling
__ g. Time management groups

*For the next two questions, please circle the number that best describes you on a scale from 1 to 5.*
*1 = very likely to 5 = not likely at all*

| 5. If you had a concern about the following issues, how likely would you be to contact a school counselor **in person and online** about the following: | **In person** | *Online* |
|---|---|---|
| a. Family problems…….. | 1 2 3 4 5 | 1 2 3 4 5 |
| b. Depression or anxiety…….. | 1 2 3 4 5 | 1 2 3 4 5 |
| c. Anger……... | 1 2 3 4 5 | 1 2 3 4 5 |
| d. Alcohol or drug use……. | 1 2 3 4 5 | 1 2 3 4 5 |
| e. Problems with friends……. | 1 2 3 4 5 | 1 2 3 4 5 |

6. If you wanted to contact a counselor, how likely would you be to:

| | |
|---|---|
| a. Meet with a school counselor in person? | 1 2 3 4 5 |
| b. Contact an online school counselor? | 1 2 3 4 5 |
| c. Use an online counseling chat room? | 1 2 3 4 5 |
| d. Contact an online counselor not associated with your school? | 1 2 3 4 5 |
| e. Meet with a counselor in person not associated with your school? | 1 2 3 4 5 |

7. Are you aware that online counseling is available? ___ yes ___ no

8. Have you ever visited an online counseling site? ___ yes ___ no

9. Please circle a number from the scale indicating how much you agree or disagree with each statement. Please circle DK if you do not know.

*Scale*

*1= Strongly Agree 2=Agree 3= Disagree 4= Strongly Disagree DK= Do Not Know*

| | |
|---|---|
| a. I like the idea of being able to contact a school counselor by email at any time of the day or night. | 1 2 3 4 DK |
| b. I like the idea of sitting face to face with a school counselor to discuss my problems. | 1 2 3 4 DK |
| c. It is easier for me to write about my problems than to discuss them face-to-face. | 1 2 3 4 DK |
| d. I express myself better when I talk about my feelings. | 1 2 3 4 DK |
| e. I trust the information I get on the Internet more than I trust the information I get talking with someone. | 1 2 3 4 DK |
| f. I am more comfortable giving information about myself when I am in my home setting. | 1 2 3 4 DK |
| g. I am more comfortable giving information about myself when I am in a professional setting. | 1 2 3 4 DK |

Your current age is: 12 13 14 15 16 17 18 other

You are: Male Female

You are in grade 9 10 11 12 other

Please add any comments about the likelihood of adolescents using the Internet for counseling.

## APPENDIX B

Research Protocol and Approval

# Adolescents' Willingness to Utilize Internet Counseling

*Research Protocol and Approval*

Investigator: Patricia Lunt
plunt@aol.com

Faculty Advisor: Dr. Gabriella Belli
gbelli@vt.edu

## JUSTIFICATION OF PROJECT

This project is a descriptive study that will examine teens' preferences for accessing counseling services through the Internet. Given the positive relationship between the health industry and computer usage as well as the surge in computer usage among teens, using the Internet as a counseling tool is a logical next step in meeting the counseling needs of teens. The results of this study have potential implications concerning counselor training and service delivery.

## PROCEDURES

Students in grades 9 through 12 at St. Stephen's and St. Agnes School in Alexandria, Virginia, will be recruited through normal and usual homeroom activities. The students range in age from 14 to 19. Males and females are equally represented. Specific procedures are as follows:

1. Faculty advisors will distribute a one-time questionnaire to students during a specified advisory period (see attached questionnaire);
2. Students will be told their participation is voluntary and anonymous;
3. Advisors will turn in completed questionnaires to a central location.

## RISKS

The research will involve no more than minimal risk to the subjects. The subjects are familiar with questionnaires presented in a school setting and are free to choose not to participate. The administration of the questionnaire will not disrupt normal classroom procedure and its administration in no way identifies individual participants.

## BENEFITS

The benefits to the students will be potential improvements in the delivery of information and services offered at their school. The benefits to the school will be increased awareness of the students' knowledge of available programs and information about potential future trends in reaching students. The benefit to the community at large will be potential information about avenues to explore to provide services to teens. There will be no guarantees or promises made to students and/or school personnel which would encourage them to participate in this research.

At the conclusion of the research, students and/or school personnel may contact the researcher for a summary of the research.

**ANONYMITY/CONFIDENTIALITY**
Subjects completing the questionnaire will be unidentifiable. After completion, each questionnaire will be randomly assigned a number for data processing purposes only. The numbers, in no way, reflect classroom distribution.

**COMPENSATION**
There will be no compensation given to the subjects for this research.

**FREEDOM TO WITHDRAW**
Students will not be required to participate in the study. Subjects will be free not to answer any questions they choose.

**APPROVAL OF RESEARCH**
This research has been approved by the St. Stephen's and St. Agnes School.

Signature of school official

March 19, 2003
Date

## APPENDIX C

Institutional review Board Documentation

Letter Requesting Exemption of Research Involving Human Subjects

Request for Exemption of Research Involving Human Subjects

IRB Exemption Approval Letter

*Patricia Lunt*

March 25, 2003

IRB
Research and Graduate Studies
301 Burruss Hall
Campus-0106

Enclosed please find a packet for IRB review that includes the following:
1. A request for exemption of research involving human subjects. The request is based on the following information:

a. The research involves no more than minimal risk to the subjects; and
b. The subjects are located in a high school that frequently uses questionnaires as a means of data gathering and, therefore, the use of this questionnaire does not adversely affect the rights and welfare of the subjects; and
c. The school will not agree to parental informed consent and is willing to distribute the questionnaire as part of their normal curricular activities. Therefore, the research could not practicably be conducted without the waiver; and
d. I have volunteered to share statistical information to the school/ subjects at the conclusion of the research.

2. A protocol and approval document signed by the school where the research is to be conducted.

3. A copy of the questionnaire to be distributed.

Please let me know if there is additional information that you need. I am hoping to distribute the questionnaire during the first part of April.

I look forward to your response to this request,

Pat Lunt
patlunt@aol.com
(703) 845-6236 (w)
(703) 751-3627 (h)

# Form 3 - EXEMPT

IRB Proposal Review #:_____

## Request for Exemption of Research Involving Human Subjects

[please print or type responses below]

Investigator(s): ___Patricia T. Lunt_____ Faculty Advisor _Dr. Gabriella Belli_____

Department(s): ___CHRE__ Mail Code: _____E-mail: patlunt@aol.com Phone_(703) 751-3627

Project Title: __Adolescents' Willingness to Utilize Online Counseling____# of Human Subjects_438

Source of Funding Support: ____ Departmental Research ____ Sponsored Research (OSP No.:_____)

[ ] All investigators of this project are qualified through completion of the formal training program or web-based training programs provided by the Virginia Tech Office of Research Compliance.

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*Note*: To qualify for Exemption, the research must be (a) of minimal risk to the subjects, (b) must not involve any of the special classes of subjects, and (c) must be in one or more of the following categories. A full description of these categories may be found in the Exempt Research section of the Virginia Tech "*IRB Protocol Submission Instructions Document* or in the federal regulations [45 CFR 46.101(b)(1-6)]. (http://ohrp.osophs.dhhs.gov/humansubjects/guidance/45cfr46.htm#46.101)

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*Please mark/check the appropriate category or categories below which qualify the proposed project for exemption:*

[X ] 1. Research will be conducted in established or commonly accepted educational settings, involving normal educational practices [see item (1), page 6 of the "Instructions" document].

[X ] 2. Research will involve the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless the subjects can be identified directly or through identifiers linked to the subjects and disclosure of responses could reasonably place the subjects at risk or criminal or civil liability or be damaging to the subjects' financial standing , employability or reputation [see item (2), page 6 –"Instructions"].

[ ] 3. Research will involve the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior that is not exempt under item 2) above if the subjects are elected or appointed public officials or candidates for public office; or Federal statute(s) require(s) that the confidentiality or other personally identifiable information will be maintained [see item (3), page 6 of the "Instructions" document].

[ ] 4. Research will involve the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified directly or through identifiers linked to the subjects [see item (4), page 7 of the "Instructions" document].

[ ] 5. Research and demonstration projects designed to study, evaluate, or otherwise examine public benefit or service programs, procedures for obtaining benefits or proposed changes in such programs [see item (5), page 7 of the "Instructions" document].

[ ] 6. Taste and food quality evaluation and consumer acceptance studies [see item (6), page 7- "Instructions].

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| | | |
|---|---|---|
| _____ Investigator(s) | Patricia T. Lunt Print name | 3/25/03 Date |
| Departmental Reviewer | Print name | Date |
| Chair, Institutional Review Board | | Date |

rev. 3/30/01

Virginia Tech
VIRGINIA POLYTECHNIC INSTITUTE
AND STATE UNIVERSITY

**Institutional Review Board**
Dr. David M. Moore
IRB (Human Subjects) Chair
Assistant Vice Provost for Research Compliance
CVM Phase II - Duckpond Dr., Blacksburg, VA 24061-0442
Office: 540/231-4991; FAX: 540/231-6033
e-mail: moored@vt.edu

April 8, 2003

**MEMORANDUM**

TO: Gabriella Belli ELPS 0302
Patricia Lunt CHRE 0302

FROM: David M. Moore

SUBJECT: IRB EXEMPTION APPROVAL – " Adolescents' Willingness to Utilize Online Counseling" – IRB # 03-191

I have reviewed your request to the IRB for exemption for the above referenced project. I concur that the research falls within the exempt status. Approval is granted effective as of April 7, 2003.

cc: file

# VITA

## PATRICIA TROMPETTER LUNT

**EDUCATION:**

Doctor of Philosophy (Ph.D.), Counseling, Virginia Polytechnic Institute and State University, Northern Virginia Graduate Center, VA, May 2004.

Master of Education (M.Ed.), Counseling, George Washington University, Washington, D.C., June, 1977.

Bachelor of Science (B.S.), Community Development, Penn State University, University College, PA, June, 1972.

**EXPERIENCE:**

| | |
|---|---|
| **COUNSELOR** | Northern Virginia Community College<br>3001 N. Beauregard Street<br>Alexandria, VA |
| **COORDINATOR** | Survivors' Fund<br>Northern Virginia Family Service<br>100 N. Washington Street<br>Falls Church, VA |
| **FACILITATOR/ TRAINER** | The Marsam Company<br>1801 Crystal Drive<br>Arlington, VA |
| **PROGRAM SPECIALIST** | Federal Emergency Management Agency<br>Washington, D.C. & Pennsylvania |

**PRESENTATIONS:**

Supervision from a Collaborative Model, Virginia Association of Counseling And Supervision, American Counseling Association,1998.

Principles of Supervision, Principles of Management, Defense Intelligence Agency, 1997, 1998.

Conflict Resolution in the Workplace, National Institutes of Health, 2002, 2003.

Sexual Harassment, Conflict Resolution, Team Building, SOC Enterprises, 2001, 2002, 2003.

Resume Writing, Interviewing Techniques, Sallie, Mae, FDIC, Defense Intelligence Agency, 1995, 1996.

**PROFESSIONAL MEMBERSHIPS:**

International Critical Incident Stress Foundation
American Counseling Association
Metropolitan Area Career/Life Planning Association