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Suicide promotion online: Frequency of access by high risk individuals

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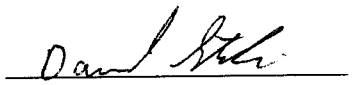

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Suicide Promotion Online: Frequency of Access by High Risk Individuals

By

Daniel Stabin

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Abstract

Online suicide promotion is a recent and potentially problematic phenomenon in which individuals provide detailed instructions for or encouragement to enact self-harm to other internet users. These types of resources are freely available to anyone willing to look for them, and there is no legal hindrance to prevent their continued operations. The purpose of this study was to investigate the frequency with which people in the general, non-clinical population access these sites with a particular interested in individuals experiencing depressive symptoms and in young adults. Both populations are likely to be influenced by suicide promotion. I predicted that individuals with depression would access suicide promotion and prevention material online more frequently than others and that young people, regardless of depressive symptoms, would access suicide-promotion material more frequently than older individuals. Participants, responding to an online ad, answered a series of surveys over the internet. A total of 127 people completed the study. Approximately 40% of respondents indicated that they had, at some point, viewed suicide-promotion material online while 22% indicated that they do so frequently. Approximately 56% reported accessing suicide prevention sites as well. Results revealed a strong association between depressive symptoms and the frequency of accessing suicide-promotion material. A strong association also exists between the frequency of depressive symptoms and the frequency of accessing suicide-prevention material. People experiencing depression appear to be turning to the internet for information on suicide, and they are reading information from a variety of potential influences. There was no relationship between age and frequency of access, indicating that older individuals are just as likely to view suicide-promotion materials as younger individuals.

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Suicide Promotion Online: Frequency of Access by High Risk Individuals

Introduction

Websites that liberally discuss suicide and suicide methods have been a recent and controversial area of study in mental health. Termed "pro-suicide" or "suicide-promotion" websites, these online destinations have received attention from researchers and the general public alike for the explicit suicidal content that they exhibit. A "suicide-promotion site" as any website that provides methodical instruction for committing suicide, advocates the act of committing suicide, or otherwise encourages the suicidal inclinations of its viewers through its content, discussion, or membership requirements. Suicide-promotion sites take several forms, varying greatly in their content, use, and intentions.

Social Support from Suicide Promotion

According to interviews with the users of certain suicide-promotion websites, people report that they use pro-suicide sites to connect with other people who are struggling with suicidal thoughts, finding the experience rewarding and conducive to their own recovery (Baker & Fortune, 2008; Eichenberg, 2007). Users are able to anonymously share their deeper concerns and darker cognitions without fearing negative social repercussions or receiving repetitive urges to seek professional help. They can engage in honest, open conversation about suicide and their unique experiences, exchanging support with like-minded individuals. Baker and Fortune found that people using suicide-promotion sites reported the experience to be more therapeutic than professional counseling, and they reported fewer and less intense suicidal inclinations after frequenting certain pro-suicide sites.

Eichenberg found that 48% of those who frequent a popular German website that allows pro-suicide discussion visit with strong constructive motives. This discussion may include sharing their problems with others, communicating openly about their feelings, and offering support to those who need it. An additional 21% exhibited more destructive motives, such as encouraging others to follow their suicidal impulses. The majority of those with destructive motives, however, demonstrated some constructive behaviors as well, using the forums to seek help with their own psychological disturbances. This finding suggests that people who pursue information about suicide online are often interested in recovery and are seeking community through online interactions.

Death with Dignity

Suicide promotion might also include death with dignity advocates, who campaign for the legal right to choose one's time and method of death. They advocate primarily on behalf of the elderly, the terminally ill, and individuals who are otherwise suffering from hopelessly debilitating ailments and wish to end their own life. In the United States, both Oregon and Washington have enacted legislation that permits physician-assisted suicide, though people are only eligible for the lethal prescription under certain limited circumstances. The legality of physician-assisted suicide is the subject of debate in several other states as well. In 2009, the Montana Supreme Court ruled that suicide is not a crime and that it is not a crime for a physician to aid that process (Associated Press, 2013). Montana legislators are currently preparing a death with dignity act for proposal. Other states, such as Massachusetts, New Jersey, Michigan, and California have unsuccessfully proposed similar legislation. Many people who desire physician-assisted suicide are thus unable to receive it, and they go online to achieve their

goal. Suicide promotion thus finds another purpose as people seek a way to end their lives peacefully, alleviating their physical suffering and removing the emotional and financial burden that their medical condition has placed on their loved ones. While the subject of physician-assisted suicide is controversial, it has many supporters.

Death with dignity websites aim to raise awareness of the issue, gain supporters, and advocate for legislation. Users of death with dignity sites often provide and openly discuss suicide methods as well, which creates additional concern that the psychologically distressed will access suicide methods intended for the terminally ill. Legislators seeking to ban online suicide promotion argue that the worth of such information to some individuals is far outweighed by their danger to others (Pirkis, Neal, Dare, Blood, & Studdert, 2009).

Online Suicide Promotion

Other suicide-promotion sites serve no obvious purpose beyond encouraging suicide attempts and improving their efficacy. Such websites may provide explicit instructions or advice for attempting and completing suicides, making available techniques that could increase a person's likelihood of completing a suicide. They may deny or revoke membership to users that try to dissuade other members from committing suicide, creating a one-sided population that normalizes and disproportionately encourages suicidal ideation (Alao, Soderberg, & Alao, 2006). Suicide promotion may also take the form of individuals who occupy generic chatrooms, blogs, and forums, posting pro-suicide content or offering encouragement to other people they encounter. For example, upon typing "how do I kill myself" into Google, the first result is Yahoo!Answers, in which one user posted "Your best bet is to find a high place and

jump. I've looked around for other methods that are painless, but they are mostly things u have to be a doctor to get a hold of..." (Cross, 2012).

Internet users may exchange advice on medication dosages or gas inhalation strategies to create a lethal, painless, clean, and/or quick death experience (Gallagher, Smith, & Mellan, 2003). One website details the locations of various parts of the brain and shows diagrams of how to best position a gun in the mouth to ensure that the person dies rather than survive with a painful or debilitating injury (Username: peace873, 2007). Many individuals who survive a suicide attempt report regretting their decision (*The Bridge*, 2006). The information that suicide-promotion websites provide thus becomes a concern as it may lead to more suicides being completed on the first attempt.

The reasons used to justify suicide promotion vary from source to source. The Church of Euthanasia, for instance, includes suicide in their "Four Pillars" of "*voluntary* population reduction" that will help restore "balance between Humans and the remaining species on Earth," (Church of Euthanasia, n.d.). The website advocates and provides methods for completing suicide in the name of environmentalism and a general disdain for the human race. The site issues a semi-regular publication called "Snuff It" and consider individuals who kill themselves using information from the site as a "success" (Church of Euthanasia, n.d.). The site provides a "lengthy pro-suicide guide" entitled, "A Practical Guide to Suicide" that covers a variety of suicide methods in detail and link to the alt.suicide.holiday newsgroup, which allows for a more active exchange of suicide information among the website's users (Recupero, Harris, & Noble, 2008)

One young woman with a history of suicide attempts accessed the Church of Euthanasia website and employed its "recommended" suicide method: helium (Gallagher

et al., 2003). The site recommends it because it is "odorless, colorless, non-flammable, widely available, inexpensive, quick, painless, discrete, accessible, clean, and a certain means of suicide." Using instructions from the site, the young woman constructed a relatively complex mask from widely available equipment. The purpose of the mask was to keep air out while transferring helium to the wearer's nose and mouth. Following hr suicide, police discovered a printed page from the Church of Euthanasia's "How to Kill Yourself" article near her body. While she likely did not believe in the Church of Euthanasia's calls for "voluntary population control," the website provided her with a final, lethal way to commit suicide when her other attempts had failed.

In some cases, people will use suicide promotion for profit. There have been numerous instances of people selling lethal drugs to other internet users, including adolescents, for the explicit purpose of committing suicide. Those individuals often claim that if a person wants to choose suicide, then they will provide the means out of respect for that person's choice (Gallagher et al., 2003). If a person is uncertain, sellers might encourage that person's suicidal inclinations in order to make the sale. One case tells of a man who committed suicide using equipment sold to him online (Ross, 2011). The equipment was a simple plastic bag and hose designed to trap helium around a person's head. It was created by an elderly woman claiming to provide the terminally ill with a better option for death. The "suicide kits" sell for $60, and it is estimated that she sells over 1,500 suicide kits every year, though it is unclear how many individuals purchasing the kits use them to make a suicide attempt (Ross, 2011).

In another recent example, a girl in England committed suicide with drugs that she purchased online. The drugs that she purchased are used for lethal injections in the

United States. She found a source for them by scouring online forums for information on suicide. The coroner, in a plea to the nation's Chief Pharmaceutical Officer, stated that while "policing the internet" is "virtually impossible," it is "a matter of public concern" that the teenager was able to get the drugs at all (Britten, 2013). Unregulated online pharmacies function similarly, selling potentially lethal prescription drugs to suicidal individuals, among other transgressions. Online communities have emerged that investigate ways to obtain controlled substances from online pharmacies, exploiting loopholes and sharing advice with other users (Recupero et al., 2008).

Suicide promotion may also occur in an attempt at humor. An Uncyclopedia article entitled "Why? You Should Kill Yourself," urges the reader to commit suicide, but the author's intention is clearly to amuse readers. The author lists a lack of achievement, unattractive appearance, obesity, romantic troubles, and similar characteristics of an outcast as reasons for suicide, stating that the "hot chick in your Math class" would finally "know your name" when the suicide was reported and to "Think of how many people want you dead" (Uncyclodpedia, 2012.) Other publications and forums have run similar pieces, such as "How to Kill Yourself Like a Man (thebestpageintheuniverse.net, n.d.), "100 Reasons Why You Should Kill Yourself" (Username: Koala MeatPie, n.d.), Adult Swim's "Five Minutes to Kill Yourself" game (AdultSwim.com, n.d.), and so forth.

While these websites clearly intend to amuse their viewers, the collective effect of their content is potentially problematic. Research has consistently demonstrated that media portrayals of suicide that normalize, glamorize, or desensitize people to the subject pose a risk of inspiring copycat behavior (Becker, 2004). This phenomenon, called the

"Werther effect," or the "suicide contagion," has been frequently studied outside the context of the internet. Results usually show a strong association between heavily publicized cases of suicide and a subsequent rise in suicide rates. A recent study shows a correlation between the prevalence of internet users and general population suicide rates (Shah, 2010). Another found that young adults cited online discussion forums as a source of suicide stories and that an association existed between hearing suicide stories online and experiencing suicidal ideation (Dunlop, More, & Romer, 2011). Continued exposure to suicide creates an impression of normalcy, and the possible impact of that exposure is potentially concerning.

Finally, some internet users encourage suicide with no apparent motive. One case, occurring in 1999, involved college student in Poland who struggled for years with anorexia and depression. She befriended a woman online who claimed to be around the same age and struggling with loneliness. During the course of their correspondence, the second woman made frequent suggestions to the first that she should commit suicide to escape her problems, offering advice on medications that she could take. Ultimately, the first girl did make a suicide attempt. She took 130 tablets that included three different drugs upon the urgings of her online friend. She survived and explained what had happened to her parents, who immediately contacted local authorities. Following an investigation, it was discovered that the second woman was 33 years old and married. She claimed that she engaged the first woman because she was "fascinated by psychology" (Chordorowski & Sein Anand, 2002).

Accessibility of Pro-Suicide Content

There are approximately 644 million active websites on the internet (Bort, 2012). Web search studies estimate that more than 100,000 websites exist to promote or facilitate suicide (Dobson, 1999). If that estimate is accurate, and if it has remained constant, then suicide-promotion websites account for just over one hundredth of one percent of all online content. The internet is vast, constantly changing, and difficult to measure, however, and studies differ in their criteria for defining suicide content (Arnold, 2005). The relative presence of suicide promotion on the internet is thus uncertain. Of course, several studies have found that suicide promotion becomes more prominent when using suicide-related search terms, accounting for approximately 11% of all search results (Kemp, & Collings, 2011; Recupero et al., 2008). Recupero and colleagues entered suicide-related search terms into several popular search engines. The researchers surveyed a total of 373 different websites from the initial results of each search. They found that 11% (N = 41) of those websites provided pro-suicide content while an additional 30.8% (N = 115) contained pro-suicide content in addition to anti-suicide content.

Suicide-promotion pages are sporadic and poorly networked (Kemp, & Collings, 2011). In contrast, suicide-prevention materials are plentiful and maintain a strong network of cooperative resources linked to their sites. They are often supported or created by professional organizations and thus receive sponsorships or donations, allowing them to obtain a stronger web presence through advertisements and greater domain ownership. Suicide-promotion sites are nevertheless easily accessible. They are open to the public, viewable without a membership, and can be found by using any popular search engine.

Furthermore, pro-suicide content is not limited to specifically pro-suicide websites. It can be found in chat rooms, message boards, blogs, and virtually any website that allows for free information sharing. Two Norwegian teenagers, for instance, met in a chat room, discussed their suicidal thoughts, made a pact to end their lives together, and committed suicide by jumping from a lethal height (Munro, 2001). Another pair of individuals met in a Japanese chat room. One was experiencing suicidal ideation and the other was already determined to commit suicide. The latter persuaded the former to join her in forming a suicide pact. They exchanged contact information and arranged a place to meet in person, though it is unknown whether or not they committed suicide (Ozawa-de Silva, 2008). In another case, a Florida teenager committed suicide live via webcam after first posting his intentions and his reasons on a body building forum. A few hours later, he overdosed on prescription medication while hundreds of other users watched him via a generic video hosting website. Many of those users actively encouraged his actions, calling him names and telling him to "go ahead and do it" (Friedman, 2008). At the time that police arrived to discover the body, there were 181 people actively watching the video stream (Abraham Biggs, 2010).

Laws exist against assisting suicide, but providing suicide information is a different matter. Legislators have proposed measures to ban online suicide promotion in several nations, but they have been repeatedly unsuccessful. Legislators feel that to enact a general ban on information provided by a website would infringe upon the public's right to free speech or equivalent protections in other nations. The only nation that has enacted a ban on pro-suicide websites is Australia, which occurred in 2006 and created a great deal of controversy (Perkis et al., 2009). The Death with Dignity movement, for

instance, has been a champion against the ban, claiming that the Australian legislation represents a denial of autonomy to the elderly and the terminally ill (Pirkis et al., 2009). Additionally, supporters of the movement feel that their political cause is being unfairly stifled, as many of their advocacy websites have be called into question or shut down as a result of the ban (Pirkis et al., 2009). The authors of the legislation refute this, claiming that their legislation aims to protect youth and other individuals who are at risk for depression, isolation, and suicidal ideation from exposure to potentially lethal information. They argue that any type of suicide promotion would be hazardous. Even if a ban were enacted in other nations, online legislation is notoriously difficult to enforce. There is a multitude of pro-suicide sites, and if one website is shut down, an equivalent website will soon emerge to replace it. As often happens, the creators of legally targeted sites will simply recreate their website under a different name. In summation, online suicide promotion is legally protected content in most of the world, and that is unlikely to change.

Consequently, suicide promotion content is not censored by search engine owners.. Even if governments had an interest in suppressing suicide promotion, their requests for censorship would be met with resistance by the companies that own the search engines, as have many such requests in the past (Welsh, 2012). Although Google will comply with specific court orders and censor illegal content such as child pornography, the company has famously refused to censor offensive content throughout its existence. Google's refusal to censor search results has led to conflicts with national governments, public officials, presidential candidates, and special interest groups (Helft, 2010; Sydell, 2012; Welsh, 2012; York, 2012). Content that promotes suicide is

concerning to some, but it is not illegal, and it therefore remains among the results for suicide-related searches.

The availability of pro-suicide content online may be a concern for parents of adolescents and young children who have grown up with the internet and are adept at seeking information online from an early age. Young people have a higher incidence of risk-taking behaviors as well, such as substance abuse, reckless driving, and nonsuicidal self-harm, which are all risk factors for suicide attempts (Joiner, 2007). Depressive disorder is prevalent among youth as well, and substance abuse often develops co-morbidly as a coping mechanism (Alao et al., 2006). All of this behavior can culminate in an "acquired ability to enact self harm," which refers to a gradually increasing comfort with risk-taking behaviors that puts a person at a greater risk for committing or attempting suicide (Joiner, 2007), and research has shown that younger people's suicidal behavior is more likely to be influenced by online content than that of older people (Dobson, 1999).

Cyberbullying

Cyberbullying, or cyber-aggression, is a separate but often overlapping issue from suicide promotion. While some people are pushed and directly encouraged to do harm to themselves, others are so insulted or attacked or humiliated through online interactions that they take it upon themselves to commit suicide. The well-publicized case of Megan Meier features an adolescent girl with a history of self-esteem problems who, through MySpace.com, befriended a woman pretending to be a handsome boy. After months of building a faux romantic relationship with Megan through this persona, the woman revealed her deception and showed their correspondences to others in the community in

order to humiliate her. Megan was so distraught that she hanged herself in her bedroom (Sanchez, 2008).

In another famous case, a freshman college student named Tyler Clementi committed suicide after his roommate secretly recorded one of Tyler's homosexual encounters and posted the video online. Tyler posted a brief suicide note on his Facebook account, "jumping off the gw bridge. sorry," before killing himself (Edwards, 2010). Neither the death of Tyler nor that of Megan resulted from direct suicide encouragement, yet the online actions of others led to their respective decisions to commit suicide. The judge who sentenced Tyler's roommate told the young man that he acted out of "colossal insensitivity" when posting about Tyler's activities and that he could not "expunge the conduct or the pain [he] caused" (Gray, 2012). Providers of suicide-promotion material may similarly be unaware of the traumatic impact that their operations can have.

The power of words, the public nature of online communication, and the relative permanency of online content make the internet a powerful tool of persuasion. If one intends to harm another individual through manipulation or persuasion, the internet provides plentiful opportunities for doing so. The anonymous nature of online communication creates an added risk. Strangers may appear well-meaning at first but harbor intentions to do harm for a multitude of reasons. The lack of face-to-face interaction may reduce the responsibility felt for other people's well-being and lessen any intrapersonal moral objections to their actions. The protection of one's identity may cause people to behave with less care and more aggression than they would in ordinary, face-to-face interactions. In the context of suicide-promotion websites, this potential for malfeasance may be amplified by the nature of the content, which details, normalizes,

and actively encourages suicide in individuals who may already be suicidal and vulnerable to persuasion.

The Influence of the Internet

The past 2 decades have seen an explosion in online communication. Since the popularization of the internet, it has attracted a continually increasing number of users to the point that the internet is now a primary method of communication among people. This is especially true for people separated by physical distance, creating a "Global Village" in which information is transmitted instantaneously regardless of geographic boundaries. The internet has had a dramatic impact on the lives of individuals and on the functioning of society at large. The social media site Facebook, for instance, recently reported hosting one billion users worldwide with more anticipated growth and has been credited with the dissolution of President Hosni Mubarak's administration in Egypt (Shaughnessy, 2012; Vargas, 2012). Broadcasts of the 2012 U.S. presidential debates were accompanied by anonymous posts from anonymous social media site users commenting on the proceedings as they transpired (Meredith, 2012).

The influence of the internet seems to permeate all aspects of society, including mental health services. According to a 2002 study, more adolescents have used the internet to pursue general health information (75% of respondents) than to shop (50%), search sports scores (46%), pursue music downloads (72%), or play games (72%) (Rideout, 2002). About 61% of the respondents who pursue health information online report doing so only a few times a year, 39% say they do so once per month, and 15% report that they check health information weekly. This suggests that as early as 2002, the internet was becoming the "go-to" resource for health advice, perhaps even before

consulting with licensed professionals. The anonymous and instantaneous nature of online information gathering makes it appealing to those who want to investigate private issues that may be embarrassing, stigmatizing, or expensive to inquire about in an interpersonal setting. A more recent study demonstrated that participants would disclose more information regarding their own suicidal ideation to a computer questionnaire than to a licensed clinician conducting an in-person diagnostic interview, suggesting a greater comfort with digital communication than with trained authorities (Levin, 2007)..

Today, with socialization tools like social media sites, chatrooms, forums, blogs, journals, and dedicated topic-sites for every imaginable subject, the internet provides an immeasurable wealth of information and opinion. The rapid and unrelenting pace at which the internet evolves makes it difficult to accurately research the influence it may on people. The content that people access through written text, images, sounds, and videos is constantly changing. For mental health professionals, the need to stay aware of online activity may be of particular importance when dealing with depressed and suicidal clients. Those clients may be more likely to pursue information or companionship online due to limited social support offline or out of a desire to find and be understood by other like-minded individuals (Baker, 2008).

Such individuals may be more vulnerable to online influences, as the internet offers them the greatest source of social interaction and support. People who are depressed or suicidal will likely turn to the internet first for information about their condition and for an outlet to express their feelings. The resources and influences that they encounter online should be of interest to mental health professionals as they develop treatments for the client.

In this study, I examined the frequency with which individuals of the general population access suicide-promotion materials online. In particular, I investigated people with depressive symptoms, as they are at a greater risk for general suicidal behavior, and young adults, who are likely to have encountered or pursued suicide information online. Individual case studies of people who reportedly used pro-suicide content to make a suicide attempt are plentiful. Several studies have attempted to estimate the amount of pro-suicide websites and determine their accessibility to the general population. The results of this study indicate how often general internet users are visiting suicide-promotion sites and whether the ones who visit most often are at a greater risk to be influenced by their content.

Hypotheses

Suicidal ideation is a predictable component of depression, and individuals who exhibit depressive symptoms are more likely to experience suicidal ideation than those who do not, and 15% of all people with severe Major Depressive Disorder will die by suicide (APA, 2000). While suicidal ideation is not a guaranteed facet of depression, it is likely to develop from it. It is also likely that individuals who are experiencing depression or suicidal ideation will be more inclined to independently research those subjects. Therefore, I predicted that:

1) High frequencies of depressive symptoms will be associated with high frequencies of accessing suicide-promotion material online.

Individuals who are depressed may be more prone to suggestion from suicide-promotion sites and more likely to make use of the material they offer. Such individuals may not limit their exposure to suicide-promotion websites, as abundant supportive

resources exist online as well. In searching the internet for information about suicide, individuals are likely to come across resources that support and encourage recovery, thus broadening their exposure and perhaps limiting their risk for suicidal actions. I therefore predicted that:

2) High frequencies of depressive symptoms will be associated with high frequencies of accessing suicide-prevention material online.

Research has shown that younger people are more likely to be influenced towards suicidal behaviors by the internet than older people (Dobson, 1999). Younger people have a higher incidence of risk-taking behaviors than older people, which also puts them at an increased risk for suicidal behaviors (Alao et al., 2006; Joiner, 2007). Young people also demonstrate higher rates of internet use than older people (Pew Research Center, 2012) Youth are often the subject of concern when discussing suicide-promotion websites, and their comfort with digital communication makes their exposure to suicide promotion a strong likelihood. Therefore, I predicted that:

3) When controlling for depressive symptoms, younger participants will show significantly higher frequencies of accessing suicide-promotion material than older participants.

Method

Participants

I recruited participants for the study online via ads posted to craigslist.com. Once posted, the ad appeared both on the Craigslist site as well as in the results of popular search engines. A total of 161 people volunteered to participate in this study. There was

no other exclusionary criterion other than that participants be at least 18 years old, allowing this sample to be more representative of the general, internet-using population.

Materials

Demographic Survey. This is a 10-item questionnaire asking participants for information regarding their gender, age, socioeconomic status, and similar categorical data. No item asks for information that could be used to identify the participant. To view this scale in full, see Appendix A.

Internet Use Survey. This is a 15-item questionnaire designed to assess the frequency with which the participant views and contributes to certain types of websites and participates in online discussion about certain subject matters. The survey uses a rating scale for participants to indicate how often they visit certain types of websites. Responses range from 0 – 4 (0 = never, 1 = once or twice, 2 = occasionally, 3 = frequently, and 4 = almost daily).

Each item provides an example of a popular website that represents a particular type of site. Each item contains three sections. The first assesses the frequency with which the participants view or access websites devoted to a particular subject matter. The second assesses the frequency with which they contribute to such websites. The third assesses the frequency with which they view or discuss that particular subject matter through websites or online communications that are not specifically devoted to the subject matter. Each section of an item has its own 0-4 rating scale, yielding 3 scores per item. To view this scale in full, see Appendix B.

Center for Epidemiological Studies: Depression Scale. This is a 20-item questionnaire designed to assess the frequency with which an individual experiences

depressive symptoms during the past week. Each item includes an experiential statement (for example, "I felt lonely") with four possible responses: Rarely or none of the time (less than 1 day), some or a little of the time (1-2 days), occasionally or a moderate amount of time (3-4 days), most or all of the time (5-7 days). Each response represents a numerical value from 0 – 3. A participant's score is determined by the sum of these items, with a higher overall score representing a more severe state of depression. A cutoff score of 16 is typically used to indicate clinically significant depressive symptoms. The CES-D shows strong reliability at assessing the number, types, and duration of depressive symptoms across populations of different age, gender, and race,. The measure shows high internal consistency and test-retest reliability, with Cronbach's alpha coefficients of .85-.90 across studies. The scale also shows strong construct, concurrent, and discriminant validity through comparisons to other self-report measures (Radloff, 1977). To view this scale in full, see Appendix C.

Procedure

I conducted this study online, recruiting participants via advertisements in the cragslist.com volunteer section. As craigslist divides its website according to geographic location, I chose specific regions to post the ads by random selection. The ad identified the study as an investigation into internet use habits and gave a brief description of the procedure. The ad also identified the incentive and provided a direct link to the survey.

Participants first read an informed consent statement that they acknowledged through electronic consent before attempting the survey. Upon giving their consent, participants received a series of questionnaires in the following order: The Demographic Survey, the Internet Use Survey, and the Center for Epidemiological Studies: Depression

scale. There was no time limit, and no identifying information was collected during the process. Participants received a short debriefing letter thanking them for their participation along with a list of online resources for individuals seeking counseling or other mental health treatment. They acknowledged electronically that they had received this list before proceeding.

Upon completion of the survey, participants had the chance to enter their e-mail address into a drawing. The prize was a $10 gift card to an online retailer. Entry was optional. During the drawing, ten participants were randomly selected to receive the incentive, which I delivered to their e-mail addresses along with a brief message to thank them for participation. Upon delivery of the incentive, I deleted all participants' e-mail addresses from record.

Data Analysis

The first hypothesis predicted that high CES-D scores would correlate with high frequencies of access of suicide-promotion material on the web. Using a Pearson's correlation, I compared participants' total CES-D scores to their total score for suicide promotion access. The latter score was the sum of the person's scores on each subscale of the suicide-promotion item on the internet use survey. As each section response ranges from 0-4, the total "suicide-promotion" score had a possible range from 0-12.

I used a second Pearson's correlation to assess the second hypothesis as, which predicted that high CES-D scores would correlate with high frequencies of access of suicide-prevention material on the web. The correlation compared participants' total CES-D scores to their scores on suicide-prevention access, which also ranged from 0-12.

Finally, I used a one-way ANCOVA to test the third hypothesis of this study, which predicted that younger people would view suicide-promotion material more frequently than older people. Age 30 served as the cut-off point between younger and older individuals because individuals age 18-29 years old have the highest rates of internet use among adults (Pew Research Center, 2012). Age, the independent variable, thus included two levels: 30 years old or older and under 30 years old. Suicide-promotion scores were the dependent variable, and CES-D scores served as the covariate.

Results

Participant Data

A total of 161 people participated in this study. Of those participants, 13 withdrew from the study after agreeing to the conditions of the informed consent. An additional 11 participants filled out the demographic survey before withdrawing from the study, and 10 more withdrew at later points of the survey. The final study sample included 127 completed surveys from which to draw data.

Of the 11 participants who withdrew after completing the demographic survey, 10 were female and 1 was male. Their ages ranged from 18 to 61 years old. This group was predominantly white (n = 8). Of the 10 participants who withdrew at later points in the study, 50% were male, and 50% were female. Ages ranged from 18 to 57 years old.

Participants who completed the study ranged from 18 to 65 years old. (Mean = 32, Median = 30, Mode = 30). Fifty-seven percent of participants were 30 years old or older (n = 72). Over 80% of respondents were female (n = 102), leaving only 25 male respondents. Forty percent of participants reported being Black or African American (n = 43), and 44.9% were White or Caucasian (n = 57). Fifty percent of participants reported

being married (n = 64) while 44.1% reported being single (n = 56). The remaining participants were either separated, divorced, widowed, or in a committed relationship.

Twenty-one percent of participants reported having a high school diploma or equivalent degree (n =27) while 29.1% of participants reported holding a college degree (n = 37). An additional 45.7% of participants reported having a graduate level degree (n = 58). Thirty-one percent of participants reported that they are currently students (n = 40), and 70.1% of participants reported that they were currently employed. Twenty-eight percent of participants reported a total household income level above $100,000 per year (n = 36) while 12.6% of participants reported a total household income of less than $10,000 (n = 16).

On the CES-D scale, participant scores had a range of 60. Participants had a mean score of 24 and a median of 21. 58% scored higher than 16, the "arbitrary cutoff" point to indicate clinically significant depressive symptoms (Radloff, 1977).

Suicide Promotion and Prevention Subscales

A total of 133 participants responded to the questions regarding suicide-promotion websites. On the first subscale, "How often do you view or access websites promoting, providing instructions for, or otherwise encouraging individuals to commit suicide," 41.4% of all participants indicated that they had viewed or accessed suicide-promotion websites at some point (n = 55) while 19.6% of participants reported that they viewed those websites frequently or almost daily (n = 26).

On the second subscale, "How often do you actively contribute to or participate in suicide-promotion websites," 37.6% of participants affirmed that they contribute to such

sites (n = 50) while 21.1% of respondents indicated that they do so frequently or almost daily (n = 28).

On the third subscale, "How often do you view or discuss suicide promotion elsewhere on the internet," 40.6% responded affirmatively (n = 54), and 24.1% of participants responded that they view or discuss suicide promotion on the internet in general frequently or almost daily (n = 32).

A total of 133 participants also responded to the questions regarding suicide prevention websites. On the first subscale, "How often do you view or access websites promoting awareness, prevention, or support for victims of suicide," 58.7% of all participants indicated that they had viewed or accessed suicide-prevention websites (n = 78) while 25.6% of participants reported that they viewed those websites frequently or almost daily (n = 34).

On the second subscale, "How often do you actively contribute to or participate in suicide-promotion websites," 50.8% of participants affirmed that they contribute to such sites (n = 67) while 21.8% of respondents indicated that they do so frequently or almost daily (n = 29).

Finally, on the third subscale, "How often do you view or discuss suicide prevention elsewhere on the internet," 59.4% indicated that they do seek out suicide-prevention material somewhere (n = 79), and 24.1% of participants responded that they pursue suicide prevention material on the internet in general (n = 37).

First Hypothesis

CES-D scores were significantly correlated with suicide-promotion scores (r = .68, $p < .001$). This finding supports the study's hypothesis and indicates that those who more frequently access suicide-promotion material on the internet experience more frequent depressive symptoms.

Second Hypothesis

CES-D scores were significantly correlated with suicide prevention scores as well ($r = .63$, $p < .001$). This finding supports the study's hypothesis and indicates that those who more frequently access suicide-prevention material on the internet also experience more frequent depressive symptoms.

Third Hypothesis

When controlling for CES-D scores, there was no significant association between age and the frequency with which participants access suicide-promotion material online. $F(1, 124) = 1.4$, $p = .24$. This finding does not support the third hypothesis that younger people would more frequently use the internet to pursue suicide-promotion material than older people when controlling for depressive symptoms.

Discussion

Searching for Suicide Information Online

The results show a high percentage of respondents who have viewed suicide-promotion material online. Approximately 40% of respondents indicate that they have, at some point, accessed suicide-promotion websites or discussed suicide promotion online, and approximately 22% indicate that they do so regularly. As participants received no indication that this study involved questions about depression or suicide this finding

suggests a large number of people from the general population have accessed suicide-promotion websites.

In comparison, a slightly higher percentage of respondents reported viewing suicide prevention material online. Approximately 56% of participants reported having ever viewed suicide-prevention material, and approximately 24% of participants do so on a regular basis. This finding suggests that, while many people have pursued suicide-promotion material, they are accessing supportive resources as well.

Suicide-promotion websites create a one-sided perspective through their membership requirement either by denying membership to people who provide recovery-conducive resources or by simply populating the site with a disproportionate amount of people experiencing suicidal ideation relative to the general population. The Werther effect shows that people who are exposed to the suicidal behaviors of others are more likely to engage in suicidal behaviors themselves (Becker, 2004). Suicidal individuals accessing suicide-promotion websites can be cause for concern as they are exposed to communities where suicidal behavior is normalized. The results of this study do not indicate whether or not the individuals visiting these sites are suicidal or visiting the sites with the intention of using them to commit suicide, but visitors of suicide-promotion sites were more likely to be depressed, which puts them at a higher risk for suicidal behavior.

The results show that the individuals who pursue suicide-promotion sites likely also seek information from other sources. Respondents seem to pursue a broad range of information on suicide. For whatever purpose, they are accessing both promotional and preventative websites. In the event that suicidal people are accessing suicide information online, the Werther effect may diminish as those people receive a variety of perspectives.

Depression and Suicide Promotion

The results support the study's first hypothesis. Individuals with depressive symptoms reported viewing suicide-promotion materials more often than others. This may indicate that the individuals who most frequently pursue suicide-promotion content are at greater risk to be influenced by their content, as individuals with depression are much more likely to experience suicidal ideation or enact suicidal behaviors. Such individuals may thus be more likely to use the information to complete a suicide attempt.

The results also support the second hypothesis, which predicted that individuals with depressive symptoms would more frequently view suicide-prevention material as well. This, along with the first hypothesis, indicates that individuals who are depressed and are potentially experiencing suicidal ideation are more likely to pursue any kind of information about suicide online.

Age, Suicide, and the Internet

The results do not support the third hypothesis. The age of individuals had no significant effect on the frequency with which the view suicide-promotion material when controlling for depressive symptoms. This finding suggests that, even though younger generations have grown up with the internet, older generations have adopted it as well. It is likely that many age groups now use the internet in the same way, including searches for mental health advice and information.

The majority of individuals who completed the surveys were 30 years old or older (56.7%, n = 72). It is possible that the "internet generation" is simply more inclusive than expected. While younger adults have higher rates of internet use, the differences between age groups are small. 94% of adults 18-29 years old reported using the internet while

89% of adults age 30-49 reported the same (Pew Research Center, 2012). Frequent internet use has become so widespread that any disparity in the age of internet users may be disappearing. In any case, it is clear that people of all ages are using the internet.

While younger people are not viewing suicide-promotion websites any more frequently than older adults, it should be noted that younger people are still viewing them. Prior research has shown that younger people are more likely to be influenced by their content to enact their own suicidal behaviors (Dobson, 1999). According to this study, being young is not a risk factor for exposure to suicide-promotion websites, but being young remains a risk factor for suicidal behavior in general and for being influenced towards suicidal behaviors by other people (Joiner, 2007).

Implications for Individuals

The results of this study suggest that people with depressive symptoms will more frequently pursue websites related to suicide. The motivations of individuals seeking suicide-related information remain unclear.. Promotion material can include detailed methodology, but it can also include websites and forums that more liberally discuss suicidal behaviors. It is possible that individuals, while seeking recovery support elsewhere, turn to promotion websites to engage in a more relaxed discussion about their feelings. They may find other individuals who are experiencing suicidal ideation and form a type of brotherhood over the commonality. They are free to express their suicidal thoughts and experiences without being repeatedly referred to a hotline or told to go see a counselor or have their statements reported by a professional.

They may also be seeking arguments from both sides. Depressed individuals who have considered but not yet decided to commit suicide may want somebody to convince

them one way or the other. They are seeking advice from any sources they can find, whether they are professionals, friends, or other people who claim to know what they are going through. It is also possible that they are using suicide-promotion websites to construct a suicide plan, gathering information on various methods and figuring out which ones they are able and willing to use. As they construct this plan they may simultaneously use recovery resources in the hope that somebody will talk them out of implementing it. The development of the plan itself may be a cry for help in the hopes that people will take their suicide threats more seriously. Having a plan in place and displaying knowledge of suicide methods may be a way of demonstrating the gravity of a person's distress in order to get attention and perhaps help from others.

Regardless of depressive symptoms, some people may have an academic or personal interest in suicide promotion. As the author of this study, I have viewed suicide-promotion websites very frequently during the course of my research. Participants in this study show a wide range of educational backgrounds, and it is possible that some of them have a related interest in suicide studies. Participants may also look at suicide websites in the interest of loves ones who are struggling with suicide or depression, hoping to better understand their perspective or prepare for future suicidal actions. It is also possible that people look at suicide-promotion websites out of a fascination with the subject. Many people habitually visit websites on paranormal phenomena, serial killers, and similar subjects because the stories can be mysterious, bizarre, shocking, or otherwise intriguing. Suicide may evoke similar fascination, and people may consequently wish to read actual suicide notes or witness videos of others committing suicide because the behavior is extraordinarily tragic and perhaps unfathomable.

While we do not know why so many people frequent suicide-promotion sites, the study's results suggest that depressed individuals will visit them more often. As they are at a higher risk for suicide behavior, it is worrisome that they are being exposed to suicide methods and encouragement from sources of unknown intent. On the other hand, it is encouraging that such individuals are pursuing prevention sites just as frequently in an apparent pursuit of recovery.

Implications for Mental Health Professionals

A high percentage of study participants reported viewing pro-suicide content online. Mental health professionals should recognize the resulting potential for increasingly lethal suicide attempts as they work with suicidal clients. They should be aware of outside influences that their clients might receive. Adjusting a client's social support network is often an aspect of treating depression, and counselors may need to help extract their clients from potentially harmful pro-suicide communities and replace them with relationships that will be conducive to their recovery.

If a client discloses suicidal ideation, therapists should be able to discuss the matter in detail, including inquiries into whom else the client has talked to about their suicidal feelings. It is likely that many of them have turned to the internet in one way or another to talk anonymously about more private matters. Asking clients directly about their internet use habits and the advice they have received from online communities may reveal a great deal about their distorted cognitions. That knowledge could then be instrumental in correcting those cognitions and adjusting client habits to maintain those corrections.

Recommendations for Future Research

As previously stated, the motivations of individuals who visit suicide-promotion sites are relatively unknown. Knowing how often people access these sites, subsequent studies should investigate why they are doing so. Previous studies have investigated motivations to a limited extent by interviewing small populations of promotion site members (Baker & Fortune, 2008; Eichenberg, 2007), but active members do not reflect the full extent of a website's visitors. It is of interest to know why web users are pursuing this material and why they are frequenting different sources. What do they intend to do with that knowledge? Are they reading for themselves, or are they trying to better understand a loved one? Are they weighing the pros and cons of suicide before making their decision? Are they looking for friends with whom to share their feelings? Are they looking for validation that somebody else feels suicidal? Are they just interested in strange, gruesome, or tragic stories? These questions must be answered before suicide-promotion websites can be defined or dismissed as a concern to the public.

Future studies may also want to target certain populations with those questions. For instance, suicidal individuals obviously present the greatest concern. Depressed individuals are more frequently viewing these sites than others, and the motivations of a person with depression accessing these sites may differ from those of the casual internet user. Clinicians especially may need to be aware of their clients' potential internet use habits and their intentions in pursuing suicide information when conducting suicide risk assessments. Suicide-promotion websites have the capacity to make a suicide attempt lethal, denying a person the chance to obtain help and recover, which they might have otherwise received after making a failed suicide attempt. For suicidal or depressed

individuals, it would also be interesting to know if their viewing habits change over time and whether those changes coincide with fluctuations in their mood. Are they viewing suicide promotion more often in the midst of a depressive episode, or do they maintain an active membership regardless of their mood state? A longitudinal study on mental health patients might reveal a great deal about the roles that suicide-promotion sites play in their lives.

Adolescents and young adults also present an interesting target population. Although I found no evidence that young adults are viewing these sites any more often than older adults, their viewing them at all is a possible concern. Adolescents especially are more impressionable and impulsive than adults, and suicide instruction could prove lethal to a troubled teenager. Following the advice of people they met online, they may complete a suicide that would have otherwise been just an attempt. Investigating the motivations of youth researching suicide could be useful for clinicians, parents, and anyone involved in their recovery. Knowing what they have been exposed to and understanding how their opinions about suicide were shaped could give way to more effective therapeutic interventions. As all participants were over the age of 18, future inquiries might target younger populations.

There are also limitations to this study that could be reduced in future research. Online recruitment is effective and efficient, and it is a logical course in researching internet habits, but it poses challenges to data analysis. A diverse sample of respondents was available that may not have been available otherwise, but there is no way to verify the data. Offering an incentive by drawing may encourage multiple submissions by the

same individual. There was no evidence that such behavior occurred, but it is possible, which could skew the data one way or another.

A larger sample size would also be desirable so the data could be better generalized to a wide population. This study included a number of drop outs, and people eventually stopped responding to the posted ads. It became difficult to obtain more respondents without compromising the population's integrity (i.e. by soliciting to college populations or specific types of websites). Additionally, the sample only includes people who were looking for surveys or volunteer opportunities, which means that the sample may not be representative of the internet-using population as a whole. Individuals who pursue such opportunities may represent a unique population themselves. People who respond to Craigslist research ads are typically female with higher education degrees and full-time jobs (Ramo, 2010). Those characteristics are consistent with the current study sample. Future recruitment efforts may succeed by utilizing online networking strategies or paid advertisements to ensure that a greater number of people view the ad without having to peruse Craigslist or search for incentive opportunities.

The population also exhibited higher depressive symptoms than the general population. Radloff found that only 21% of people in the general population would score above 16 while 70% of people in a clinical population would score higher than 16. As 58% of respondents in this study scored above 16, this study sample likely comprises a higher number of depressed individuals than the general population does. This may have led to higher rates of viewing suicide-promotion content than would ordinarily be present. In order to accurately determine the percentage of individuals who have viewed

suicide-promotion websites, subsequent studies should pursue a sample that more accurately reflects the population.

Finally, males are far more likely to complete a suicide on the first attempt than females as they use more lethal methods (Joiner, 2007). Male suicide rates are double those of females (APA, 2000). As the study sample included predominantly female responders, they study sample may underrepresented males who frequent suicide-promotion websites. Given their propensity for using more lethal methods, suicidal males may be at a higher risk for using the methods available on suicide-promotion websites. Future studies should consider this population when investigating people's motivations for pursuing pro-suicide content online.

Conclusions

Suicide-promotion websites provide material that is seemingly dangerous to suicidal individuals. Access to instructions or encouragement may increase their chances of completing a suicide attempt. Many people have viewed these websites, and those who are most vulnerable to their dangers appear to visit them more frequently. Those individuals are, however, also frequenting websites on the other end of the spectrum, opening themselves to suicide-prevention websites influences as well. Consequently, the encouragement provided by suicide-promotion websites may not present such a threat. An abundance of other resources are available, and it appears that people are using them. Even pro-suicide sites have reportedly provided some therapeutic value (Baker & Fortune, 2008; Eichenberg, 2007). People will likely explore many options in seeking information or communities rather than limiting themselves to a single environment. Future studies should explore this process.

The lethality of pro-suicide content remains a concern as misguided individuals may complete a suicide when they would have failed without instruction. Additionally, the encouragement of individuals may be far more hazardous than the encouragement of a website. Individuals who seek a supportive relationship from others may find it, but they may also find people who will take advantage of their vulnerability. It is important for mental health practitioners to be aware of all such influences so that they can better understand and serve their clients. It is likely that clients will tell the internet much more than they will tell their family members or their counselors, and they may just listen to what it has to say (Levin, 2007).

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Appendix A:

Demographic Survey

Select the response that best describes you:

1) What is your sex?
   a. Male
   b. Female
   c. Other (please specify): _____

2) What is your age?

   _____

3) What is your marital status?
   a. Married
   b. Single
   c. Separated
   d. Divorced
   e. Widowed
   f. Other (please specify): _____

4) What is the highest degree or level of education that you have completed?
   a. High school diploma or equivalent degree (Ex: GED)
   b. College degree
   c. Graduate-level degree
   d. Professional or Doctorate degree
   e. Other (please specify): _____

5) Are you currently a student?
   a. Yes
   b. No

6) What is your current employment status?
   a. Employed, part-time
   b. Employed, full-time
   c. Unemployed and pursuing work
   d. Unemployed and not pursuing work
   e. Other (please specify): _____

7) With whom do you live?
   a. Roommate(s) who are close friends
   b. Roommate(s) who are not close friends
   c. Family
   d. I live alone
   e. Other (please specify): _____

8) What is your total household income (approximately)?
   a. Less than $10,000
   b. $10,000 to $20,000
   c. $20,000 to $40,000
   d. $40,000 to $60,000
   e. $60,000 to $80,000
   f. $80,000 to $100,000
   g. $100,000 to $150,000
   h. Greater than $150,000
   i. Prefer not to say

9) Which best describes your ethnicity?
   a. Hispanic
   b. Native American
   c. Southeast Asian
   d. Black or African American
   e. Native Hawaiian or Other Pacific Islander
   f. White or Caucasian
   g. Other (please specify): _____
   h. Prefer not to say

10) Which best describes your sexual orientation?
   a. Heterosexual
   b. Homosexual
   c. Bisexual
   d. Prefer not to say

Appendix B:

Internet Use Survey

Circle response for each item:

0 = Never, 1 = Once or Twice, 2 = Occasionally, 3 = Frequently, 4 = Almost Daily

1. How often do you view or access sports-related websites? (Ex: www.espn.com)

   0 1 2 3 4

   How often do you actively contribute to or participate in such websites? (Ex: Comments, forum posts, content submissions, etc.)

   0 1 2 3 4

   How often do you view or discuss sports-related material elsewhere on the internet? (Ex: www.answers.yahoo.com, www.blogspot.com, www.chathour.com, www.livejournal.com, etc)

   0 1 2 3 4

2. How often do you view or access social networking websites? (Ex: www.facebook.com)

   0 1 2 3 4

   How often do you actively contribute to or participate in such websites?

   0 1 2 3 4

   How often do you pursue social activity and/or connections elsewhere on the internet?

   0 1 2 3 4

3. How often do you view or access politically-affiliated websites? (Ex: www.barackobama.com)

   0 1 2 3 4

   How often do you actively contribute to or participate in such websites?

   0 1 2 3 4

   How often do you view or discuss politically-related material elsewhere on the internet?

   0 1 2 3 4

4. How often do you view or access religiously-affiliated websites? (Ex: www.christiananswers.net)

   0 1 2 3 4

   How often do you actively contribute to or participate in such websites?

   0 1 2 3 4

   How often do you view or discuss religion-related material elsewhere on the internet?

   0 1 2 3 4

5. How often do you view or access medical health-related websites? (Ex: www.webmd.com)

   0 1 2 3 4

   How often do you actively contribute to or participate in such websites?

   0 1 2 3 4

   How often do you view or discuss medically-related material elsewhere on the internet?

0 1 2 3 4

6. How often do you view or access mental health-related websites? (Ex: www.nimh.nih.gov/)

   0 1 2 3 4

   How often do you actively contribute to or participate in such websites?

   0 1 2 3 4

   How often do you view or discuss mental health-related material elsewhere on the internet?

   0 1 2 3 4

7. How often do you view or access websites promoting awareness or prevention of cancer? (Ex: www.nationalbreastcancer.org)

   0 1 2 3 4

   How often do you actively contribute to or participate in such websites?

   0 1 2 3 4

   How often do you view or discuss cancer-prevention material elsewhere on the internet?

   0 1 2 3 4

8. How often do you view or access websites promoting awareness and/or prevention of suicide? (Ex: http://www.suicidepreventionlifeline.org/)

   0 1 2 3 4

   How often do you actively contribute to or participate in such websites?

   0 1 2 3 4

How often do you view or discuss suicide prevention-related material elsewhere on the internet?

0 1 2 3 4

9. How often do you view or access websites promoting physician-assisted suicide? (Ex: www.deathwithdignity.org)

0 1 2 3 4

How often do you actively contribute to or participate in such websites?

0 1 2 3 4

How often do you view or discuss suicide physician-assisted suicide elsewhere on the internet?

0 1 2 3 4

10. How often do you view or access websites promoting, providing instructions for, or otherwise encouraging individual suicide? (Ex: http://exiteuthanasia.wordpress.com/)

0 1 2 3 4

How often do you actively contribute to or participate in such websites?

0 1 2 3 4

How often do you view or discuss suicide-promotional or instructional material elsewhere on the internet?

0 1 2 3 4

11. How often do you view or access websites promoting awareness, prevention, or support for victims of STDs and/or HIV? (Ex: http://www.aids.org)

0 1 2 3 4

How often do you actively contribute to or participate in such websites?

0 1 2 3 4

How often do you view or discuss STD and/or HIV-related material elsewhere on the internet?

0 1 2 3 4

12. How often do you view or access websites providing information about abortion? (Ex: www.abortionfacts.com)?

0 1 2 3 4

How often do you actively contribute to or participate in such websites?

0 1 2 3 4

How often do you view or discuss abortion elsewhere on the internet?

0 1 2 3 4

13. How often do you view or access websites offering resources and/or support to individuals with drug and/or alcohol addictions? (Ex: http://www.recoveryconnection.org)

0 1 2 3 4

How often do you actively contribute to or participate in such websites?

0 1 2 3 4

How often do you view or discuss drug and/or alcohol addiction-related material elsewhere on the internet?

0 1 2 3 4

14. How often do you view or access websites offering resources and/or support to individuals with eating disorders? (Ex: nationaleatingdisorders.org/)

0 1 2 3 4

How often do you actively contribute to or participate in such websites?

0 1 2 3 4

How often do you view or discuss eating disorder-related material elsewhere on the internet?

0 1 2 3 4

15. How often do you view or access websites promoting, providing instructions for, or otherwise encouraging unhealthy eating habits for the purpose of weight loss? (Ex: http://thinspirationtips.net/)

0 1 2 3 4

How often do you actively contribute to or participate in such websites?

0 1 2 3 4

How often do you view or discuss eating disorder promotional or instructional material elsewhere on the internet?

0 1 2 3 4

Appendix C:

Center for Epidemiologic Studies Depression Scale (CES-D), NIMH

Below is a list of the ways you might have felt or behaved. Please tell me how often you have felt this way during the past week.

	During the Past Week			
	Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	Most or all of the time (5-7 days)
1. I was bothered by things that usually don't bother me.	☐	☐	☐	☐
2. I did not feel like eating; my appetite was poor.	☐	☐	☐	☐
3. I felt that I could not shake off the blues even with help from my family or friends.	☐	☐	☐	☐
4. I felt I was just as good as other people.	☐	☐	☐	☐
5. I had trouble keeping my mind on what I was doing.	☐	☐	☐	☐
6. I felt depressed.	☐	☐	☐	☐
7. I felt that everything I did was an effort.	☐	☐	☐	☐
8. I felt hopeful about the future.	☐	☐	☐	☐
9. I thought my life had been a failure.	☐	☐	☐	☐
10. I felt fearful.	☐	☐	☐	☐
11. My sleep was restless.	☐	☐	☐	☐
12. I was happy.	☐	☐	☐	☐
13. I talked less than usual.	☐	☐	☐	☐
14. I felt lonely.	☐	☐	☐	☐
15. People were unfriendly.	☐	☐	☐	☐
16. I enjoyed life.	☐	☐	☐	☐
17. I had crying spells.	☐	☐	☐	☐
18. I felt sad.	☐	☐	☐	☐
19. I felt that people dislike me.	☐	☐	☐	☐
20. I could not get "going."	☐	☐	☐	☐

SCORING: zero for answers in the first column. 1 for answers in the second column. 2 for answers in the third column. 3 for answers in the fourth column. The scoring of positive items is reversed. Possible range of scores is zero to 60, with the higher scores indicating the presence of more symptomatology.