

7-28-2008

Self-Injury Knowledge and Peer Perceptions among Members of Internet Self-Injury Groups

Emily L. Boeckmann

Western Kentucky University, emily.canning@wku.edu

Follow this and additional works at: <http://digitalcommons.wku.edu/theses>



Part of the [Personality and Social Contexts Commons](#)

Recommended Citation

Boeckmann, Emily L., "Self-Injury Knowledge and Peer Perceptions among Members of Internet Self-Injury Groups" (2008). *Masters Theses & Specialist Projects*. Paper 6.
<http://digitalcommons.wku.edu/theses/6>

This Thesis is brought to you for free and open access by TopSCHOLAR®. It has been accepted for inclusion in Masters Theses & Specialist Projects by an authorized administrator of TopSCHOLAR®. For more information, please contact topscholar@wku.edu.

SELF-INJURY KNOWLEDGE AND PEER PERCEPTIONS
AMONG MEMBERS OF INTERNET SELF-INJURY GROUPS

A Thesis
Presented to
The Faculty of the Department of Psychology
Western Kentucky University
Bowling Green, Kentucky

In Partial Fulfillment
Of the Requirements for the Degree
Specialist in Education

By
Emily L. Boeckmann

August 2008

SELF-INJURY KNOWLEDGE AND PEER PERCEPTIONS
AMONG MEMBERS OF INTERNET SELF-INJURY GROUPS

Date Recommended July 28, 2008

Elizabeth L. Jones
Director of Thesis

Rick Grieve

Lakeisha Meyer

Dean, Graduate Studies and Research Date

Acknowledgements

First and foremost, I want to thank my God for making, what I feel has been the impossible, *possible* – for bringing me this far in my life and for continually opening new doors for me to venture through. Thank you for giving me faith, strength, and perseverance.

With heartfelt gratitude, I would like to thank my husband, Phil, for his patience, support, and encouragement during the last three years of our life together. I could not have made this journey without you by my side. You are my best friend – I love you, rain or shine.

To the backbone of my life, my family – thank you for believing in me. Dad and Mom, thank you for standing by me throughout my life and never letting me give up when times were too challenging. Your unconditional love has been, and will forever be, with me. Andy, Kelli, Laura, Brandon, and Timmy, your friendships mean so much to me, and I am so thankful we are family. You all inspire me more than you will ever know. Lainey, Sarah, and Matthew, my precious nieces and nephew, thank you for your hugs and kisses every time I see your smiling little faces. Roger and Jackie, thank you for loving me as your own daughter and for always listening to my long short stories. Leah and Bob, thank you for taking the time to listen, to laugh, and to drink good wine with me. You have all been such a blessing to me.

Thank you to my friends that have been such an immense part of my life – Elizabeth, Jacquetta, Jamie, and Lorie; Michelle, Lucy, and Liz – you girls have been true friends. Thank you for the times we have laughed, the times we have cried, and all the times in between. My door and home are always open for you – I am only a short drive away.

Last, but most certainly not least, special thanks to my thesis advisor, Dr. Jones, for her patience, understanding, and insight, and to my committee, Dr. Grieve and Dr. Meyer, for their guidance, assistance, and knowledge while working on this project. Also, much appreciation to Dr. Myers for being an inspiration the last three years, and to Dr. Powers, for being a wonderful boss, a better friend, and an amazing role model.

Table of Contents

	Page
List of Tables	iii
List of Figures	iv
Abstract	v
Introduction	3
Literature Review	5
Definition of Self-Injury	5
Prevalence of Self-Injury	8
Associated Features	9
Social Networking on the Internet	15
Perceptions of Self-Injury	23
Purpose	29
Method	31
Results	42
Discussion	67
References	82
Appendix A	87
Appendix B	107
Appendix C	109
Appendix D	111
Appendix E	113
Appendix F	115

List of Tables

	Page
Table 1	24
Table 2	32
Table 3	43
Table 4	46
Table 5	56
Table 6	57
Table 7	58
Table 8	62
Table 9	62
Table 10	66

List of Figures

	Page
Figure 1	36
Figure 2	48
Figure 3	49
Figure 4	51
Figure 5	51
Figure 6	54
Figure 7	55
Figure 8	61

SELF-INJURY KNOWLEDGE AND PEER PERCEPTIONS
AMONG MEMBERS OF INTERNET SELF-INJURY GROUPS

Emily L. Boeckmann

August 2008

122 Pages

Directed by: Elizabeth Jones, Rick Grieve, and Lakeisha Meyer

Department of Psychology

Western Kentucky University

Members of 26 MySpace social groups for self-injury (SI) provided data for this study investigating knowledge of SI, friends' perceptions of SI, and the impact of online activity on SI. This study proposes that people who have belonged to these online SI groups for longer periods have higher levels of SI knowledge than those group members who have recently joined. In addition, the study proposes that individuals who self-injure have higher levels of SI knowledge than professionals who work with individuals who self-injure. An additional purpose of this study is to explore information regarding the reasons why people belong to online SI groups, the outcomes of participating in them, and their perceptions of their online peers' and face-to-face peers' attitudes regarding SI. A convenience sample of 101 members solicited from SI social groups on MySpace completed the survey, which consisted of five sections including the following: demographics, experiences with SI, knowledge of SI, activities related to SI in MySpace groups, and perceptions of online and face-to-face peers' attitudes regarding SI.

The knowledge section of the survey contains a 20 item measure previously used by Jeffrey and Warm (2002). A knowledge score was created based on participants responses to these 20 items. This score was used in the analysis of both hypotheses one

and two. Results indicate that participants have a good understanding of SI, based on their mean knowledge score. In addition, results reveal that the current sample's mean SI knowledge level is higher than are four of the seven groups' mean knowledge scores. Length of membership on online SI groups is not significantly greater for individuals who score higher on the knowledge of SI measure as assessed through independent *t* tests. Descriptive information indicates that participants perceive their online friends to react more positively to their self-injurious behaviors than they do their face-to-face friends. In addition, the sample does not indicate that participation in online SI groups has an impact on the frequency of their self-injurious behaviors, which is consistent with prior research (Murray & Fox, 2006). Limitations discussed include sample size and solicitation, survey length, and the lack of a thorough assessment of online activity.

Introduction

Self-injury (SI) is a behavioral phenomenon observed amongst more individuals and in more settings than ever before (Alderman, 1997; Brophy, 2006; Jones, Butts, & Canning, 2007; Klonsky, Oltmanns, & Turkheimer, 2003; Murray & Fox, 2006; Ross & Heath, 2003; Walsh, 2006; Whitlock, Eckenrode, & Silverman, 2006; Whitlock, Powers, & Eckenrode, 2006; Yates, Tracy, & Luthar, 2008). Self-injury is evident in various populations, such as males as well as females and adolescents as well as adults, and in schools, colleges, hospitals, prisons, and the army. It is even becoming more evident on the Internet (Murray & Fox, 2006). The prevalence rate for SI is also on the rise. Results of previous studies have concluded that 4% to 16% of the general population engages in SI (Klonsky et al., 2003; Ross & Heath, 2003; Whitlock, Eckenrode et al., 2006), but results of a recent study indicated that as much as 26 % to 37% of adolescents may be engaging in these behaviors (Yates et al., 2008).

Internet usage by adolescents is also increasing (Lenhart, Madden, & Hitlin, 2005). The Internet is now considered a common form of communication for adolescents, as more than half of adolescents access the Internet daily, spending approximately 7.8 hours per week socializing with friends online (Lenhart et al., 2005). In addition, it appears that people who self-injure are also becoming more involved with the Internet. Discussion groups for people who self-injure are becoming more prevalent and are seen as ways for this marginalized population to connect with like-minded others, gain support, and find information regarding their behaviors (Murray & Fox, 2006; Whitlock, Eckenrode et al., 2006).

However, much is still unclear regarding online SI discussion groups and individuals' participation. The purpose of the present investigation is to explore Internet use by those who self-injure, to extend current knowledge regarding the outcomes of their participation in these discussion groups, and to gain a better understanding of their perceptions of their online peers' thoughts and attitudes versus their face-to-face peers' thoughts and attitudes regarding SI.

The following literature review will first provide a basis for the current investigation exploring SI knowledge and peer perceptions among members of Internet SI groups. First discussed are the definitions, prevalence, functions, methods, and classification of SI, with an emphasis on common self-injury (CSI) as the form of SI that is the explored in this investigation. Next to be discussed are social networking websites is provided along with an overview of what is known regarding SI on these websites, followed by accurate and inaccurate perceptions of SI held by professionals, family, and friend. These perceptions provide a basis for comparing knowledge levels of the participants of SI discussion groups. The review concludes with a validation for the research questions and hypotheses that guide the current investigation.

Literature Review

This section provides a contemporary understanding of SI. Self-injury is a growing phenomenon that varies by degree of seriousness and commonality of methods. Functions, methods, and accompanying features, such as comorbidity, shame and secrecy, and contagion form a basis of understanding SI in the discussion presented below. In addition, the rationale for use of Internet discussion groups and social networking sites is presented. Currently there is little research available about people who self-injure and participate in these groups and the outcomes from this participation. Additionally, current knowledge is limited regarding the perceptions and levels of SI knowledge held by friends of people who self-injure. These last two issues will be the focus of this current investigation presented in the purpose section.

Definition of Self-Injury

This section discusses the definition of self-injurious behaviors, including current terminology and various types. SI occurs when a person deliberately and directly injures his or her own body to reduce psychological distress without the intention of dying. It can either be direct, such as skin cutting, self-burning, or hair-pulling, or indirect, such as an eating disorder or substance abuse. This act of harming oneself has been referred to by many different terms, such as cutting, parasuicide, self-mutilation, self-harm, self-wounding, self-inflicted violence, and self-destruction. However, today the broad category for these behaviors is most commonly referred to as *self-injury (SI)* or *non-suicidal self-injury (NSSI)*. Self-injury (inclusive of NSSI) will be the term used for this investigation.

Even though prior research has compared self-injury to suicide, it is very different from the act of taking one's own life. Someone who self-injures most commonly does not wish to end his or her life; rather, it is a way for that person to relieve pain and deal with emotional burdens. In addition, Walsh (2006) describes SI as differing from suicide in the following ways: the intent of the behavior (to find relief from distress rather than to escape pain); the level of physical damage and potential lethality (cutting an arm or leg versus shooting oneself with a gun); the frequency of the behavior (because it is a way to cope, SI occurs at a much higher rate than suicide attempts); the choice of multiple methods (if suicide attempts are repeated, it is most commonly done by one method – overdose – whereas repeated SI typically evokes more than one method); and the level of psychological pain (SI is a coping mechanism to relieve psychological distress so that it does not build up to an excruciating and intolerable level typical of those who commit suicide).

Also, people who self-injure have a cognition that is not constricted to an “all or nothing” view frequently seen in suicide, as well as they do not feel as hopeless and helpless as people who attempt suicide. If a person survives a suicide attempt, he or she often does not find any relief from his or her burdens, whereas someone who self-injures does find relief from his or her actions. While SI is associated with suicidal behaviors, it is important to note that frequent self-injurers often turn to suicide when they are no longer able to find relief from self-injuring and that not all people who self-injure have suicide ideations or attempt suicide (Walsh, 2006). Suicide is, however, seen more frequently in populations that self-injure and may occur episodically, rather than continuously, in those who self-injure (Walsh, 2006).

Frequent misconceptions are that SI is the same as altering one's appearance (a tattoo, body piercing, or plastic surgery) or taking part in a ritualistic mutilation (Alderman, 1997). Common forms of body alterations, including tattoos, body piercing, and plastic surgery, differ from SI in that another person usually performs the act versus person doing it to him- or herself. In addition, a person engages in body alterations to enhance the body's image. Alderman also indicates that, although altering the body in these ways may provide relief from some psychological distress, it is not the main intention as with SI. In addition, these body alterations are more likely to draw attention to the person, whereas people who engage in SI typically conceal their wounds and scars from others. Ritualistic mutilations, such as genital mutilation or branding as part of a ritual to become a member of a group or tribe, is not considered to be SI for the same reasons body alterations are not – it is usually performed by another and it serves a function other than to alleviate distress (Alderman, 1997).

Classification of Self-Injurious Behaviors

Simeon and Favazza (2001) define four different types of self-injurious behaviors: (1) *stereotypic self-injurious behaviors* are repetitive, include head banging, self-hitting, and hand chewing, and are most commonly seen in people who suffer from mental retardation, schizophrenia, or Autism spectrum disorders; (2) *major self-injurious behaviors* are episodic, result in severe damage, are often life threatening, include eye enucleation and limb amputation, and are most often witnessed in people who are dealing with psychosis; (3) *compulsive self-injurious behaviors* are repetitive in nature, result in minor to moderate damage, include hair pulling and skin picking, and are considered to occur among those who suffer from Trichotillomania or those who have a stereotypic

movement disorder; and (4) *impulsive self-injurious behaviors* result in mild to moderate damage, can be sporadic or episodic, include skin cutting, skin burning, and self-hitting, and are the most commonly seen amongst the general public.

Common Self-Injury

Walsh (2006) finds Simeon and Favazza's categories of the impulsive and compulsive SI to be problematic in that some self-injurious behaviors fit into more than one of these categories. For example, some individuals who self-injure may episodically evidence behaviors fitting the impulsive category while continuously evidencing symptoms best fitting the compulsive category. Therefore, Walsh proposes a categorization scheme that consists of *common self-injury* (CSI), such as cutting, hitting, and burning, and *major self-injury*, such as limb amputation and eye enucleation. Further, these behaviors can be categorized into direct self-harm, including suicidal behavior, CSI, and major SI, or indirect self-harm, including chronic substance abuse, eating disorders, and physical, situational, and sexual risk taking behaviors. CSI is also consistent with what recent research also refers to as *direct non-suicidal self-injury*. CSI, inclusive of non-suicidal self-injury, is the form of SI that is focus of this investigation.

Prevalence of Self-Injury

Self-injury prevalence rates are growing. Prevalence rates of SI range from 4% to 37% of the general population (Klonsky et al., 2003; Ross & Heath, 2003; Whitlock, Eckenrode et al., 2006; Yates et al., 2008). People who self-injure typically begin during their early adolescent years and continue throughout their 20s. As such, it is estimated that roughly 14% of adolescents and 17% of college students self-injure (Ross & Heath, 2002; Whitlock, Eckenrode et al., 2006). However, recent data indicate that these rates

may be underestimates. Yates et al. (2008) investigated SI in two privileged or affluent large-scale samples of adolescents from the West (n = 1,036) and East (n = 245) coasts of the United States. The cross-sectional West coast sample evidenced SI rates of 37 %. The East coast longitudinal sample evidenced a 26% rate for SI. Researchers have also reported prevalence rates for SI in other countries. For instance, in the United Kingdom, Brophy (2006) estimates that 1 in 15 adolescents self-injure. Prevalence rates for self-injury among men and women differ throughout research. While most research supports a higher prevalence of self-injurious behaviors for women than for men, recent studies note equivalent prevalence rates for this sample (Klonsky et al., 2003; Yates et al., 2008).

Associated Features

Functions of Self-Injurious Behaviors

Klonsky (2007) reviewed 18 empirical studies that investigated the functions of SI and identified seven functions of SI: affect-regulation (to alleviate negative affect), anti-dissociation (to end dissociation experiences), anti-suicide (to avoid committing suicide), interpersonal boundaries (to assert identity or autonomy), interpersonal-influence (to gain attention or to manipulate others), self-punishment (to express anger towards oneself), and sensation-seeking (to create feelings of excitement). Not only was affect-regulation the only one of the seven functions identified in all 18 studies, but the findings for this function were also the strongest noted. It is also important to note that these functions are not mutually exclusive as they can co-occur. When negative affect is present, it triggers people to self-injure in order to decrease the negative affect and to provide relief from emotional distress. In another study, Kanan, Finger, and Plog (2008) note that the most common trigger for SI in youths is interpersonal conflict.

Methods and Frequencies of Types of Self-Injury

The most common methods of common SI include the following: cutting, excessive scratching, and carving on the skin; interfering with the healing of wounds, such as picking at scabs; hitting and bruising one's self; self-burning; head banging; excessive nail biting; intentional breaking of bones; and other forms such as self-biting and hair pulling (Alderman, 1997; Walsh, 2006). People who engage in the behavior most often self-injure on the arms (47%), hands (38%), wrists (29%), thighs (18%), stomach (16%), calves (11%), and head or fingers (each at 11%; Whitlock, Eckenrode et al., 2006). In a recent survey of 2,875 college-aged participants, the three most often reported methods of SI were severely scratching or pinching the skin with bleeding (52%), banging and punching objects resulting in bruising and/or bleeding (38%), and cutting (34%; Whitlock, Eckenrode et al., 2006). In addition, of the participants who reported self-injuring, 70% preferred to use multiple methods, with 51% noting the use of two to four methods. Personal preference and circumstances affect the choice of SI method (Alderman, 1997). For instance, if a person's circumstances do not allow him or her to have access to a hot object or a flame to burn part of the body, he or she may result to banging his or her head on a hard surface to alleviate the distress.

Whitlock, Eckenrode et al. (2006) also found that, of participants they surveyed, 490 (17%) reported self-injuring, of which 74% (346) self-injured on more than one occasion. In another study, Whitlock and Knox (2007) found that of 715 people who self-injure, 76% had self-injured on more than one occasion. Specifically, 227 (47%) reported self-injuring 2 to 10 times, 78 (16%) reported self-injuring 11 to 50 times, and 42 (9%) reported self-injuring more than 50 times. In addition, 117 (24%) reported only self-

injuring one time and 24 (5%) participants were unsure of how many times they had self-injured.

Whitlock, Eckenrode et al. (2006) reported differences in SI methods based on gender. Men are more likely to self-injure by punching an object and women are more likely to self-injure by scratching and pinching or by cutting. In addition, men are more likely to injure their hands and women are more likely to injure their wrists or thighs.

Accompanying Features

Comorbidity. Researchers have reported self-injury to be associated with suicidal behavior, history of abuse (physical, sexual, and/or emotional), eating disorders, substance abuse, poor mood regulation, and history of psychological disorders (Alderman, 1997; Walsh, 2006). For instance, 41% of 240 females surveyed reported using drugs or alcohol while self-injuring (Favazza & Conterio, 1989). Self-injury is also associated with suicidal behaviors. Some research suggests that frequent self-injurers may turn to suicide when they are no longer able to find relief from self-injuring (Walsh, 2006). Whitlock and Knox (2007) surveyed 2,875 undergraduate and graduate students, 715 (25%) of whom reported self-injurious behaviors, suicidality, or both. Not only did their results indicate that self-injurious behavior was a strong predictor of suicidality, but also that, as the frequency of self-injurious behaviors increased, so did the risk of suicidality. However, suicide is not always evident in populations that self-injure, and self-injurious behaviors do not always lead to suicidal behavior. In this sample, 60% of the individuals who self-injure did not evidence suicidality while 40% evidenced both SI and suicidality. This is consistent with other studies that report a higher level of suicidality in populations with SI (Stanley, Gameroff, Michalsen and Mann, 2001).

Whitlock, Eckenrode et al. (2006) found that 53 % of 490 college students who self-injure also reported a history of physical, sexual, and/or emotional abuse. Further, participants who had self-injured on more than one occasion were significantly more likely to report a history of all three types of abuse. Favazza and Conterio (1989) found similar results in their study of females who habitually self-injure, with 62% of 240 participants reporting previous sexual and/or physical abuse.

Another comorbid feature frequently seen alongside SI is eating disorders. Whitlock, Eckenrode et al. (2006) found that of 490 individuals who reported self-injuring, 28 % reported at least one characteristic of an eating disorder. Another study found that of 240 females who habitually self-injure, 61% reported currently having or having had an eating disorder (Favazza & Conterio, 1989). The frequency of eating disorders in populations that self-injure is much higher than that of the general population, of which approximately one to two percent engage in anorexia nervosa and approximately 10 to 25% engage in bulimia nervosa (Mash & Wolfe, 2005).

Depression has been found to be higher in populations that self-injure. In a study that examined depression and anxiety in people who self-injure ($n = 440$), 64% described feeling “lonely,” “sad,” and “alone” prior to and during SI experiences (Ross & Heath, 2002). Ross and Heath observed that depressive symptomatology was significantly higher in people who reported self-injuring than in those who did not. Greater levels of anxiety were also reported in this study. In addition, Klonsky et al. (2003) notes that SI has been observed in people who have disorders including posttraumatic stress disorder, major depression, anxiety disorders, schizophrenia, borderline personality disorder, and impulsive personality disorders. Impulsive self-injurious behaviors most commonly have

been witnessed amongst people who have been victims of abuse or trauma, and/or suffer from dissociation or post-traumatic stress disorder (Walsh, 2006).

Shame and secrecy. Self-injury is an act that creates a sense of shame for many of the people who perform this behavior. Most people who self-injure appear to perform the behavior alone and reveal this information only to a few individuals who they are careful about selecting, as this behavior is not socially acceptable (Walsh, 2006). Because of SI being a social taboo, shame is often associated with these behaviors, creating the propensity for marginalization of those who self-injure. This sense of shame may also lead to secrecy as this marginalized population is more inclined to lie about or hide their wounds and scars, and to not openly discuss their self-injurious behaviors out of fear of being rejected.

Shame may also be related to previous trauma, such as being abused as a child, where the victim self-injures to cope with the emotional distress that the abuse produces for him or her. Victims of abuse may also self-injure because they think that they may have deserved the abuse, and by self-injuring they are acting in a way that is consistent with those beliefs (Alderman, 1997). These individuals may be self-injuring to self-punish for the abuse that occurred at an earlier time. Moreover, Levenkron (2006) proposes that feelings of shame may eventually develop into general feelings of shame of oneself. This notion may perpetuate the cycle of SI, as the more shame one feels towards him- or herself, the more he or she may be inclined to self-injure.

Social contagion. Self-injury can also be conceptualized as a contagion. Contagion exists when one person, consciously or unconsciously, imitates or learns a behavior from another person. It is “particularly alarming that [self-injury] appears to

have a ‘contagious’ effect among peer groups,” (Lieberman, 2004, ¶3). If someone is observing another person self-injuring, and he or she sees the positive feelings of relief that this person receives by self-injuring, then he or she is more likely to imitate the behavior (Alderman, 1997).

Walsh and Rosen (1985) conducted a study involving 26 incarcerated adolescent boys and girls to determine which of nine predetermined behaviors were a contagion at a community-based treatment center. In 365 days, suicidal talk was the behavior witnessed most (78 incidents), and SI was the second most common behavior (73 incidents among 10 of the adolescents). However, SI was the only behavior that yielded statistically significant results; no other of the nine behaviors occurred together as often as self-injurious behaviors. In fact, more than one individual performed SI on nine days during the year, and Walsh and Rosen indicated that several incidents by more than one person in one day might imply a greater level of contagion.

Prinstein and Wang (2005) compared adolescents’ perceptions of their friends’ deviant and health risk behaviors to adolescents’ perceptions of their own behaviors. Deviant and health risk behaviors include aggression, illegal behavior, use of drugs, use of alcohol, sexual risk behavior, dieting, bingeing, and suicidality. They concluded that adolescents’ perceptions of their peers’ behaviors strongly predict their own behavior; however, they noted that often these perceptions were flawed in that peers either over- or under-estimated their peers’ behaviors. None-the-less, perceptions of another person’s behaviors may play a role in peer contagion (Prinstein & Wang, 2005). For instance, peers’ behaviors may influence others behaviors’ in one of two ways: selection effect, which is when teens select as peers those that engage in similar behavior, and

socialization effect, which is when affiliation with peers who engage in deviant or health risk behaviors is associated with an increase in one's own deviant behavior. In addition, implicit peer modeling, explicit peer demands, and/or belief that their emulative behavior may earn them specific social rewards may also affect peer contagion (Prinstein & Wang, 2005).

One can argue that SI is indeed a deviant and health-risk behavior, as deviant behaviors are behaviors that go against social norms, and this western society does not normalize the act of SI (Walsh, 2006). Self-injury can also be seen as a health-risk behavior due to the risks of infection and even death in some cases.

Social Networking on the Internet

Features of Social Networking Websites

Adolescent development is characterized by development within the social context and development of social skills. These developmental tasks include establishing caring, meaningful relationships, finding acceptance and belonging in social groups, and establishing interpersonal intimacy (Berk, 2006). Peer roles in fulfilling these tasks are important. It is also important to consider how the Internet contributes to adolescent development, since one in every two adolescents between the ages of 12 and 17 years has access to the Internet, and almost half of teenagers agree that the Internet helps them have better social lives (Lenhart et al., 2005). In addition, Lenhart et al. also report the number of adolescents who use the Internet increased from 17 million (73%) in 2000 to 21 million (87%) in 2004. More recently, in 2006 it was reported that 9 out of 10 adolescents, or 93% of adolescents, reported using the Internet (Lenhart, Madden, Macgill, & Smith, 2007). In addition, the number of adolescents who go online daily has

increased from 42% in 2000, to 52% in 2004, and to 61% in 2006 (Lenhart et al., 2007). In 2004, of the 21 million teens who reported using the Internet, 52% reported going online daily, of which 24% reported going online multiple times a day; in 2006, these percentages increased to 61% and 34%, respectively (Lenhart et al., 2005; Lenhart et al., 2007). On average, these youth spend 10.3 hours a week participating with friends in face-to-face social activities outside of school and 7.8 hours talking with these friends via the Internet or phone (Lenhart et al., 2005). Thus, the internet is a common form of communication for adolescents.

One website that is a popular networking website amongst adolescents is MySpace (<http://www.myspace.com>), which allows people to create personal profiles and network friends. Of adolescents who use the Internet, 55% also report using social networking sites, of which 85% state that they have a MySpace profile (Lenhart & Madden, 2007). Additionally, 26% of adolescents log onto their profile daily and 22% log on multiple times a day. Lenhart and Madden also found that “one of the major reasons why teens are such enthusiastic users of social network sites is that the sites give them opportunities to present themselves to a group of peers and then get feedback and affirmation” (p. 12-13). In addition, social networking sites attract teens because they are able to belong to a group of like-minded friends, as well as see their network of online relationships and reveal their popularity or liking for others (Lenhart & Madden).

Individuals who are members of MySpace can join various social groups, which allow them to network with people who share similar interests. There are various categorization topics for groups (i.e., sports, sororities, sexual orientation, health and fitness, etc.). Each group has a moderator who monitors the group for comments or

images that breach the group rules. Rules are most often found in groups that are highly monitored and censored. Most group pages allow members to upload images, provide forum topics for discussion, and post bulletins. Groups that are more lenient may not have any rules as to what can be posted and not posted, whereas groups that have strict rules may require the moderator to screen images before they are posted. Groups can be public groups (anyone can join), private groups (membership has to be granted by moderator), or hidden groups (membership can only be accessed if someone from within the group sends an invitation to join to another person). Unlike private and public groups, hidden groups are not listed when using the site's search engine and entering key terms or group names.

One purpose of joining groups is to network friends with the possibility of meeting new people. In order to become someone's friend on MySpace, one must send a *friend request* through the site's messaging system. The person the message is sent to must then accept the requester as his or her friend. It is important to note that there is an option to deny someone from being a friend, which means that if a person has his/her profile set to *private*, only those people accepted as friends are allowed to view the profile. *Networking* takes place when a person becomes a friend with a friend's friends, joins a group composed of people with similar interests, or conducts a search for people that have things in common (hometown, high school, area of study, occupation, etc.).

A person's *homepage* can only be seen by the creator of the page and is secured by a password. On the homepage, people are able to manage their accounts in terms of editing information, accepting or requesting friends, posting and reading bulletins and

blogs, and sending messages to others. Anyone can see a person's *profile page*, unless, again, the owner set it to private, allowing only his or her friends to view the profile page.

Five forms of electronic text take place on sites such as MySpace: *messages*, *comments*, *blogs*, *bulletins*, and *forums*. A *message* is similar to an individual e-mail in that a person can send it directly to another person and no one else can view it; however, he or she cannot send a message to more than one other person at a time. People can make *comments* on a person's profile page and anyone who views that page has access to the comment. Many online users refer to *blogs* as online journals or diaries that appear on the profile page of the author. Anyone who is able to access that person's page, friend or not, is able to view the blog. In addition, friends are able to respond by posting comments underneath the blog. When a person posts a *bulletin*, it is viewable by all of his or her online friends on their *bulletin spaces*. Bulletins allow a person to contact everyone on his or her friend list at the same time. However, a reply to a bulletin is sent as a private message to the person who posted it. *Forums* are found in groups and can be started by one person who posts a topic, or thread, which can be replied to by anyone in the group. A person can also send or post a picture, video, or graphic image by any of the five means.

Self-Injury on Social Networking Sites

A study of relationships formed on the Internet proposed that the ability to remain anonymous online may permit individuals to disclose private or personal information more than they would to someone in face-to-face setting, as the risks in doing so are lessened (McKenna & Bargh, 2000). Furthermore, "under the protective cloak of anonymity on the Internet, individuals can admit to having marginalized or non-

mainstream proclivities that they must hide from the rest of the world” (McKenna & Bargh, 2000, p.64). Selekman (2006) proposes that this western society marginalizes people who self-injure and that they face institutional racism and social injustice. As such, one can assume that people who self-injure are more likely to divulge their private acts in communications with others online through instant messaging, e-mailing, and group discussion boards. In addition, since there are websites dedicated to SI and message boards and discussion forums primarily for those who self-injure, the Internet has created an environment that normalizes SI rather than marginalizing it (Whitlock, Powers et al., 2006).

When people who self-injure feel like harming themselves, they most often want to talk to someone, and “face-to-face support groups may not provide readily accessible support; they may meet infrequently, require considerable travel time, as well as impinge upon family and work commitments” (Murray & Fox, 2006, p. 2). Internet SI groups, however, allow people who SI to have immediate access to a virtual community in which they feel safe to openly discuss their thoughts and feelings with like-minded others. For people who self-injure, these “communities are a gift, an opportunity to reach out of the loneliness and isolation that so often characterizes the practice” (Whitlock, Lader, & Conterio, 2007, p. 1136). Murray and Fox surveyed individuals participating in Internet discussion groups for SI to uncover the reasons why they choose to talk online. These identified reasons include seeking support from like-minded others (37%), freedom of expression (19%), safety (16%), alleviation of SI (10%), casual involvement (no mental health professionals, can come and go as they please; 10%) and ease of communication (7%). Participants also noted that, when they feel like self-injuring, they most often want

to talk to someone, and these discussion groups provide a means of communication and support, which in turn makes them feel less alone (42%) and more understood (33%).

Many people consider SI to be a topic that is sensitive in nature due to the secrecy and shame that often accompanies the act of SI. There is an abundance of websites that cater to people who self-injure. Jones et al. (2007) used the MySpace search engine and the terms *cut*, *cutters*, *cutting*, *self-injury*, and *self-mutilation* to identify groups pertaining to these topics. Through this search, Jones et al. identified 175 groups as having more than two members and more than two posts on the group's page. A current search to substantiate this investigation using the same method identified 47 new groups for a total of 222 groups. Groups that were still in existence from the original search increased in size between 1 and 768 members. In addition, Whitlock, Powers, et al. (2006) searched the Internet using five major search engines for SI discussion boards and identified over 400 message boards discussing issues related to SI. During a follow-up study a year later, over 500 message boards were identified (Whitlock et al., 2007).

In addition to revealing an increase in SI groups and SI discussion boards, content analysis revealed four types of Internet SI groups: support groups (help stop SI), promote groups (promote SI), recovering groups (support recovery from SI), and anti-cutter groups (members do not self-injure and are hostile toward people who self-injure; Jones et al., 2007). Whitlock, Powers, et al. (2006) examined the message boards they identified and found that the discussions revolved primarily around issues relating to SI, such as triggers (what causes a person to feel the need to self-injure), concealment issues, addictive elements of self-injuring, and issues of seeking help and treatment. Murray and Fox (2006) surveyed members of online SI groups and found that not only did the

majority of participants not know other people who self-injured before they began self-injuring, but they also did not know any other people who self-injured prior to joining the discussion group. This finding supports the idea that the virtual communities these discussion boards and websites create foster an environment where SI is normalized and accepted, and that the people who belong to them are supported, whether they are currently engaging in the behaviors, are wanting to stop, or have already stopped. Respondents also stated that they chose these discussion boards to talk about self-injure because they feel they are talking to like-minded individuals, which allows them to feel more comfortable, less isolated, and less likely to be judged (Murray & Fox, 2006).

There is debate as to whether these SI discussion groups are harmful or helpful. Murray and Fox (2006) found that 51% of the respondents felt that belonging to the discussion group helped reduce their self-injurious behaviors, while 49% of the respondents had self-injured as a result of being “triggered” by something they saw or read on the discussion board. Murray and Fox conclude that “while some participants had self-harmed in response to material posted on the group at one time or another, on the whole, respondents had experienced either a decrease or no change in their self-harming behavior” (p.7). They further indicated three main benefits reported by participants on these groups: support, being able to talk with someone when they feel the urge to self-injure, and having a place to meet like-minded others.

Another topic to consider when exploring SI discussion boards – as well as with websites, social networking sites and related groups – is the role the individuals play. While there is not a wealth of research in this area, one finding indicated that, while 80% of the respondents *read* the discussion group posts daily, only 30% participated in *posting*

messages on the discussion boards on a daily basis. People who post messages daily or even weekly are referred to as active participants, whereas the percentage of people who read the blogs daily, but do not post messages or participate in the discussions are what Whitlock et al. (2007) refer to as “lurkers.”

However, Internet websites and discussion boards geared towards individuals who self-injure appear to be a double-edged sword. There are benefits for youth who self-injure, such as an ability to connect and affiliate with others and establish intimate relationships with the ability to remain anonymous while doing so as noted previously by Murray and Fox (2006). One of the main discussion threads observed on these websites is the giving and receiving of informal support (Whitlock, Powers, et al., 2006). In addition, peer group identification is a large part of adolescent development, and for marginalized youth who self-injure it is an even greater need. This need can be difficult to meet for youth who self-injure as they struggle with shame, isolation and distress particularly when the source of the stress must be kept hidden. The ability for these marginalized youth to meet this need through these websites and discussion boards is of great importance.

Even though some of these websites have moderators who monitor them and offer support for those who self-injure, some websites expose susceptible youth to SI in an online culture where SI is normalized and promoted (Whitlock, Powers, et al., 2006). In addition, while some of these more monitored and supportive sites appear to be helpful, they may be more damaging, as the content on the site can be more triggering than they are therapeutic (Walsh, 2006). Images of people harming themselves, message boards with people describing their SI experiences, and medical advice from unqualified people

are a few of the reasons these Internet sites are potentially harmful to those who self-injure and to the vulnerable ones who do not currently self-injure, but are exploring the idea and searching for knowledge regarding SI. People who self-injure use the Internet to communicate strong feelings about SI, to coerce others, to model SI methods for others, to compete with others about SI practices, and to disinhibit others (Walsh, 2006).

Identifying with this subculture initiates a desire and need to belong, as well as a satisfaction from associating with people who self-injure, which, for others, may fuel the need to self-injure. Furthermore, for this marginalized population, the difficulty in ending a coping strategy and leaving an online community of supporters may decrease the desire to find alternative coping methods.

Thus, one can see that use of the Internet is constantly increasing, and adolescents are using the Internet for social purposes and to search for information on issues that sensitive in nature. Self-injury is one such issue, and groups geared towards individuals who self-injure are readily evident on social networking websites and the Internet. Furthermore, these groups are created and used in increasing numbers. However, there are mixed reviews as to what outcomes people receive from participating in these groups.

Perceptions of Self-Injury

Much like eating disorders did in the 1980s when there was little knowledge about them, SI evokes strong, and often negative, responses from individuals who do not perform the behavior. Self-injury is not aligned with societal values, causing it to be a deviant or taboo topic. As such, discussing SI may make individuals who do not engage in the behavior cringe or want to change the subject as they find it difficult to talk about SI. It is also hard for individuals who do not self-injure to understand why someone

would engage in the behavior. Because SI is a marginalized issue in society, it is difficult to bring awareness to it. Furthermore, there are noted misconceptions, or myths, regarding SI that continue to cloud and prevent accurate understandings.

Professionals

One reason that people who self-injure do not get the support they need is because of the lack of knowledge professionals hold on the topic. Jeffrey and Warm (2002) reviewed literature on SI and identified common misconceptions, which they used to develop a 20 point survey consisting of 10 accurate and 10 myths about SI, as illustrated in Table 1 below.

Table 1

Facts and Myths about Self-Injury

Facts about SI

SI is a form of communication.

SI provides a way of staying in control.

SI provides distraction from thinking.

SI can obtain feelings of euphoria.

SI is a release for anger.

SI expresses emotional pain.

SI is a coping strategy.

SI helps a person maintain a sense of identity.

Table 1 (cont.)

Facts about SI (cont.)

SI provides escape from depression.

SI helps deal with problems.

Myths about SI

SI is a sign of madness.

People who self-injure will “grow out of it” eventually.

SI is a manipulative act.

SI is a “woman’s problem.”

The best way to deal with people who self-injure is to make them stop.

People who self-injure have been sexually abused.

SI is a failed suicide attempt.

SI is attention seeking.

People who self-injure should be kept in psychiatric hospitals.

Everybody who self-injures suffers from Munchausen’s Disease (self-inflicted injuries calculated to produce specific symptoms that will lead to medical hospital admissions).

Note. Adapted from “A study of service providers’ understanding of self-harm,” by D. Jeffery and A. Warm, 2002, *Journal of Mental Health*, 11, p. 299.

Survey participants included 96 psychiatrists, psychologists, general practitioners, nurses, social workers, mental health support workers, and 16 people who self-injure.

Psychiatrists and medical workers (i.e., nurses and general practitioners), who most likely will work with those who self-injure, lack an accurate understanding of SI (Jeffrey & Warm, 2002). The mean scores of these groups on their understanding of SI were 69.78 and 71.00, respectively, as compared to the SI group’s mean score of 79.81. Results of another study indicated that high school teachers are also a group of professionals who lack an accurate understanding of SI (Heath, Toste, & Beettam, 2006). Even though this

group of high school teachers was able to report the basic facts regarding SI, only 12% of the 50 teachers were able to indicate accurate prevalence rates of SI and indicate that they felt knowledgeable about the subject.

On the other hand, it appears that psychologists, social/community care workers, and school psychologists are relatively knowledgeable about SI (Jeffery & Warm, 2002; Beld, 2007). Jeffrey and Warm's results indicated that psychologists' ($M = 79.37$) and social/community workers' ($M = 77.16$) understandings of SI are not significantly different from the SI group's understanding of SI ($M = 79.81$). In addition, Beld surveyed 64 school psychologists using the same 20 items used by Jeffrey and Warm (2002) and found that school psychologists' level of understanding ($M = 79.11$) was roughly equivalent to the group of people who SI from Jeffrey and Warm's study ($M = 79.81$). However, the school psychologists still had some inaccurate perceptions of SI. For instance, 44 % stated that they were unsure if people who self-injure had been sexually abused (myth), 57% disagreed or were unsure if self-injuring helps people deal with their problems (fact), 56% agreed or were unsure if SI is a manipulative act (myth), and 81% agreed or were unsure if SI is an attention seeking behavior (myth).

Family and Peers

While there is available research examining the knowledge that medical and school professionals hold regarding SI, there are no direct studies assessing any other person's perceptions of SI, including peers of those who self-injure. However, there is literature available that discusses some of the most commonly reported perceptions based on the opinions and experiences of clinicians who have worked with people who self-injure (Alderman, 1997; Levenkron, 2006; Walsh, 2006). Much of the popular media

originally portrayed people who self-injure as “freaks” (Levenkron, 2006, p. 62). Other negative perceptions of people who self-injure have been noted in the general public, family members, and mental health and physical health professionals. People who do not engage in SI may react to someone who self-injures with shock, denial, anger, frustration, empathy, sympathy, sadness, and guilt, as well as feel fearful, repelled, or disgusted by those who self-injure (Alderman, 1997; Levenkron, 2006). In a memoir, Kettlewell (1999) recounts a personal account with classmates and teachers discovering her SI, in which one classmate calls her SI “really disgusting” and another remarks that she is “just wants attention” (p. 5). She recalls her teachers, principal, and school nurse shaking their heads in dismay, and feeling as though their “questions probed [her] like insinuating fingers” (p.10). McVey-Noble, Khemlani-Patel, and Neziroglu (2006) add that if a person’s self-injurious behaviors are blatantly obvious, then people will most likely assume that the person is seeking attention, trying to shock or stun people, or that the person is deeply disturbed, and they will be more likely to avoid the person who self-injures.

Family members may react with fright and denial as they try to lessen the severity of their loved one’s SI by hoping they will grow out of the behavior. Friends of people who self-injure may either withdraw when they learn of the behavior or they may try to take on a sole responsibility of helping their friend overcome the urge to self-injure (Levenkron, 2006). In either of these situations, Levenkron proposes that the friend will eventually leave the person who self-injures alone, either due to not being able to handle the behavior or because the friend will realize that he or she cannot single-handedly help the self-injurer, thus seeing the person who self-injures as a symbol of his or her own

failure. However, it also appears that adolescents who self-injure often group together and that peers influence other peers to self-injure (McVey-Noble et al., 2006; Walsh, 2006).

It is known that peers influence other peers to self-injure (Walsh, 2006). Not only do adolescents' perceptions of their peers' behaviors influence their own behaviors, but adolescents also choose friends who engage in similar behaviors (Prinstein & Wang, 2005). In addition, adolescents' deviant behaviors are more likely to increase than to decrease when they associate with other adolescents who engage in deviant behaviors. It seems logical to conclude that the deviancy concept applies to self-injurious behaviors as they can be seen as deviant and health-risk behaviors. People who self-injure choose to join and participate in SI groups because they are able to connect with like-minded people who engage in similar behaviors, which is an example of the selection effect (Murray & Fox, 2006; Prinstein & Wang, 2005; Whitlock, Powers, et al., 2006). People who self-injure also join these groups to gain support from others. Murray and Fox (2006) have observed participation in these groups to lead to a decrease in participants' self-injurious behaviors. However, 12 % of their sample reported increasing their self-injurious behaviors due to group participation, and 46% stated that content on a group page had triggered them to self-injure (Murray & Fox). More interesting, however, is that 16% of this sample reported *wanting* to be triggered by information contained on the group page, which can be seen as an example of the socialization effect as this may lead to an increase in the behavior (Murray & Fox, 2006; Prinstein & Wang, 2005).

However, there is little knowledge regarding the degree non-self-injuring peers may be influencing people to self-injure or to conceal their activities. It is also unclear

how teens perceive their peers who engage in SI. This lack of knowledge promotes a variety of questions: Are non-self-injuring peers accepting of these behaviors, or do they ridicule and reject those who self-injure? If a teen who self-injures reveals this information to his or her peers, does the knowledge of the behavior then create a barrier to the continuation of the relationship? Do teens reject their peers who engage in SI? Are teens self-injuring to self-select into a peer group they can identify with? Or, does it vary from one person to another?

Purpose

Many researchers have documented the occurrence of self-injurious behaviors within many settings, such as inpatient psychiatric facilities, community treatment centers, hospitals; prisons; elementary schools, middle schools, high schools, and colleges; and in the military (Alderman, 1997; Klonsky et al., 2003; Ross & Heath, 2002; Walsh, 2006; Walsh & Rosen, 1985; Whitlock, Eckenrode et al., 2006). Researchers have observed SI as a topic in discussion forums and social groups on the Internet (Jones et al., 2007; Murray & Fox, 2006; Whitlock, Powers et al., 2006). While previous research has focused on the number of groups and the content of the group discussion boards, there is limited research as to why these individuals are involved in these online SI groups. Is it because they feel so isolated from the people around them who do not self-injure that they turn to a virtual community of people who are more like them? Do these online communities normalize self-injurious behaviors in a way that appeals to people who engage in these behaviors? Or is it because they are just starting to self-injure and they are able to find more information and ideas by talking to people who have been self-injuring longer? This research seeks to offer insight to the virtual world of SI, including

the knowledge of people who belong to online SI groups, their experiences or connection to SI, and how they view SI perceptions of their online peers and their face-to-face peers.

The purpose of this investigation is to look at the level of SI knowledge and the understandings that individuals who self-injure have about their peers' reactions and perceptions of SI within virtual communities identified as SI groups. The main intent of this investigation is to gain descriptive information about why individuals belong to Internet SI groups and how knowledgeable they are about SI. The specific hypotheses under study are as follows:

1. Members who have belonged to an online SI group for longer periods will have higher levels of SI knowledge than members who have recently joined an online SI group.
2. Members of online SI groups will have higher levels of SI knowledge than will health care professionals.

In addition to the above hypotheses, two research questions guide the collection of additional descriptive information.

1. What do members of online SI groups report about online peers' perceptions of SI and face-to-face peers' perceptions of SI?
2. What do members of online SI groups report as outcomes of their participation in these groups?

Method

Description of Respondents

A convenience sample of respondents solicited from 26 MySpace SI groups participated. From these groups, 103 members completed the online survey. The survey responses from two respondents were excluded because they had never self-injured. Thus, 101 survey responses were obtained.

Basic demographics. The majority of the respondents ($n = 92$) were Caucasian (85.9%) and female (87.0%). The remaining 14% indicated their ethnicity as Asian (4.3%), Hispanic (3.3%), African American (2.2%), and other (4.4%; Native American, Middle Eastern, or Multiracial). Participants' ages range from 18 to 46 years, with a mean age of 21 years. However, the modal age was 18 years (40.2%). Regarding sexual orientation, 52.2% of the participants indicated that they were heterosexual, 31.5% bisexual, 13.0% questioning their sexuality, and 3.3% gay/lesbian. A majority of the respondents reside within the United States (89.1%), while the remaining participants reside in Australia (5.4%), England (3.3%), or Canada (2.2%). At least one participant represents 32 of the 50 United States. California ($n = 11$, 10.9%) and Pennsylvania ($n = 8$, 7.9%) are the two states with the most respondents ($n = 11$, 10.9%) reporting as their state of residence. Regarding education levels, 25% of the sample indicated completing at most their junior year of high school, 32.6% reported completing their senior year of high school, 22.8% reported completing their first year of college, and 17.8% reported completing two years of college or more.

Self-injury demographics. Of the total sample, 89 participants responded to seven items pertaining to their connection to SI. Out of the seven items, two were removed as

they pertained to those who have not engaged in SI. Over half (66.3%) of these respondents indicate they currently engage in SI and over a quarter (30.3%) report they have self-injured before but no longer engage in the behavior. Table 2 illustrates how these two groups responded to the remaining items.

Table 2

Online Self-Injury (SI) Group Participants' Peer Relationship and SI Statuses

Item	Currently engage in SI ^a	No longer engage in SI ^b	Sample ^c
	% (n)	% (n)	% (n)
Has an online friend who self-injures	32.6 (29)	11.2 (10)	43.8 (39)
Has a face-to-face friend who self-injures	33.7 (30)	14.6 (13)	48.3 (43)
Have both online and face-to-face friends who SI	27.0 (24)	10.1 (9)	37.1 (33)
Is curious to know more about people who SI	13.5 (12)	4.5 (4)	18.0 (16)

^an = 59 (66.3%). ^bn = 27 (30.3%). ^cn = 89.

Participants responded to demographic questions regarding their self-injurious behaviors. For the 88 participants responding to these questions, the age range of onset of self-injury spans from 2 to 26 years, with 59% indicating they began self-injuring between the ages of 12 and 14 years. In addition, 95.5% report having self-injured more than 30 times and 92% indicate engaging in self-injurious behaviors for over one year. Regarding the frequency of their behaviors, 52 respondents report they self-injure on a daily basis, and of these respondents 67.3% report doing so up to five times per day. In addition, 56 respondents indicate they self-injure on a weekly basis, with 53.5% of these

reporting they self-injure one to five times a week, 12.6% self-injure six to ten times per week, and 14.3% self-injure 11 or more times per week. When asked how concerned they are about SI in general, 49.4% report being extremely concerned and 27.0% report being somewhat concerned, while 15.7% indicate they are unsure how concerned they are about the behaviors, and 7.9% report being not very concerned or not concerned at all about SI.

When asked how they first became aware of SI, 55.3% of the 85 respondents report their own personal experience, such as they self-injured without knowing other people did it, as how they first became aware of SI. The second most frequently reported way respondents first became aware of SI is through the popular media (15.3%), such as television, news programs, magazines, or the Internet, followed by hearing people talk about it in person (9.4%). Respondents ($n = 86$) indicate first learning about their friends' SI by talking to their friends in person (30.2%), seeing their friends self-injure (11.6%), or chatting online with a friend about SI (10.5%). However, 23.3% of the respondents indicate they do not have any friends who they know to self-injure.

Respondents ($n = 83$) indicate a wide range of sources of information on SI. Respondents were able to endorse more than one source of information. Items endorsed by at least 50% of the sample include: personal experience (have engaged in SI at least once; 84.3%), researching it on the Internet (not including the use of social networks; 69.9%), conversing with other people who self-injure in online group discussion forums (63.3%), mental health or medical professionals (53.0%), and chatting with friends who self-injure online (i.e., personal messages, comments, instant messages; 50.6%). Additional significant sources of information include conversing with face-to-face friends about SI (41.0%), reading information in other people's comments or blogs on personal

webpages without joining in the conversation (37.3%), television or other popular media (31.3%), and hearing face-to-face friends talk about SI (28.9%). Less frequently nominated sources are family members (7.2%) and other (i.e., books, other websites; 6.0%).

Participants were also asked to indicate their top three preferred information sources. The three most frequently reported responses for preferred information source were personal experience (50.6%), researching SI on the Internet without using social networks (21.5%), and online group discussion forums (8.9%). Participants additionally nominated researching SI on the Internet in the second (18.4%) and third (18.6%) rankings. They also nominated group discussion forums in the first (8.9%) and second (14.5%) ranks. Talking to friends in person about SI (17.1%) also received a nomination in the second rank, and information from medical health professionals (18.6%) and chatting with friends on Online (i.e., personal messages, comments, instant messages; 12.9%) were nominated in the third rank.

Function of self-injury. Respondents were asked to indicate the primary reasons they engage in self-injurious behaviors (see Figure 1). Of the 87 participants responding to this question, 96.6% indicate they self-injure to find relief from negative emotions, such as emotional distress, and 78.2% report they self-injure to express anger towards themselves, to punish themselves, and/or to degrade themselves. Responses indicated for the “other” category (8.0%) were categorized by theme, and include: to prevent another behavior (e.g., hurting someone else, panic attacks; $n = 4$), to have a sense of control ($n = 2$), and because it is an addiction ($n = 3$). Participants also ranked the top three reasons they engage in SI. An analysis of the three most reported responses for each of the top

three reasons they engage in SI revealed *relief from negative emotions* (51.8%) as the number one reason respondents engage in self-injure. The other two responses for the number one reason respondents self-injure were *to express anger towards themselves* (18.1%), and *other* (12.0%). Participants also nominated *to express anger towards themselves* at the second and third rank (32.5% and 20.3% respectively). Also nominated for the second rank was *relief of negative emotions* (27.5%). Respondents nominated *to end outside of the body feelings* for the second and third ranks (18.8% and 32.4% respectively). *To resist the urge to commit suicide* was the final reason participants nominated for the third rank (18.9%).

Associated features of self-injury. Respondents also indicated if any comorbid or associated conditions existed. There were 16 total response options, including “other” and “not applicable.” None of the 91 respondents selected “not applicable,” and 5.5% listed an “other” condition, such as anxiety disorders and medical conditions. The range of comorbid features spans from 2 to 13, with a mean of approximately six associated conditions. Of the 14 possible options, the top three responses were attempted suicide (68.1%), professionally diagnosed depression (67.0%), and eating disorder (57.1%). Following these top responses were situational risk taking behaviors (47.3%), physical risk taking behaviors (45.1%), sexual abuse (40.7%), depression not diagnosed by a medical professional (39.5%), contemplated suicide without attempting (34.1%), sexual risk taking behaviors (34.1%), alcohol abuse (33.0%), substance abuse of street or prescription drugs resulting in legal problems (31.9%), and rape (31.9%). Less than one-third of the respondents reported posttraumatic stress disorder diagnosed by a health care professional (23.1%), and posttraumatic stress

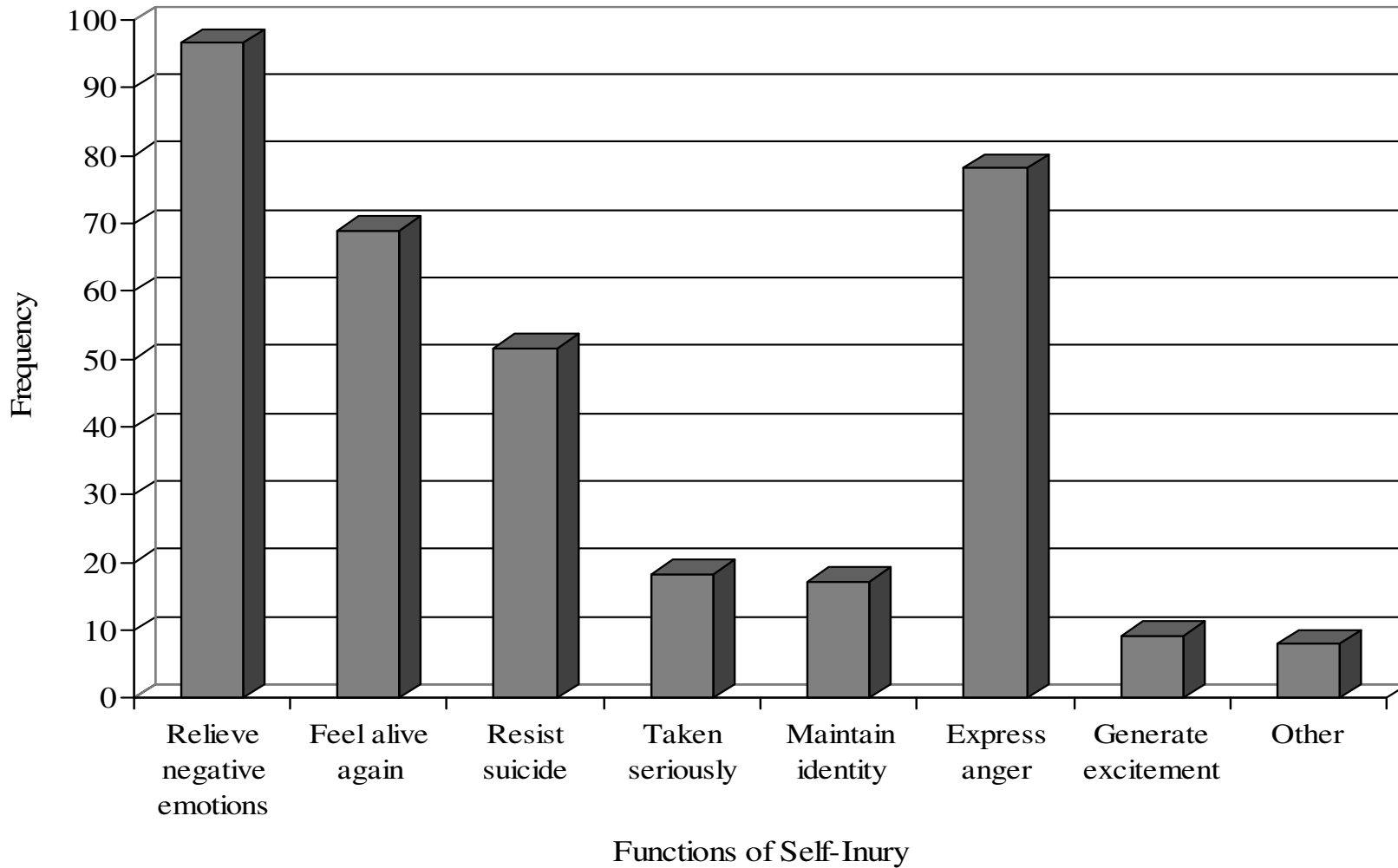


Figure 1. Functions of self-injury (SI) reported in percentages by 87 online SI group participants.

disorder not diagnosed by a health care professional (15.4%).

Instrument

A survey developed to solicit information to address the research questions and hypotheses provides the data for this investigation (see Appendix A). The survey consists of five sections to evaluate information including demographics, experiences with SI, knowledge of SI, activities related to SI in MySpace groups, and perceptions of online and face-to-face peers' attitudes regarding SI. Questions are derived based on review of the literature and current knowledge regarding participation in SI groups.

The first section of the survey (questions 3 to 10) asked for basic demographic information relevant to individuals who self-injure, including age, race, gender, sexual orientation, years of schooling completed, country of residence, and state of residence (if residing within the United States). In addition, Question 10 requested participants to indicate if any comorbid or associated conditions existed, including: depression, post-traumatic stress disorder, sexual abuse, rape, eating disorder, alcohol abuse, recurrent substance abuse of street or prescription drugs, attempted suicide, contemplated suicide (without attempting), physical risk taking behaviors (e.g., walking in high speed traffic), situational risk taking behaviors (e.g., getting into a car with a stranger), or sexual risk taking behaviors (e.g., having sex with strangers or having unprotected sexual interactions). Additional response options included "none of these apply to me" and "other" with space to explain.

The second section of the survey (questions 11 to 22) ascertained participants' connection and personal experience with SI, including the age at which they began self-injuring and how often and how long they have self-injured. In addition, participants

reported how they first became aware of SI as well as how they first became aware that SI was something their friends also did. Based on Klonsky's (2007) review of empirical research on the functions of SI, question 17 addressed the functions of the participants' self-injurious behaviors. Specifically, participants indicated their primary reasons for self-injuring from the following list: to find relief from negative emotions (such as emotional distress); to end "outside of the body" feelings or to feel alive again; to resist urges to attempt suicide; to be taken more seriously by someone or to effect someone else's behavior towards themselves; to maintain identity or autonomy; to express anger towards themselves or to punish themselves; to generate excitement and/or exhilaration. After selecting all of the reasons they engage in the behavior, participants rank ordered the top three reasons they self-injure.

The survey's third section (question 23 to 28) pertained to knowledge of SI. Question 23 included Jeffery and Warm's (2002) 20 items that assess a person's level of SI knowledge by having him or her respond on a five-point Likert scale (i.e., 1 = *strongly disagree* to 5 = *strongly agree*) to accurate and inaccurate perceptions of SI. During development, professionals checked Jeffrey and Warm's survey for face validity. A factor analysis confirmed content validity and it supported the distinctions between the accurate and inaccurate perceptions of SI. Jeffrey and Warm established the reliability of the measure through Cronbach's alpha coefficient ($\alpha = .75$) and split-half reliability ($r = .84$). An analysis by Beld (2007) also supported the reliability for the 20 items as it revealed the coefficient alpha of the items to be .69. An additional open-ended question (Question 24) was included after these 20 items to offer participants the opportunity to share any information regarding SI they would like people to know or understand. The

remaining questions in this section determine knowledge of contemporary research, including percentage of the general public who self-injure, age of onset of SI, and current conceptions of SI.

The fourth section of the survey (questions 29 to 42) focused on use of the internet and activity in online SI groups along with questions to ascertain the outcomes associated with SI group participation. Questions 29 to 31 focus on the participants' experience with activities related to SI in MySpace groups, including how many groups they belong to and how long they have been a member of each group. Participants also indicated the amount (length of time and frequency of participation) and type of participation (e.g., initiate conversations; read and respond; questions 32 to 36). Participants also indicated their reasons for belonging to MySpace groups (e.g., informal support, to find advice on SI techniques; questions 37 and 38). Questions 39 and 40 addressed the influence of online SI group participation on personal SI. Participants identified the forms of SI participants encountered in their MySpace SI groups (e.g., cutting, burning, scratching, etc) in questions 40 and 41.

The fifth survey section (questions 43 to 55) inquired about perceptions of online friends' and face-to-face friends' beliefs and attitudes towards SI. Respondents answered the same set of four questions in reference to the two different peer groups: online and face-to-face. The four questions pertain to the number of close friends they have (questions 43 and 47), how many of these close friends they talk to about SI (questions 44 and 48), if they know whether any of their close friends have ever self-injured (questions 45 and 49), and if they know of any of their close friends who have self-injured within the past year (questions 46 and 50). Question 51 asked for the participants

to indicate which of their friends – face-to-face, MySpace, Both or Neither – are most likely to think certain things about SI, such as the functions of SI, whether people who self-injure need professional help, and whether knowing about a friend’s self-injurious behaviors has changed their relationships for the positive or negative.

Three doctoral level psychologists, three school psychology practitioners, three master’s level professionals, and one business professional conducted an expert and practitioner content validity and readability review analysis. They checked the document for both breadth and clarity of the questions and adequacy of response options. In addition, they checked for redundancy and for grammar mistakes. The reviewers only made recommendations for grammatical corrections.

Procedure

Group selection. I solicited respondents via postings to MySpace SI groups. Groups were identified using the search engine on MySpace and the terms *cutting*, *cutters*, *self-injury*, and *self-mutilation*. Of the 58 public and private groups detected, 29 met the inclusion criteria of (a) group membership greater than or equal to 10 and (b) activity in the last four months of at least two postings with one response each. Further, I solicited only 27 of the groups, as two groups’ privacy settings did not permit me to contact the moderator.

Solicitation of participants. I contacted the moderators of each of the 27 groups asking them to post the invitation on their group’s site (see Appendix B). One moderator declined, 18 of the moderators did not respond, and eight moderators agreed to post the invitation. Upon agreeing to post the invitation, moderators received an e-mail containing information for them to post on the group’s webpage (see Appendix C). Noting a slow

response rate and upon checking the survey links in the eight groups, it was discovered that one group's link was not working properly and two group moderators did not post the invitation for their group members to participate. After obtaining approval to amend the IRB approved procedures, I joined each of the 26 groups that were solicited (the 27th group moderator had selected not to participate), and posted a modified invitation and link directly to 23 of the groups' pages (see Appendix D, HSRB Revisions Memo, and Appendix E, Modified Invitation). I did not post an invitation on three group pages as the moderator had posted the survey link within the three days prior to my joining the group. In addition, one week later I posted a follow-up message to all 27 group pages inviting members to take the survey before the cut-off date.

The size of the groups where invitations were posted ranged from 14 to 1,586 members. The sum of the memberships of all groups was 6,938, with a mean of 267. Three of the groups were private groups, and 23 groups were public. In addition, the moderators identified 21 of the groups as support groups, five of the groups for support in controlling or stopping SI, and one of the groups for promoting SI. They did not identify any of the groups as being for recovered self-injurers or as being hostile towards self-injurers. The Western Kentucky University Human Subjects Review Board approved all of the procedures (see Appendix F).

Results

This section presents the survey data and the analyses conducted to address the hypotheses. Descriptive information will be provided for the responses to the survey questions along with the analyses to address the hypotheses. Some of the participants did not complete the entire survey. Of the 101 respondents, 52.5% completed the entire survey, 59.4% completed two-thirds of the survey, and 82.2% completed one-third of the survey. All of the items participants responded to create the base for the descriptive data; however, the knowledge measure based on Jeffrey and Warm's (2002) 20 items was computed only for those participants who completed all 20 of the items. There were not any demographic differences between responses given on complete surveys versus responses provided on incomplete surveys. Therefore, inconsistencies in survey completeness results in the number of respondents varying for each question.

Self-Injury Knowledge Measure

Hypothesis One and Hypothesis Two rely on the analysis of the 20 item self-injury knowledge measure previously used by Jeffrey and Warm (2002), Beld (2007), and Butts (2008). Of the 101 respondents, 81 completed all or some of these items (question 23). Only the 79 participants who completed all 20 items were included in the analysis of knowledge mean scores, but all available responses were used for the analysis and categorization of response patterns (i.e., accurate versus inaccurate understandings). I recoded the reverse worded items to ensure consistent scaling across the items with agreement indicative of correct responses. A five-point Likert scale supplied the response options. Totaling the numerical value for each of the 20 items provided a SI knowledge score. The potential range for the knowledge score is from 20 to 100; the range from the

current sample is 61 to 97 ($M = 80.39$, $SD = 6.94$). An analysis of reliability established Cronbach's alpha at .69 and a spilt half reliability of .777.

In addition, an analysis of the response patterns on the knowledge items categorized them as having good (accurate), poor (inaccurate), or problematic understandings of SI. I accepted Beld's (2007) criterion level of a response rate of 70% for determination of items as good, poor, or problematic. This level is liberal and functions as a screening rather than a mastery of content criterion level. Under this criterion level, categorizations of good understanding includes items for which response rating frequencies of 4 (*agree*) or 5 (*strongly agree*) are greater than or equal to 70%. A categorization of poor understanding includes items for which response rating frequencies of 1 (*strongly disagree*), 2 (*disagree*), or 3 (*unsure*) are greater than or equal to 70%. A categorization of problematic understanding includes items that do not reach the 70% level as either poor or good. On Jeffrey and Warm's 20 items, responses from the current sample reflect 10 accurate understandings and 10 problematic understandings of SI (see Table 3).

Table 3

Online Self-Injury (SI) Group Participants' Understanding of SI Knowledge

Question	<i>M</i>	Inaccurate	Accurate
Good Understanding of SI ^a			
SI provides a way of staying in control	4.22	14.6	85.4
SI provides distraction from thinking	4.29	8.5	91.5
SI is a "woman's problem"	4.73	4.9	95.2
SI is a release for anger	4.56	1.2	98.8

Table 3 (cont.)

Good Understanding of SI (cont.)			
SI is an expression of emotional pain ^b	4.64	0.0	100.0
Best to make people who engage in SI stop	4.40	11.0	89.0
SI is a failed suicide attempt	4.78	2.4	97.6
SI is a coping strategy	4.46	6.1	93.9
SI is attention seeking ^c	4.22	22.8	77.2
Everyone who engages in SI suffers from Munchausen's Syndrome	4.61	12.2	87.8
Problematic Understanding ^d			
SI is a form of communication	3.57	37.8	62.2
SI is a sign of madness/mental illness	3.28	54.9	45.1
People "grow out of" SI ^b	4.02	32.1	67.9
SI is a manipulative act	3.55	52.4	47.6
SI obtains/promotes feelings of euphoria	3.44	45.1	54.9
People who SI have been sexually abused	3.50	51.2	48.8
SI helps people deal with problems	3.77	34.1	65.9
SI helps maintain a sense of identity	3.45	50.0	50.0
SI provides an escape from depression	3.38	45.1	54.9
People who SI need psychiatric hospitalization	3.65	43.9	56.1

Note. Accurate and inaccurate frequencies (shown as percentages) reported by participants ($n = 82$) on the knowledge of SI measure (Jeffery & Warm, 2002).

Table 3 (cont.)

Note (cont.). Frequencies derived from rescaling the 5-point Likert scale (1 = *strongly agree*, 2 = *disagree*, 3 = *unsure*, 4 = *agree*, 5 = *strongly agree*) into two groups, *accurate* (ratings of 4 or 5) and *inaccurate* (ratings of 1, 2, or 3).

^aGood Understanding of SI = Accurate frequencies $\geq 70\%$. ^bn = 81. ^cn = 79. ^dProblematic Understanding of SI = Inaccurate or Accurate frequencies $< 70\%$.

Hypothesis One

Hypothesis One predicted that members who have belonged to an online SI group for longer periods would have higher levels of SI knowledge than members who recently joined an online SI group. This hypothesis was analyzed by breaking the sample (n = 58) into three groups based on the length of time participating in online SI groups. Group One consisted of 19 participants who had belonged to a group for less than one month up through five months (32.8%). Group Two consisted of 21 participants who had belonged to a group for 6 through 12 months (36.2%). Group Three consisted of 18 participants who had belonged to a group for 13 months or more (31.0%).

An independent-samples *t*-test was conducted to evaluate whether the mean knowledge of SI scores for those with the longest online group membership (Group Three, 13 months or more membership) evidences greater knowledge of SI than the most recent online group membership (Group One, 5 months or less membership). The *t*-test was not significant, $t(34) = .541$, $p = .284$. The effect size was small (.11). Therefore, Hypothesis One was not supported.

Hypothesis Two

Hypothesis Two predicted that members of online SI groups would have higher levels of SI knowledge than would health care professionals. To evaluate this hypothesis, the mean SI knowledge score for the current sample ($n = 79$) on Jeffrey and Warm's (2002) 20 items was calculated. This analysis was followed by a series of one-sample t -tests using the mean scores for the various professional groups obtained by Jeffrey and Warm (2002), Beld (2007), and Butts (2008) as the population mean (see Table 4). A Bonferroni correction established the probability at $p = .0071$ for these comparisons. The current sample's mean knowledge score when compared to that of the other professionals (e.g., psychiatrists, teachers) was significantly higher than four of the seven groups. In addition, the effect sizes for the significant comparisons were large.

Table 4

Online Self-Injury (SI) Group Participants' Mean Knowledge Score and Comparisons with Various Professional Groups

Group	<i>M</i>	<i>SD</i>	<i>t(df)</i>	Effect size
Self-Injurers	80.39	6.94		
Psychiatrists ^a	69.78	6.94	13.41(76)*	1.53
Psychology Workers ^a	79.37	6.55	1.29(76)	.15
Medical Workers ^a	71.00	5.98	11.87(76)*	1.35
Social/Comm. Workers ^a	77.16	8.71	4.08(76)*	.47
Self-Harmers ^a	79.81	6.46	.73(76)	.08
School Psychologists ^b	79.11	6.27	1.62(76)	.18
Teachers ^c	68.83	6.23	14.61(76)*	1.67

Table 4 (cont.)

^aFrom “A study of service providers’ understanding of self-harm,” by D. Jeffery and A. Warm, 2002, *Journal of Mental Health*, 11, p. 299. ^bFrom “Self-injury in the schools: A survey of school psychologists,” by A. Beld, 2007, Unpublished Educational Specialist Project, Western Kentucky University, Bowling Green. ^cFrom [Self-Injury in the schools: A survey of educators] by J. Butts (2008), unpublished raw data.

* $p < .0071$.

The mean knowledge score for the respondents was not significantly different from that of the psychology workers, the school psychologists, and the self-harmers. Further, the effect sizes for these non-significant comparisons were all small, indicating that results would most likely remain the same based on a larger sample size. Therefore, only partial support was obtained for Hypothesis Two.

Research Question One

The first research question sought to gain knowledge about online peer perceptions versus face-to-face peer perceptions of SI. Questions 43 through 50 provide the information regarding the participants’ online and face-to-face relationships. Figures 2 and 3 illustrate how many online and face-to-face friends the participants report communicating with regularly and how many of these friends they report talking to about SI. Overall, respondents indicate having more face-to-face than online friends with whom they communicate with on a regular basis, yet they report having more online friends than face-to-face friends to talk with about SI. Regarding the friends they communicate with on a regular basis, 18.8% of the 64 respondents report not having any online friends

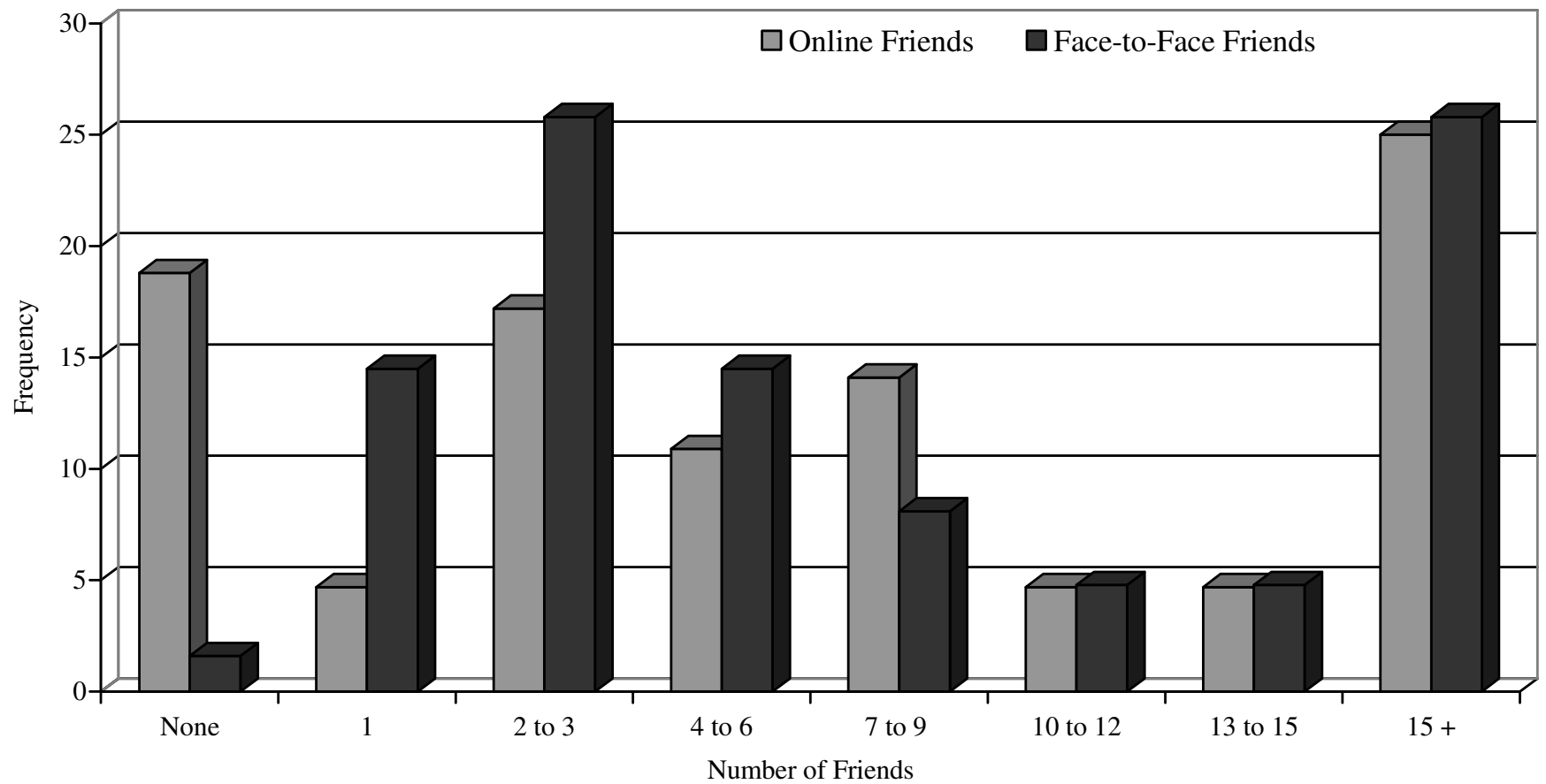


Figure 2. Number of online and face-to-face friends self-injury (SI) group participants' report communicating with on a regular basis (frequencies reported as percentages). There were 64 participants responding to the question regarding online friends and 62 participants responding to the question regarding face-to-face friends.

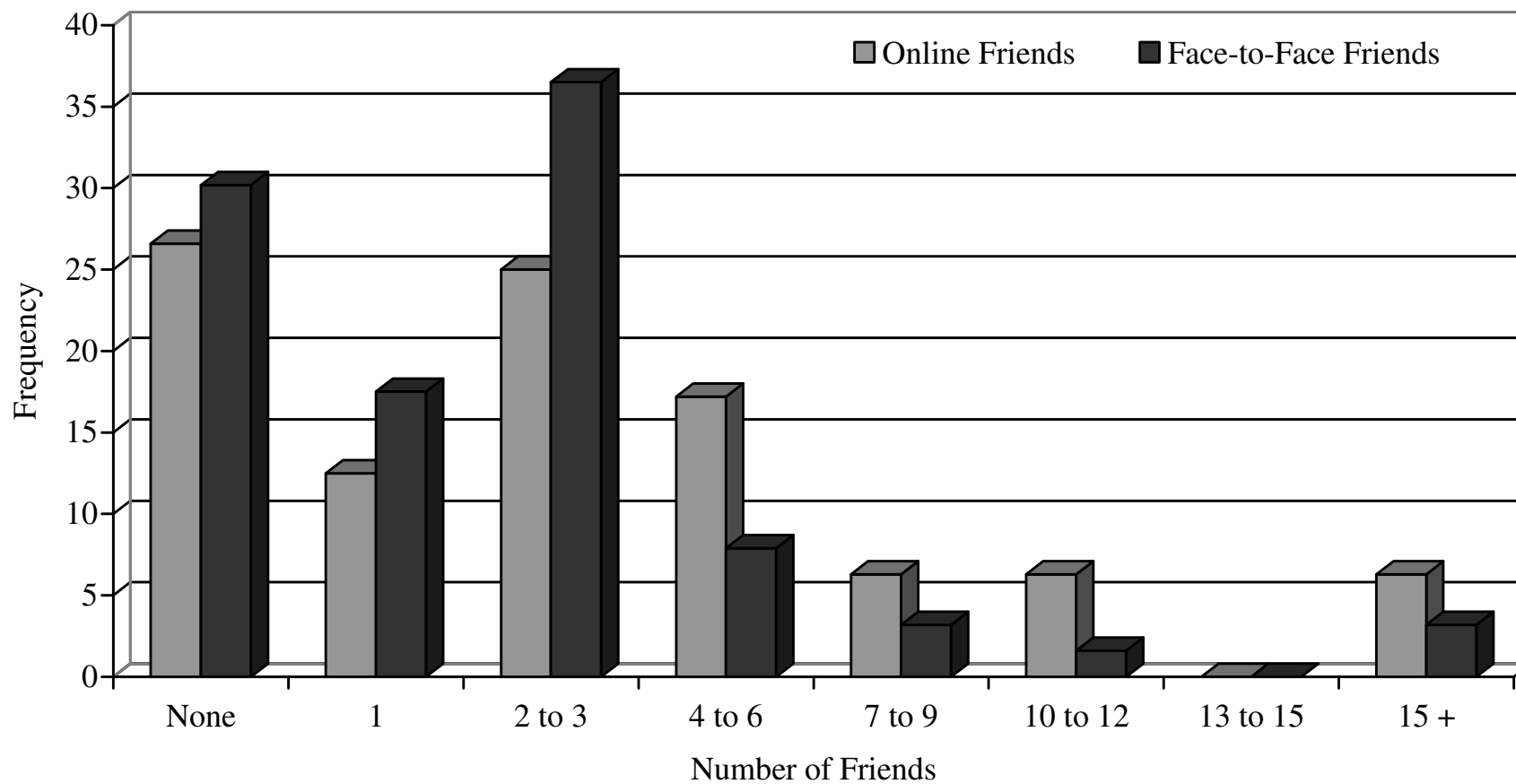


Figure 3. Number of face-to-face friends and online friends self-injury (SI) group participants' report talking to about SI (frequencies reported as percentages). There were 64 participants responding to the question regarding online friends and 62 participants responding to the question regarding face-to-face friends.

they communicate with on a regular basis, versus only 1.6% of 62 participants reporting they do not have any face-to-face friends they communicate with on a regular basis.

However, 26.6% of the 64 respondents indicate that they do not have any online friends with whom they discuss SI and 30.2% of 62 participants indicate they do not have any face-to-face friends with whom they discuss SI. In addition, with the exception of the response options “none” and “seven to nine friends,” response frequencies are higher for the face-to-face friends for each response option, yet response frequencies vary for how many friends participants report talking to about SI. However, frequencies for responses indicating between none and three friends are higher for face-to-face friends and response options indicating four to more than 15 friends are higher for online friends.

In addition, Figure 4 illustrates how many online and face-to-face friends who self-injure the respondents know. Overall, of the 61 participants responding to this question, 62.3% report knowing of at least one online friend who self-injured in the last year, while only 4.9% report none of their online friends self-injured in the last year. Likewise, of the 62 participants responding to the face-to-face friend question, 59.7% report knowing at least one friend who had self-injured in the last year, whereas 22.6% indicated none of their friends have self-injured in the past year.

If the respondents indicated that they knew of at least one friend who had self-injured in the last year, they also reported how many online and face-to-face friends they knew who had self-injured in the last year. Figure 5 illustrates of the number of friends respondents indicated knowing who had self-injured last year. Overall, of the 58 participants responding to this question, 65.5% indicate knowing one to ten online

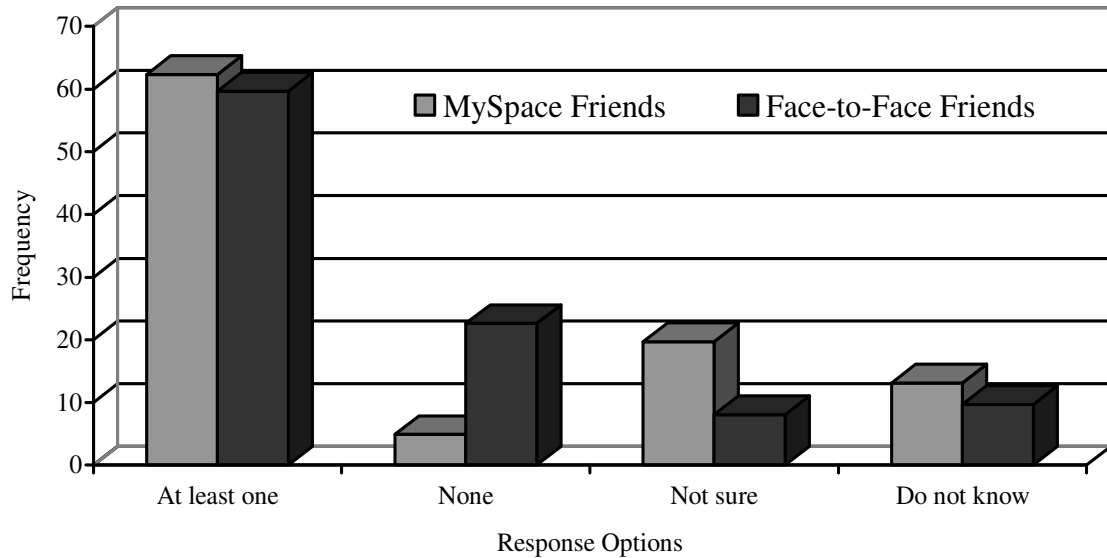


Figure 4. Percentages of online and face-to-face friends self-injury (SI) group participants indicate knowing have or have not self-injured within the last year. There were 61 participants responding to the question regarding online friends and 62 participants responding to the question regarding face-to-face friends.

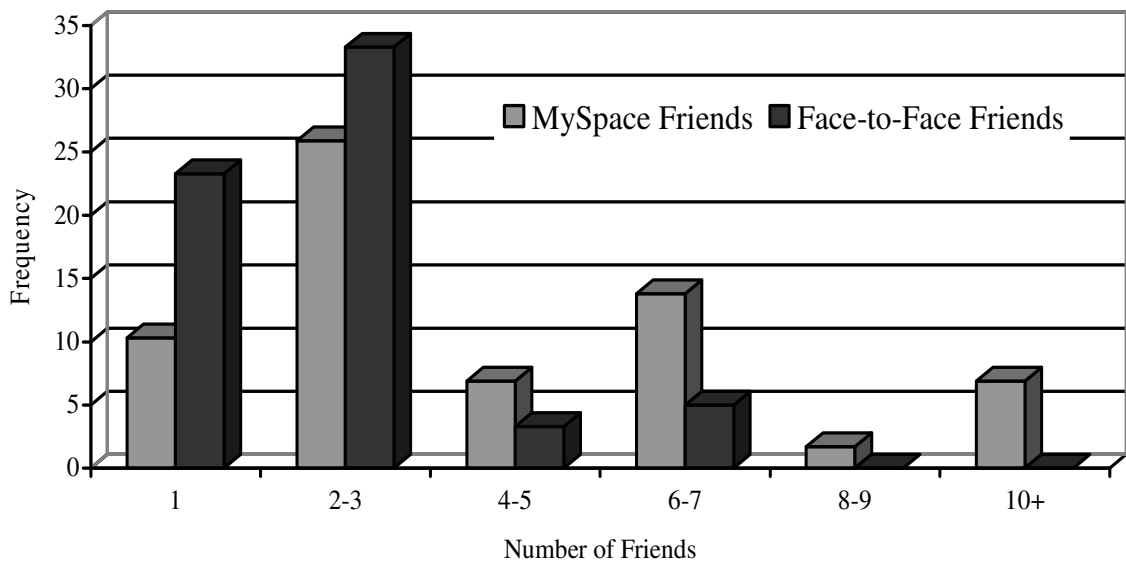


Figure 5. Percentages of online and face-to-face friends self-injury (SI) group participants indicate knowing who have self-injured within the last year. There were 46 participants responding to the question regarding online friends and 50 participants responding to the question regarding face-to-face friends.

friends who had self-injured in the last year, with the highest frequency (25.9%) knowing two to three online friends. Likewise, of the 60 participants responding to the face-to-face friend question, 65.0% report knowing one to seven face-to-face friends who had self-injured in the last year, with the greatest frequency (33.3%) knowing two to three friends.

To explore respondents' perceptions of online and face-to-face friends' attitudes and behaviors, they answered two questions twice, once in reference to their online friends and once in reference to their face-to-face friends. Frequencies to the response options for the questions (52 and 54; 53 and 55) were first analyzed using a chi square statistic to determine if the distributions of frequencies across the response options for online peers were significantly independent from the frequencies across the response options for the face-to-face peers. Next, responses were assigned a rank order based on frequency of response with "1" representing the most frequent response, "2" representing the second most frequent response, and so on. Then a Pearson rank order correlation was computed to see if there was a relationship between the rankings of the response options between online and face-to-face peers.

The first set of questions (52 and 54) asked respondents to select one of 11 options that best describes their friends' (online or face-to-face) primary reaction regarding the respondents' self-injurious behaviors. A one-sample chi-square test was conducted and the results were significant, $\chi^2(2, n = 59) = 99.945, p < .01$ (see Figure 6). The Cramer's *V* statistic was .49, which indicates a medium effect size.

The second set of questions (53 and 55) asked respondents to select one of seven options that best describes how the friend thinks SI is impacting the respondent's life functioning. A one sample chi-square test was conducted and the results were significant,

$\chi^2(2, N = 59) = 79.907, p < .01$ (see Figure 7). The Cramer's V statistic was .48, which indicates a medium effect size.

A rank order correlation between the rankings of the response options for online and face-to-face friends was not significant for either set of questions. These results indicate that there is no relation between the response rankings for online friends and the response rankings for face-to-face friends. Thus, online peers and face-to-face peers are perceived to have different types of reactions to SI as well as to hold different thoughts as to how self-injurious behaviors impact their friend's life functioning.

In addition to these two sets of questions, participants responded to 21 items (question 51) by indicating which group of friends (face-to-face friends, online friends, both, or neither) would most likely hold certain beliefs regarding SI. These 21 items compose five categories: functions of SI, attitudes towards SI, SI and professional help, impact on relationships, and concern about SI. Upon examination of the response frequencies, a pattern is difficult to discern due to the inclusion of "both" and "neither" responses. However, for some of the items, the lowest or highest percentage appears to stand out, and although these differences do not necessarily indicate statistically significant findings, they are noteworthy. For instance, in the first category, functions of SI, it is clear that the higher percentages go to online friends for six of the eight items (see Table 5). The two items for which respondents ($n = 60$) indicate face-to-face friends are more likely to think are SI is a way to gain attention (45.0%) and people self-injure for thrill and excitement (23.3%). In addition, two of the items respondents indicate both groups of friends would believe to be true: SI is a way to cope with emotions (55.0%) and anxious people are more likely to self-injure (58.3%).

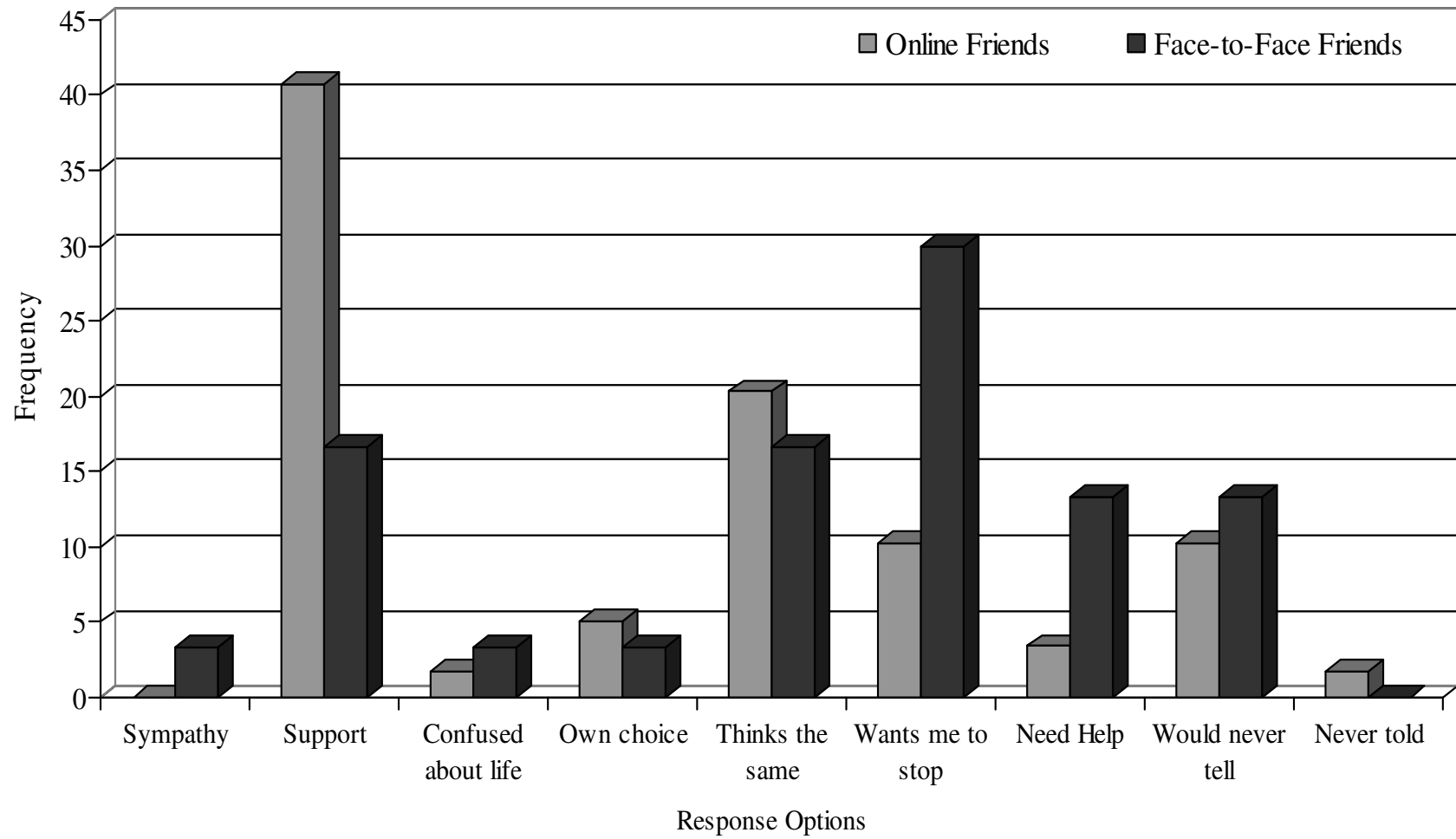


Figure 6. Perceptions of 59 online self-injury (SI) group participants regarding their online and face-to-face friends' primary reactions to learning about their self-injurious behaviors.

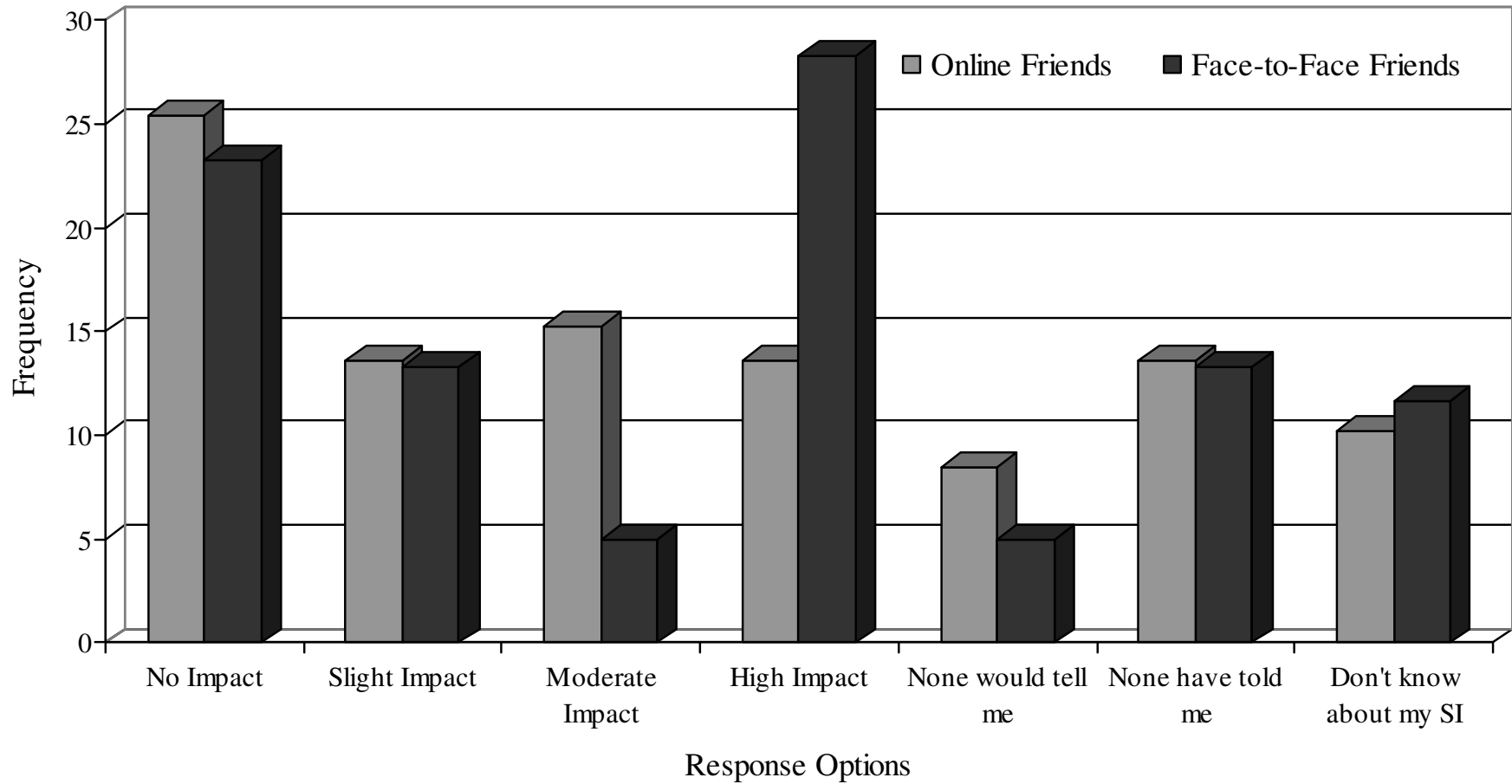


Figure 7. Perceptions of 59 online self-injury (SI) group participants regarding their online and face-to-face friends' thoughts concerning the impact of self-injurious behaviors on respondents' life functioning.

Table 5

Percentage of Self-Injury (SI) Group Participants Indicating Perceptions of Online and Face-to-Face Friends' Beliefs Regarding the Functions of SI

Item	Face-to-Face	Online	Both	Neither
Functions of SI				
SI is a way to cope with emotions	5.0	35.0	55.0	5.0
Anxious people are more likely to SI	13.3	20.0	58.3	8.3
People SI to feel alive again	6.7	35.0	38.3	20.0
SI is a way to avoid suicide	13.3	28.3	28.3	30.0
SI is a way to gain attention	45.0	8.3	13.3	33.3
SI is a part of a person's identity	5.0	33.3	41.7	20.0
SI is a form of self-punishment.	11.7	31.7	48.3	8.3
People SI for the thrill and excitement	23.3	6.7	15.0	55.0

Note. Numbers in bold print denote response options that have a difference of at least 15 percentage points from another response option ($n = 60$).

Table 6 illustrates the second and third categories, which pertain to attitudes towards SI and thoughts regarding professional help, respectively. The lowest percentages in the second category go to online friends for four of the items: SI is something people will grow out of (0.0%); if they knew someone self-injured, these friends would think less of that person (1.7%); these friends pity people who self-injure (5.1%); and these friends have a hard time talking about SI because it distresses them too much (3.4%). For the third category, the “both” and “neither” groups are allotted the

highest percentages for three out of the four responses: these friends would encourage someone who self-injures to get help (both, 73.3%); people who self-injure should explore alternatives for help besides the people they meet online (both, 59.3%); and people who self-injure do not need professional help (neither, 70.7%).

Table 6

Percentage of Self-Injury (SI) Group Participants Indicating Perceptions of Online and Face-to-Face Friends' Attitudes towards SI and Thoughts Regarding Professional Help

Item	Face-to-Face	Online	Both	Neither
Attitudes towards SI				
People grow out of SI	35.0	0.0	20.0	45.0
They think less of those who Sis	39.0	1.7	13.6	45.8
They would pity someone who Sis	30.5	5.1	15.3	49.2
SI is too distressing for them to talk about	45.8	3.4	27.1	32.7
SI and Professional Help				
People who SI need mental health services ^a	38.3	1.7	36.7	23.3
Encourage people who SI to get help ^a	10.0	8.3	73.3	8.3
People who SI do not need professional help ^b	0.0	10.3	19.0	70.7
People who SI should consider other forms of help besides online friends	20.3	6.8	59.3	13.6

Note. Numbers in bold print denote response options that have a difference of at least 15 percentage points from another response option ($n = 59$).

^a $n = 60$. ^b $n = 58$.

The fourth category pertains to the impact of SI on interpersonal relationships and the fifth category includes the level of concern the participants' perceive their friends' to hold regarding their self-injurious behaviors (see Table 7). In the fourth category, one of the three items had the lowest percentage going to online friends: SI is such a "different" behavior that it has changed our relationship for the negative (0.0%). In addition, one of the three items had the highest percentage going to "neither" of the two groups of friends: SI is such a "different" behavior that it has changed our relationship for the positive (50.8%). The fifth category, "both" groups of friends are reported to have the highest percentage for being very concerned about the respondents' self-injurious behaviors (44.1%), and "neither" groups of friends are reported to have the highest percentage for not being very concerned about the respondents' self-injurious behaviors.

Table 7

Percentage of Self-Injury (SI) Group Participants Indicating Perceptions of Online and Face-to-Face Friends' Levels of Concern and the Impact of SI on Relationships

Item	Face-to-Face	Online	Both	Neither
Concern About SI				
They are not very concerned about my SI	5.1	33.9	35.6	25.4
They are very concerned about my SI	30.5	10.2	44.1	15.3
Impact on Relationship				
SI has negatively impacted our relationship	37.3	0.0	23.7	39.0
SI has positively impacted our relationship	6.8	28.8	13.6	50.8
They accept me for who I am	5.1	33.9	35.6	25.4

Note. Numbers in bold print denote response options that have a difference of at least 15 percentage points from another response option ($n = 59$).

Research Question Two

The second research question focuses on the outcomes participants indicate they receive from their participation in online groups. Length of MySpace membership ranged from one month up to six years, with a mean of 2 years, 10 months. Of the participants responding to this question ($n = 73$), 25 indicated they had been a member of MySpace for up to 24 months, 25 indicated they had been a member for 25 to 36 months, and 23 for 37 to 60 months. On average, participants belong to approximately five social groups ($n = 79$), three of which focus on SI ($n = 76$), and have belonged to the group they rated as number one most preferred for 1 year and 3 months ($n = 59$).

Participants were asked to indicate how they participated in the SI group they ranked as their most preferred group. Of the participants responding to this question ($n = 70$), 42.9% indicate they initiate communication and respond to other members' communications, 35.7% report only responding to other members' communications without initiating any of their own, and 21.4% indicate they only read available information without communicating with others in any way.

When asked how often they participate this way in their most preferred group, 43.4% of respondents report daily participation and 20.8% report weekly participation ($n = 53$). Of those participating in the group daily, 35% do so once a day, 22.5% do so two to three times a day, and 22.5% participate in their top SI group four or more times a day. In addition, 60.0% of the respondents indicated that they login to their most preferred group once a day and 31.7% indicated that they login on a weekly basis.

Question 37 asks respondents to identify the reasons they belong to Online SI groups (see Figure 8). More than 70% of respondents ($n = 71$) indicate they belong to

these SI groups for informal support (78.9%), to talk about other personal problems other members are also experiencing (e.g., relationship problems, depression; 74.6%), and to help other members when they are trying to stop self-injuring (71.8%).

Participants also provided information regarding the outcomes of their participation in online SI groups. More specifically, they rated how their participation in these groups influenced their thoughts and behavior regarding SI (see Table 8). When asked how participating in SI groups had affected their self-injurious behaviors, 42.6% of the 68 respondents strongly disagreed or disagreed that their behaviors had decreased as a result of their participation. However, 25.8% of 66 participants agreed or strongly agreed that they had tried new forms of SI they had learned from other online members. In addition, 46.2% of 67 respondents agreed or strongly agreed that their self-injurious behaviors had not changed since they began participating in online SI groups.

In addition, participants rated their opinions on eight statements regarding the acceptance of SI by others (see Table 9). Most of the 63 respondents (79.3%) agree or strongly agree that people they have met online are more accepting of their self-injurious behaviors than are people they know in person. In addition, participants disagree or strongly disagree that they are able to talk freely with their face-to-face peers about their self-injurious behaviors. Even more respondents (87.3%) agree or strongly agree that it is difficult to discuss SI openly with people (in general) who do not self-injure. In addition, 77.8% of the 63 respondents indicate that people treat them differently when they learn about the respondents' self-injurious behaviors, and 85.5% of the participants agree or strongly agree that the public needs to be educated about SI.

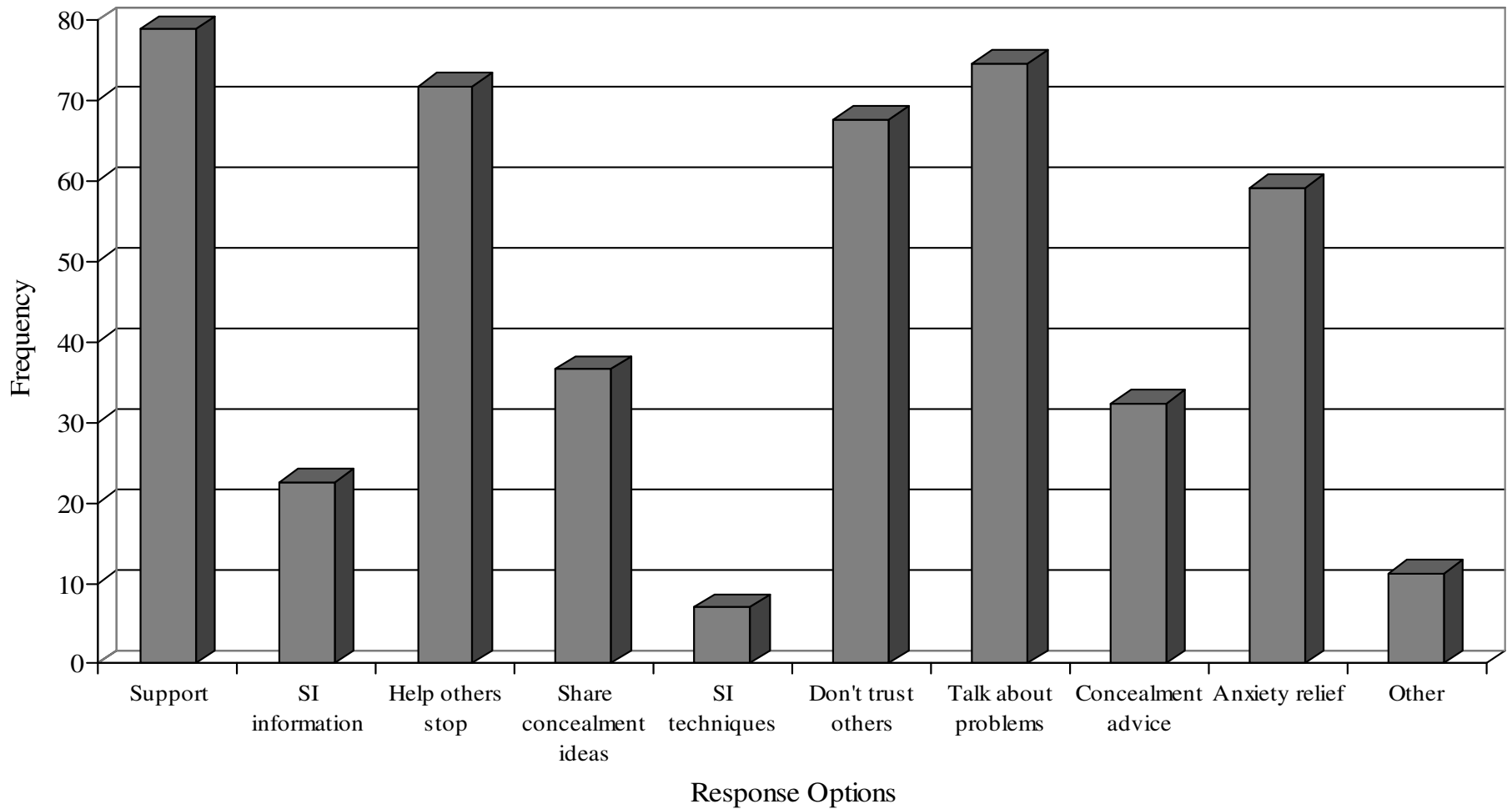


Figure 8. Reasons why 71 online self-injury (SI) group participants indicate belonging to MySpace SI groups (frequencies reported as percentages).

Table 8

Online Self-Injury (SI) Group Participants' Perceptions of the Influence of Online SI Group Activity

	Disagree	Unsure	Agree
SI behaviors have decreased ^a	42.6	27.9	29.4
SI behaviors have not changed ^b	22.4	31.3	46.2
Have tried new forms of SI ^c	60.6	13.6	25.8
Have shared SI techniques with others ^d	56.9	12.3	30.8
Have supported others to stop SI ^c	16.7	13.6	69.7
Support to stop available if needed ^c	22.7	19.7	57.6
Able to share SI knowledge ^c	10.6	25.8	63.6
Talk freely without feeling judged ^c	16.7	13.6	49.7
Cautious of how I talk to others online about SI ^c	24.2	33.3	42.5

Note. Frequencies reported as percentages.

^an = 68. ^bn = 67. ^cn = 66. ^dn = 65.

Table 9

Online Self-Injury (SI) Group Participants' Perceptions of the Social Acceptance of SI

	Disagree or strongly disagree	Unsure	Agree or Strongly Agree
SI is evident on non-SI social networking websites ^a	17.2	43.8	39.1

Table 9 (cont.)

SI is more accepted by people online than in person	12.7	7.9	79.3
Public needs to be educated about SI ^b	6.4	8.1	85.5
Can talk about SI with face-to-face peers who do not SI	79.3	9.5	11.1
A person is more likely to begin to SI after talking about it with someone in person	36.5	39.7	23.8
Face-to-face peers' reactions to my SI have caused me to distance myself from them	31.7	20.6	47.6
People treat me differently when they learn about my self-injurious behaviors	12.6	9.5	77.8
SI is difficult to discuss with people who do not SI	9.5	3.2	87.3

Note. Frequencies reported as percentages.

^a*n* = 64. ^b*n* = 62.

What respondents see and read in these online groups are also outcomes of their participation. Question 41 asks them to indicate what methods of SI they have seen (i.e., in videos or pictures) or read about (i.e., in blogs, comments, or messages) online. Two of the respondents (*n* = 64) indicated they had not seen or read of any SI methods on Online. However, of the remaining 62 respondents, cutting (98.4%), burning (85.5%), and

scratching (72.3%) were listed as the top three methods seen and read about online, followed by a tie between picking scabs and punching or hitting self or objects with the body (66.1%), and then by hair pulling (60.7%), banging body parts on objects (58.1%), ingesting harmful materials (41.0%), and breaking bones (27.4%). Respondents ($n = 62$) report seeing or reading about at least one and at most all of the nine listed SI methods, with a mean of six methods. However, more than one-third of the respondents (35.5%) report reading about or seeing seven to nine of these methods online. Moreover, 4.9% of the respondents indicate other methods, including salt on wounds and salt and ice on the skin to create a reaction similar to frostbite.

Additional Information

The survey contained one open-ended question and several other exploratory questions. Question 24 is an open-ended question that allowed participants to share their thoughts about SI. The 28 responses to this question were coded into nine categories. Some of the more in-depth responses were coded into more than one category. Overall, the most frequently reported categories indicate that SI serves a function (e.g., deal with stress; 39.3%) and that people who self-injure are not easily identifiable (39.3%). This second option includes responses that imply that people who self-injure are not “emo,” and that people who self-injure as an attention-seeking behavior are not “dedicated self-injurers,” as well as a response that asserts that anyone can be self-injuring. In addition, responses imply that SI is an addiction (21.4%), that certain remarks towards people who self-injure can be very hurtful (e.g., calling them “freaks,” “emos,” or “mentals”; 21.4%), and that there is a sense of secrecy associated with this behavior in that they do not want other people knowing they self-injure (21.4%). Responses also include information

regarding the emotional pain and distress of SI (14.3%), and how SI differs from person to person by means of method, function, frequency, etc. (14.3%). An “other” category was also included, as 25.0% of the responses did not directly fit one of the other categories. Information from these responses includes reports of the seriousness and complexity of SI, as well as the ambivalence of self-injurious behaviors. In addition, some responses indicate that the participants want other people to be educated about this topic. There are also a mixture of responses in this category implying both the need for help and the desire to be left alone.

Additionally, participants indicated the age they thought most people begin self-injuring and the percentage of the general population they believe engages in SI. A majority (71.6%) of 81 respondents indicated that most people begin self-injuring between the ages of 13 and 15 years. In addition, 19.8% of the respondents selected 9 to 12 years and 8.6% of the respondents selected 16 to 22 years as the ages that most people begin self-injuring. None of the respondents endorsed the responses of *before 9 years of age* or *over 22 years of age*. Regarding the percentage of the general population that engages in self-injury, participants’ responses were dispersed across the seven options. The highest response frequency of 22.2% represented the option of 1 to 5% of the general population, followed by 6 to 10% of the population (17.3%), and 16 to 20% of the population (16.0%).

In addition, respondents rated their opinions on eight statements regarding the influence of the media on the promotion of self-injurious behaviors (question 28; see Table 10). Four of the items have more than a 15 percentage point difference between the disagree and agree columns. First, 85% of 80 respondents agree or strongly agree that

Internet forums are easily accessible. Second, 55.0% of 80 participants disagree or strongly disagree that they know someone who began self-injuring after seeing someone self-injure online. Third, 46.8% of 79 respondents agree or strongly agree that SI can spread among members of a peer group. Fourth, 60.8% of 79 participants disagree or strongly disagree that the media has a greater influence than peers do in promoting self-injurious behaviors.

Table 10

Online Self-Injury (SI) Group Participants' Perceptions of Media and Peer Influences on SI

Item	Disagree or Strongly Disagree	Unsure	Agree or Strongly Agree
SI is evident in the popular media	36.3	17.3	46.4
Easy to access SI Internet forums	7.5	7.5	85.0
Media is a means for spreading SI info	42.4	13.8	43.8
Media has influenced peers to SI	38.8	22.4	38.8
Peer began to SI after seeing it in person	45.0	11.2	43.8
Peer began to SI after seeing it online	55.0	18.7	26.3
Media influences SI more than peers ^a	60.8	25.3	13.9
SI can spread among peer group members ^a	30.4	22.8	46.8

Note. Frequencies reported in terms of percentages. Items in bold denote at least a 15 percentage point difference between ratings ($n = 80$).

^a $n = 79$.

Discussion

The present investigation examined the level of SI knowledge and the understanding that individuals who self-injure have about their peers' reactions and perceptions of SI. In addition, the main intent of this study was to gain descriptive information about why individuals belong to Internet SI groups.

Sample

Overall, the sample for this study is comparable to the samples in current research on SI in terms of gender, race, and age. The current sample is mostly comprised of women (85.9%), which is comparable to other studies that report samples with percentages of females between 74.0% and 94.0% (Murray & Fox, 2006; Whitlock, Powers et al., 2006). In addition, the age range for the current sample is between 16 and 46 ($M = 21.11$), which is similar to age ranges of 12 to 54 years and mean ages between 16.4 and 23.9 years reported in the other studies (e.g., Murray & Fox, 2006; Whitlock, Powers et al., 2006). However, sexuality is an aspect of this sample to discuss. The percentage of participants reporting bisexuality (31.5%) or questioning (13.0%) as their sexual orientation appears to be higher than percentages found in other studies. Although exact data for sexual orientation is not available, Whitlock, Eckenrode et al. (2006), found that individuals who have self-injured on multiple occasions are more likely to be bisexual or questioning their sexuality than heterosexual.

Self-Injury Demographics

The most frequently reported age of onset for this sample is between 12 and 14 years. This range is comparable to the ranges in other studies, such as Murray and Fox (2006), who report the mean age of SI onset for their sample as 13.6 years. Additionally,

Whitlock, Eckenrode et al. (2006), report an age of onset of 15 to 16 years for their sample. Furthermore, participants in the current study report engaging in the behavior for more than a year and roughly half of the respondents indicate they self-injure on a daily basis, with a mean of approximately 24 times per day. Most of the respondents indicate they first became aware of SI through their own personal experience of engaging in the behavior, yet a smaller portion of the respondents report learning of SI through popular media or through friends talking about it. Their current resources for information appear to be personal experiences and the Internet, including general research on SI and the use of social networking sites and discussion forums pertaining to SI.

The current sample also consists primarily of participants whose SI is associated with clinical conditions, as evidenced by high comorbidity with psychological disorders (90.1% of respondents reported the existence of a comorbid feature). Researchers and clinicians have frequently observed a high level of comorbidity with psychological disorders in life-course prevalent self-injury (Walsh, 2006). In that there appears to be high comorbidity with psychological disorders in this sample, life-course prevalent SI is more likely. The three most frequently reported comorbid associations for this sample are attempted suicide, professionally diagnosed depression, and an eating disorder. Whitlock and Knox (2007) report that 40% of their sample evidence both self-injurious behaviors and suicidality, which is also evident with the current sample as 68.1% of the 91 respondents report attempting suicide, 34.1% report contemplating suicide, and 5.5% report both contemplating and attempting suicide. In a study evaluating depression and SI, Ross and Heath (2002) reported higher levels of depression among people who engaged in SI than in those who do not. Further, 64% of the 440 participants in Ross and

Heath's study reported experiencing symptoms of depression, which is comparable to the current sample as 95.6% of the 91 participants report either depression as diagnosed by a health professional, symptoms of depression that have not been professionally diagnosed, or both. Furthermore, between 28.1% and 61.0% of participants in other studies reported the comorbidity of SI with eating disorders (Favazza & Conterio, 1989; Whitlock, Eckenrode, et al., 2006). For the 91 participants reporting comorbid associations in the current study, 57.1% report a history of eating disorders.

The function of self-injury is also a noteworthy area. The most frequently reported (96.6%) function of SI for this sample is relief from negative emotions. This finding is consistent with Klonsky's (2007) review of empirical research on the functions of SI, which found affect-regulation, or relief from negative affect, as the only one of the seven functions of SI to be evident across all reviewed studies.

Overall, for the current sample, SI and comorbidity are within similar ranges when compared with other studies. Findings of high bisexual orientation, questioning sexual orientation, and suicidality in this sample are similar to higher rates found in previous studies. Therefore, this appears to be a reasonably "typical" sample of individuals who self-injure. Thus, this online sample appears to be similar to samples obtained through other methods.

Hypothesis One

Hypothesis One, which predicted that members who have belonged to an online SI group for longer periods of time will have higher levels of SI knowledge than members who have recently joined an online SI group, was not supported. One possible explanation is, although group members recently joined one of the 26 solicited groups,

they may have belonged to other online SI groups or discussion forums prior to the MySpace group. Survey items only asked about the length of time they belonged to their most preferred MySpace SI group and did not take into consideration length of time belonging to any other online SI group or discussion forum. Another possible explanation is that the sample consists of people who all have engaged, or currently engage, in SI. It may be possible that for this sample their personal experiences with SI are more influential than knowledge or experiences gained from participating in online groups. Overall, however, it appears that this samples' level of SI knowledge is fairly consistent across the group, regardless of how long each of the participants has been a member of a MySpace SI group.

Hypothesis Two

Results partially support Hypothesis Two, which predicted that members of online SI groups would have higher levels of SI knowledge than would health care professionals. On Jeffrey and Warm's (2002) 20 item measure, the participants included in the current sample appear to be rather knowledgeable about SI, as their mean knowledge score of 80.39 is comparable to 79.81, the mean knowledge score of Jeffrey and Warm's self-harmers sample. Further, the current sample's mean score is higher than most professional groups' mean knowledge scores. While they did not appear to have any poor understandings of these items, the current participants did have a problematic (neither accurate nor inaccurate) understanding of 10 of the items, five of which were myths and five of which were facts. However, three of the items that appear to be problematic have a percentage rate between 60 and 70 percent, which falls closer to an accurate understanding than to a poor understanding of the item. The three items are

people who self-injure will eventually grow out of it (67.9%), SI helps people deal with their problems (65.9%), and SI is a form of communication (62.2%). A possible explanation for the items rated as problematic may be that this sample may not see SI as being a black or white issue. Most of the inaccurately understood items dealt with the functions of SI. However, participants appeared to vary in their opinions regarding the legitimacy of some of these function. For example, some respondents may understand their self-injurious behaviors to be an outlet for their depressive symptoms, but others may self-injure to experience euphoria. Furthermore, the inconsistent results on these problematic items may imply that people who self-injure need to be better educated on SI as they may need to address some misconceptions or inaccurate knowledge.

Another possible explanation for the problematic items is that the high frequencies concerning comorbidity suggest that this sample is composed of a greater proportion of individuals whose SI exists alongside a clinical disorder. Therefore, it is understandable for the participants not to agree with all of the myths or facts presented. For instance, 91 of the respondents listed various comorbid conditions, including depression, posttraumatic stress disorder, suicidal thoughts and behaviors, all of which could be considered “signs of madness or mental illness.” SI as a sign of madness or mental illness is one of the myths that 54.9% of this sample were unsure about or agreed with. In addition, 40.7% of the respondents reported sexual abuse as a comorbid condition, and 51.2% stated they were unsure or agreed with the myth that people who self-injure have been victims of sexual abuse. For the open-ended question, one participant replied, “I put unsure for ‘self injury is a manipulative act’ because it can be. I feel that there are a few categories for people who self injure and any of [Jeffrey and

Warm's 20 items] can apply," and she continued to explain how she used SI to manipulate her relationship with her father. Overall, 52.4% of the participants were unsure or agreed with the myth that SI is a manipulative act.

In addition, another possible explanation is that the wording of the question may have affected the responses. Participants may have been trying to indicate what they feel are the primary reasons for SI rather than if they agreed or disagreed with the statement. Further, the wording of some of the items within this measure may have generated mixed feelings, such as "self-injury is attention seeking." Based on responses to the open-ended question we know that some participants do not regard using SI to gain attention in terms of creating a social scene as "dedicated self-injury"; yet, self-injuring to gain attention from someone in order to change his or her behaviors appears to be more acceptable. However, the inconsistent responses may also indicate that the items may be true for some subgroups of people who self-injure, but not for others.

Research Question One

The first research question sought to gain knowledge about online peer perceptions versus face-to-face peer perceptions of SI. The distribution of response frequencies across the response options for the questions pertaining to the participants' perceptions of their online and face-to-face friends' reactions towards and thoughts about SI are not random. Thus, it appears that people who self-injure perceive their online friends and their face-to-face friends to react differently to their SI. In addition, they report having more face-to-face friends they communicate with on a regular basis. Participants report higher frequencies for having one face-to-face friend or two to three face-to-face friends. However, it appears that they have more online friends with whom

they discuss SI as response frequencies were higher for the categories indicating having 4 to more than 15 online friends with whom they discuss SI (with the exception of 13 to 14 friends category, which received 0% of responses for both groups of friends). They also appear to know that more of their online friends have self-injured in the past year versus their face-to-face friends.

Regarding how they perceive their friends' thoughts regarding SI, participants indicate that they perceive their online friends as more supportive of their self-injurious behaviors, whereas they perceive their face-to-face friends as wanting them to stop and thinking they need professional help. Overall, the participants indicate they sense their face-to-face friends think that SI highly affects their daily functioning and that their online friends think that SI only moderately impacts their functioning. Frequencies were approximately the same for both groups of friends not thinking SI has any impact on their life functioning.

There is limited research available to use as a comparison for the results of this section. However, people in today's society generally hold negative perceptions of the SI, such as it being a deviant behavior. One negative view participants in this sample report from their face-to-face friends is the impact of SI on their daily functioning. The response frequency for face-to-face friends was the highest for this response, indicating that participants feel these friends think that SI is impairing their functioning in more than one area of their life (e.g., job performance, schoolwork, interpersonal relationships). In addition, participants appear to perceive their face-to-face friends to think that SI is an attention-seeking behavior or a thrill seeking behavior. However, these are two functions

of SI that this sample do not hold to be true, based on their responses to the knowledge items earlier on in the survey.

However, participants perceive their online friends' thoughts about SI more positively. Participants believe that 5% or less of their online friends would think less of someone who self-injures, pity people who self-injure, or find SI to be too distressing of a topic to discuss. In addition, none of the participants indicated that their online friends think that people will eventually grow out of SI or that their relationships with their online friends have changed for the worse because of SI. However, respondents report that their relationships with neither their online friends nor their face-to-face friends have changed for the better because of SI.

In addition, a majority of the respondents feel both groups of friends would encourage them to seek help and that neither of the groups would think that people who self-injure do not need professional help. Participants also feel that both groups of friends are concerned about their self-injurious behaviors, as response frequencies across the "face-to-face friends," "online friends," and "both groups" response options total 84.8%.

Overall, it appears that online friends and face-to-face friends respond to and think differently of SI. Participants report having more face-to-face friends to talk to on a regular basis; however, they report having more online friends with whom they discuss SI. They also indicate knowing more friends online who have self-injured within the last year. Based on their responses, participants perceive their online friends to be supportive of their self-injurious behaviors, whereas they perceive their face-to-face friends to want them to stop, to think they need help, and to think that SI highly affects the respondents' daily functioning. Participants also perceive both groups of friends to be concerned about

their self-injurious behaviors and they feel that both groups of friends would encourage them to seek professional help.

Research Question Two

The second research question focuses on the outcomes participants indicate they receive from their participation in online groups. The type of group participation was one noteworthy finding. Almost half (42.9%) of the 70 respondents reported initiating and responding to communications, 35.7% indicated only responding to other members' efforts or communications, and 21.4% reported only read information without communicating with other members. Previous research indicates that people who self-injure find solace and build connections with other like-minded individuals through online participation (Murray & Fox, 2006; Whitlock, Powers et al., 2006). Thus, one would suspect that active levels of participation would be higher than the percentages reported in the current study.

However, other current studies indicate that a large number of individuals who self-injure are "lurkers" within these groups, only reading information others post, thus not actively participating (Whitlock et al., 2007). Whitlock and colleagues (2007) reported that approximately 80% of their sample were lurkers, with only 20% posting messages on a daily basis. These percentages differ greatly from the current study, indicating a need for further research. Whitlock et al. also noted that additional research is needed to evaluate whether types of participation create differences in members' "online experiences and offline perceptions and behaviors" (p. 1137). In addition, McKenna, Green, and Gleason (2002) note that disclosure of intimacy is necessary for members to develop strong online relationships. In that many individuals who self-injure

are 'lurkers,' it may be necessary to control for the type of interaction among members of a sample as their perceptions of their online friends and the outcomes of their participation in online groups may differ between lurkers and active members.

It is also difficult to discern if respondents' participation in online self-injury groups has influenced their self-injurious behaviors. Various researchers have indicated that deviant behaviors are more likely to increase among adolescents when they associate with peers who engage in the behaviors (Prinstein & Wang, 2006). Even though people in the general society view SI as a deviant behavior, it is possible that people in online SI communities do not regard the behavior as such because they are more accepting of SI within these communities, which may affect the spread of the behavior.

Yet, many participants indicate that their participation in online SI groups has not changed their self-injurious behaviors. Approximately 26% of the participants reported trying a new SI technique, while 29.4% report a decrease in their behaviors. These results differ from results indicated in Murray and Fox's (2006) study, which indicate that 34.2% of their sample reported no change or not much of a change in their self-injurious behaviors, 7.6% reported an increase in their behaviors, and 48.1% reported a decrease in their behaviors. Similar to Murray and Fox's results, the overall effect of participation in SI groups appears to have resulted in no change or a decrease in participants' behaviors. However, it is important to note that the reported changes, or lack thereof, in participants' self-injurious behaviors are the perceptions of the participants. For this study, there is no way to determine if participants' behaviors would have changed had they not participated in the online self-injury group. Perhaps participants' behaviors would have decreased had they not participated in the online self-injury

groups; but, because of their participation, their self-injurious behaviors have remained constant. Again, for this study there is no way to determine if this is the case.

Additional Information

The responses to the open-ended question, which allowed participants to voice some of their thoughts regarding SI, are noteworthy. Many respondents indicated that SI does not look the same for everyone, as well as people who self-injure do not fit a certain mold either. One particularly intriguing response indicating these ideas stated the following:

I personally never did it for attention. That's an overused stereotype. I'm not "emo," I'm not the nerdy girl who sits in the corner, and no, I don't wear black. I'm a teenage girl who's [sic] life hasn't always been easy, but no one's life is. Cutting was an escape from it all. I'm top 20 in my state for gymnastics, I'm a straight A student, and I'm in 100 extra-curriculars [sic]. Anyone can have self-injury problems. Anyone.

In addition, respondents report that SI is an addiction, often comparing it to a drug, and that without the appropriate replacement behavior or coping strategy any attempts at stopping their self-injurious behaviors would most likely not succeed. Other comments pertained to wanting other people to be educated about SI and to the seriousness of the behavior. And while some participants left remarks about needing and wanting help, others indicated they would rather be left alone.

Additionally, participants report their opinions regarding how influential the media is on SI. Overall, their responses indicate that SI internet forums are easily accessible and that the popular media is more influential in promoting self-injurious

behaviors than are peers. Yet almost half of the respondents (46.8%) agree that SI can spread by members in a peer group. Further, 43.8% imply they know a peer who began self-injuring after seeing someone do it in person compared to only 23.6% who know of a peer who began self-injuring after watching someone do it online.

Limitations

One limitation to this study is the sample. First, solicitation of participants only occurred in MySpace self-injury groups that met certain criteria, so the results may not be representative of all online SI social group members. Second, the composition of the sample is likely to contain more individuals with life-course prevalent than adolescent limited SI because they report their age as being 18 years or older, as well as reporting a high level of comorbidity with a psychological disorder, which is more common in life-course prevalent SI (Walsh, 2006). The majority indicated engaging in self-injurious behaviors for more than a year, which also insinuates life-course prevalent SI as Whitlock, Eckenrode, et al. (2006) indicate that most people who have ceased self-injuring do so within one to five years of onset. Third, to have only 101 respondents when the membership of the groups solicited ranged from 14 to 1,586 members indicates that the current sample reflects a low response rate.

A second category of limitations can be found in the survey instrument. First, the survey's length led to a high attrition rate, as only 52% of the respondents completed the entire survey. Second, as noted in the results, a few questions did not provide optimal response options for analysis (i.e., question 51 including "both" and "neither" as response options).

In addition, a thorough assessment of all types of online activity was not obtained. This study focused on participant's current use of online SI groups, specifically within the social networking site MySpace. It did not consider their use of other networking sites, such as Facebook or Xanga, nor did it consider their use of SI discussion forums or message boards accessible through major search engines. In addition, the current study did not investigate how participants engage in these other online resources, including type and frequency of participation, or if they do at all.

Recommendations for Future Research

While results of this study provide information regarding the use of online SI groups, additional information still needs to be obtained in this area. Replication with a larger and more diverse sample may further support these findings. Allowing a longer response period for group members to participate in the survey may increase the sample size, as well. Further, this study did not attempt to quantify the nature of the SI group(s) to which they belonged nor the frequency of their participation in more than one group. In that most young adults participate online frequently – as much as 61% in one study – to look at participation types and frequencies in SI groups versus other types of online social groups may be useful information (Lenhart et al., 2007). In addition, the size and purpose of the groups may impact the members' participation levels or knowledge gained. Determining previous Internet experience, such as how long they have been using the Internet to research SI and what other venues they use for information on SI, would provide a better understanding of how people who self-injure are using online resources. On the other hand, seeking out participants by means other than the Internet would help ensure that these results are not based off of a subtype of people who self-injure.

Another suggestion is to survey the friends of people who self-injure to gather information on their perceptions of SI. Although it is important to ascertain the opinion of those that self-injure, it is second-hand information. Having information from the direct source may provide additional thoughts and perceptions not previously discussed.

Also, exploring types of activity within groups may provide additional information. For instance, group members who actively participate (i.e., read and respond to other members) may hold different perceptions of their online friends than those who lurk within the group (i.e., only read other members' information). The same may apply for the outcomes of their participation within the group. It would also be beneficial to evaluate differences between genders within a sample consisting of approximately the same number of males as females as their perceptions of online and face-to-face relationships may differ.

Conclusions

This study provides information about SI in individuals who participate in online social groups. The data obtained generally supports and extends current knowledge in several areas. First, it provides additional information regarding the levels of SI knowledge of people who self-injure and it further supports that these individuals have higher levels of SI knowledge than do most professionals. However, the data also indicate that there may be some inaccurate understandings regarding self-injury held by either people who self-injure or within some of the current research in this area.

Second, this study provides additional information as to how people who self-injure perceive their online and face-to-face friends. Based on the information participants provided, it appears that they perceive their online friends to be supportive of

their self-injurious behaviors and they perceive their face-to-face friends to want them to cease their behaviors and/or seek professional help. They also appear to be more likely to talk to their online friends about SI, as they report difficulties in talking about SI to their face-to-face friends and people who do not engage in the behavior.

Third, while the data is not available to conclude whether or not participants' self-injurious behaviors have changed as a result of their participation in online self-injury groups, there is additional information regarding the outcomes of their participation online. For instance, many of the participants report using the Internet in various ways to obtain information on SI. In addition, they indicate reading about or seeing various methods of self-injury within online self-injury groups. They also report informal support being the number one reason they belong to online self-injury groups.

Even while conducting this research, the online communities for people who self-injure were evolving. Future research is necessary to understand this population of people who self-injure better, and to continue to bridge the gap between the virtual world and real world.

References

- Alderman, T. (1997). *The scarred soul: Understanding and ending self-inflicted violence*. Oakland, CA: New Harbinger Publications.
- Beld, A. (2007). *Self-injury in the schools: A survey of school psychologists*. Unpublished Education Specialist project. Western Kentucky University, Bowling Green.
- Butts, J. D. (2008). [Self-injury in the schools: A survey of educators.] Unpublished raw data.
- Berk, L. (2006). *Development through the lifespan*. (4th ed.) New York: Allyn & Bacon.
- Brophy, M. (2006). *Truth hurts: Report of the national inquiry into self-harm among young people*. London: Camelot Foundation and Mental Health Foundation.
- Retrieved April 12, 2008, from <http://www.selfharmuk.org/docs/self%20harm%20report%20lowres.pdf>.
- Favazza, A. R., & Conterio, K. (1989). Female habitual self-mutilators. *Acta Psychiatrica Scandinavica*, 79, 283-289.
- Heath, N., Toste, J., & Beettam, E. (2006). I am not well equipped: High school teachers' perceptions of self-injury. *Canadian Journal of School Psychology*, 21, 73-92.
- Jeffrey, D., & Warm, A. (2002). A study of service providers' understanding of self-harm. *Journal of Mental Health*, 11, 295-303.
- Jones, E., Butts, J., & Canning, E. (2007, March). *The 'virtual' subculture of self-injury*. Paper presented at the meeting of the National Association of School Psychologists, New York.

Kanan, L., Finger, J., & Plog, A. (2008). Self-injury and youth: Best practices for school intervention. *School Psychology Forum: Research in Practice*, 2, 67-79.

Retrieved April 14, 2008 from:

<http://www.nasponline.org/publications/spf/index.aspx>

Kettlewell, C. (1999). *Skin game*. NY: St. Martin's Press.

Klonsky, D. (2007). The functions of deliberate self-injury: A review of the evidence.

Clinical Psychology Review, 27, 226-239.

Klonsky, D., Oltmanns, T., & Turkheimer, E. (2003). Deliberate self-harm in a nonclinical population: Prevalence and psychological correlates. *American Journal of Psychiatry*, 160, 1501-1508.

Lenhart, A., & Madden, M. (2007). *Teens, privacy, and online social networks: How teens manage their online identities and personal information in the age of MySpace*. Retrieved May 3, 2008 from

http://pewinternet.org/pdfs/PIP_Teens_Privacy_SNS_Report_Final.pdf.

Lenhart, A., Madden, M., & Hitlin, P. (2005). *Teens and technology: Youth are leading the transition to a fully wired and mobile nation*. Retrieved April 30, 2007, from

http://www.pewinternet.org/pdfs/PIP_Teens_Tech_July2005web.pdf.

Lenhart, A., Madden, M., Macgill, A. R., & Smith, A. (2007). *Teens and social media: The use of social media gains a greater foothold in teen life as they embrace the conversational nature of interactive online media*. Retrieved May 3, 2008 from

http://www.pewinternet.org/pdfs/PIP_Teens_Social_Media_Final.pdf.

Levenkron, S. (2006). *Cutting: Understanding and overcoming self-mutilation*. New York: W. W. Norton and Company.

- Lieberman, R. (2004). Understanding and responding to students who self-mutilate. *Principal Leadership Magazine*, 4. Retrieved April 30, 2007, from http://www.nasponline.org/resources/principals/nassp_cutting.aspx.
- Mash, E., & Wolfe, D. (2005). *Abnormal child psychology* (3rd ed.). Belmont, CA: Wadsworth Thomson.
- McKenna, K. & Bargh, J. (2000). Plan 9 from cyberspace: The implications of the Internet for personality and social psychology. *Personality and Social Psychology Review*, 4, 57-75.
- McKenna, K., Green, A., & Gleason, M. (2002). Relationship formation on the Internet: What's the big attraction? *Journal of Social Issues*, 58, 9-31.
- McVey-Noble, M., Khemlani-Patel, S., & Neziroglu, F. (2006). *When your child is cutting: A parent's guide to helping children overcome self-injury*. Oakland, CA: New Harbinger Publications.
- Murray, C., & Fox, J. (2006). Do Internet self-harm discussion groups alleviate or Exacerbated self-harming behaviour? *Australian e-Journal for the Advancement of Mental Health*, 5, 1-9. Retrieved February 24, 2007, from <http://www.auseinet.com/journal/vol5iss3/murray.pdf>.
- Prinstein, M., & Wang, S. (2005). False consensus and adolescent peer contagion: Examining discrepancies between perceptions and actual reported levels of friends' deviant and health risk behaviors. *Journal of Abnormal Child Psychology*, 33, 293-306.

- Ross, S., & Heath, N. (2002). A study of the frequency of self-mutilation in a community sample of adolescents. *Journal of Youth and Adolescence, 1*, 67-77. Retrieved April 12, 2008, from <http://www.springerlink.com.libsrv.wku.edu/content/515v37jxa9eu7mj8/fulltext.pdf>.
- Ross, S., & Heath, N. (2003). Two models of adolescent self-mutilation. *Suicide and Life-Threatening Behavior, 33*, 277-287.
- Selekman, M. (2006). *Working with self-harming adolescents: A collaborative strengths-based therapy approach*. New York: W. W. Norton & Company.
- Simeon, D., & Favazza, A. R. (2001). Self-injurious behaviors: Phenomenology and assessment. In D. Simeon & E. Hollander (Eds.), *Self-Injurious Behaviors: Assessment and Treatment* (pp. 1-28). Washington, D.C.: American Psychiatric Publishing, Inc.
- Stanley, B., Gameroff, M., Michalsen, V. & Mann, J. (2001). Are suicide attempters who self-mutilate a unique population? *American Journal of Psychiatry, 158*, 427-432.
- Walsh, B. W. (2006). *Treating self-injury*. New York: The Guilford Press.
- Walsh, B. W., & Rosen, P. (1985). Self-mutilation and contagion: An empirical test. *American Journal of Psychiatry, 142*, 119-120.
- Whitlock, J. L., Eckenrode, J., & Silverman, D. (2006). Self-injurious behaviors in a college population. *Pediatrics, 117*, 1939-1948. Retrieved April 12, 2008, from <http://pediatrics.aappublications.org/cgi/content/full/117/6/1939>.

- Whitlock, J., & Knox, K. (2007). The relationship between self-injurious behavior and suicide in a young adult population. *Archives in Pediatric Adolescent Medicine, 161*, 634-640. Retrieved April 12, 2008 from <http://www.archpediatrics.com>
- Whitlock, J. L., Lader, W., & Conterio, K. (2007). The Internet and self-injury: What psychotherapists should know. *Journal of Clinical Psychology: In Session, 63*, 1135-1143.
- Whitlock, J. L., Powers, J. L., & Eckenrode, J. (2006). The virtual cutting edge: The Internet and adolescent self-injury. *Developmental Psychology, 42*, 407-417.
- Yates, T. P., Tracy, A. J., & Luthar, S. S. (2008). Nonsuicidal self-injury among “privileged” youths: Longitudinal and cross-sectional approaches to developmental process. *Journal of Consulting and Clinical Psychology, 76*, 52-62.

Appendix A
Informed Consent and Survey

STUDY INFORMATION/INFORMED CONSENT DOCUMENT

Project Title: Self-Injury Knowledge and Internet Usage

You are being asked to participate in a project conducted through Western Kentucky University investigating how Internet social networking sites, such as MySpace, influence self-injurious behaviors. The University requires that you give your signed agreement to participate in this project by clicking on the “I Agree” button below.

If you have any questions about the purpose of the project, the procedures to be used, and the potential benefits or possible risks of participation please contact the investigators through the e-mail addresses indicated below. You may ask him/her any questions you have to help you understand the project. A basic explanation of the project is written below. Please read this explanation and discuss with the researcher any questions you may have.

If you then decide to participate in the project, please click the “I Agree” button at the bottom of this text.

1. **Nature and Purpose of the Project:** The purpose of this survey is to gain information about self-injury from individuals who participate in Internet forums (such as MySpace).
2. **Explanation of Procedures:** Upon your consent, you will be asked to complete a short survey (20-25 minutes) that can be assessed by clicking the “I Agree” button below. You will be asked 54 questions, including questions about self-injury, your experiences with self-injury, how peers respond to you or to other individuals who self-injure, and your experiences using Internet social networks.
3. **Discomfort and Risks:** **If you engage in self-injury, this survey may create some discomfort or trigger self-injurious behavior. You may stop the survey at any time by clicking on the “Exit Survey” link, which is located on every page in the top right hand corner. This link will allow you to access online support at www.selfinjury.com. You can also call 800-DONTCUT (800-366-9066) to receive assistance.**
4. **Benefits:** Information gained through this survey will tell us about the perspectives of individuals who self-injure, about how peers respond to individuals who self-injure, and about use of the Internet by individuals who self-injure. This survey will educate professionals about self-injury and will promote an understanding of self-injury from the perspective of those who self-injure. Upon completion of this survey, you may choose to be entered into a raffle for one of four \$30 Visa gift cards.
5. **Confidentiality:** All responses to the survey will be kept in a database that is blind to your name and any e-mail or Internet information.

6. **Refusal/Withdrawal:** Refusal to participate in this study will have no effect on participation in your Internet groups. Anyone who chooses to participate in this study is free to withdraw from the study at any time with no penalty.

If you have any questions regarding the survey or results, please contact Emily Boeckmann at emily.canning@wku.edu or Elizabeth Jones at elizabeth.jones@wku.edu, Department of Psychology, Western Kentucky University. You may also contact the Compliance Manager for WKU, Mr. Sean Rubino, (270) 745-2129, sean.rubino@wku.edu.

Thank you in advance for your participation and support by taking the time to fill out the following information.

- 1.) In accordance with WKU's policies, you must be 18 years of age or older to participate in this survey. Please select the option below that applies to you.
 - Yes, I am 18 years of age or older and am therefore able to participate in this survey if I so choose.
 - No, I am not 18 years of age or older, and therefore understand that I am not able to participate in this survey at this time.
- 2.) You understand also that it is not possible to identify all potential risks in an experimental procedure, and you believe that reasonable safeguards have been taken to minimize both the known and potential but unknown risks.
 - I Agree/I Understand
 - I Decline
- 3.) Age: _____
- 4.) What is your race/ethnicity?
 - African American
 - Asian
 - White/Caucasian
 - Hispanic
 - Native American
 - Other (please specify): _____
- 5.) What is your gender?
 - Male
 - Female
- 6.) Indicate your sexual orientation:
 - Gay
 - Lesbian
 - Heterosexual
 - Bisexual
 - Questioning (Unsure of sexual orientation)

- 7.) Including Kindergarten, how many years of school have you completed? (i.e., if you have completed the 12th grade, you've completed 13 years of school. If you completed your junior year in college, you have completed 16 years of school).
- 8 years
 - 9 years
 - 10 years
 - 11 years
 - 12 years
 - 13 years
 - 14 years
 - 15 years
 - 16 years
 - 17 years
 - 18 years
 - 19 or more years of school
- 8.) In what country do you live?
- _____
- 9.) If you live in the United States, what state do you live in? If you live in any other country, please put "N/A" for this question.
- _____
- 10.) Have you ever personally experienced any of the following? Please check all that apply.
- Depression (diagnosed by a health care professional)
 - Depression (not diagnosed by a health care professional)
 - Post Traumatic Stress Disorder (diagnosed by a health care professional)
 - Post Traumatic Stress Disorder (not diagnosed by a health care professional)
 - Sexual abuse
 - Rape
 - Eating Disorder (anorexia, bulimia)
 - Alcohol abuse
 - Recurrent substance abuse of street or prescription drugs that has created a legal problem (i.e., DUI), social problem (loss of friends), or inability to fulfill major obligations (school/work absences)
 - Attempted suicide
 - Thought about committing suicide, but have never tried to commit suicide
 - Physical risk taking behaviors (i.e., walking in high speed traffic)
 - Situational risk taking behaviors (i.e., getting into a car with strangers)
 - Sexual risk taking behaviors (i.e., having sex with strangers, unprotected sexual acts)

- These do not apply to me.
- Other (please specify): _____

CAUTION: If you engage in self-injury, this survey may create some discomfort or trigger self-injurious behavior. You may stop the survey at any time by clicking on the “Exit this survey” button in the top right corner. You will be redirected to www.selfinjury.com where you can access online support.

- 11.) Describe your connection to self-injurious behavior. Please select all that apply.
- I currently engage in self-injury.
 - I have self-injured in the past but no longer self-injure.
 - I have never self-injured.
 - I have never self-injured, but am thinking about it.
 - I have a friend I met on MySpace who self-injures.
 - I have a face-to-face friend who self-injures.
 - I am curious to know more about people who self-injure.
- 12.) Regardless of whether you self-injure or not, how concerned are you about self-injurious behaviors?
- Not at all concerned
 - Not very concerned
 - Neutral/Unsure
 - Somewhat concerned
 - Extremely concerned
- 13.) If you currently self-injure or have self-injured in the past, how old were you when you first self-injured?
- I have never self-injured.
 - Age: _____
- 14.) How many times total have you self-injured?
- Once
 - 2-4 times
 - 5-10 times
 - 11-20 times
 - 21-30 times
 - >30 times
 - I have never self-injured.
- 15.) How long did you or have you engaged in self-injury?
- I only tried it once.

- 2-3 days
- 1 week
- 2-3 weeks
- 1 month
- 2-3 months
- 4-6 months
- 7-11 months
- 1 year
- More than 1 year
- I have never self-injured.

16.) How frequently do you engage in self-injury? Or, if you have ceased self-injuring, how frequently did you engage in the behavior?

- Daily (# times per day): _____
- Weekly (# times per week): _____
- Monthly (# times per month): _____
- Less than monthly (please explain): _____

17.) What is/are the primary reason(s) you engage or did engage in self-injurious behavior? Please check all that apply.

- A.) To find relief from negative emotions/affect, such as emotional distress
- B.) To end “outside of the body” feelings; to regain a sense of self; to feel alive or real again
- C.) To resist urges to attempt suicide
- D.) To be taken more seriously by someone; to avoid being left alone; to effect someone else’s behavior towards self
- E.) To maintain identity or autonomy
- F.) To express anger towards self; to punish self; to degrade self
- G.) To generate excitement and/or exhilaration
- H.) Other (please specify): _____

18.) Of the choices you checked in the item above, please rank the top three reasons you engage or did engage in self-injury, with “1” being the reason you most often self-injure, “2” being the next reason, and “3” being the third most influential reason you self-injure. In the space provided, type the letters representing the reasons you selected above.

- 1.) _____
- 2.) _____
- 3.) _____

- 19.) How did you first become aware of SI?
- I saw someone do it in person.
 - I saw someone do it online.
 - I heard people talking about it in person.
 - I chatted with people about it online (i.e., e-mail, instant messaging, etc.).
 - Personal experience (I did it on my own without knowing other people do it.)
 - I saw something about self-injury in the popular media (i.e., TV, news programs, magazine, Internet).
 - A family member has talked to me about self-injury.
 - A family member has self-injured before.
 - I heard of self-injury from a mental health or medical professional.
 - I have no knowledge or experience about self-injury.
 - Other (please specify): _____
- 20.) How did you first become aware that self-injury was something that your friends do? Check all that apply.
- I do not have any friends who self-injure.
 - I saw my friend do it in person.
 - I saw my friend do it online (via video or pictures).
 - I overheard my friend talking about it with someone else.
 - I heard someone else talking about my friend doing it.
 - I chatted online (via IM, e-mail, chat room, etc.) with my friend about it.
 - I talked to my friend about it in person (i.e., fact-to-face or on the phone).
 - I saw something my friend wrote about it on the Internet (i.e., in a comment to someone else, in a blog, etc.).
 - I heard about my friend self-injuring from one of his/her family members.
 - I heard about my friend self-injuring from one of my family members.
 - Other (please specify): _____
- 21.) Which are your main information sources for self-injury? Please check all that apply.
- A.) Conversing with other people who self-injure in social groups on MySpace (i.e., discussion forums)
 - B.) Talking to friends in person (such as at school or work) about self-injury
 - C.) Chatting with friends who self-injure on MySpace (i.e., personal messages, comments, instant messaging, etc.)
 - D.) Reading other peoples comments/conversations on MySpace web pages without joining in on the conversation
 - E.) Hearing face-to-face peers/friends talk about self-injury
 - F.) Researching it on the Internet (not including the use of social networks such as MySpace)
 - G.) Personal experience (you have engaged in self-injury at least once)
 - H.) Television or other popular media (i.e., movies, news programs, Internet, books/magazines)
 - I.) Family members
 - J.) Mental health/medical professionals

K.) I have no knowledge of self-injurious behaviors.

L.) Other (please specify): _____

22.) Please rank in order your top three sources of information about self-injury using “1” to indicate where you obtained the largest amount of information, “2” to indicate the second largest source of information, and “3” being the third largest source. In the space provided, put the letters representing the reasons you selected above.

1.) _____

2.) _____

3.) _____

23.) Please indicate to what extent you agree with the following statements:

	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
Self-injury is a form of communication.					
Self-injury is a sign of madness/mental illness.					
Self-injury can provide a way of staying in control.					
Self-injury can provide distraction from thinking.					
People who self-injure will “grow out of it” eventually.					
Self-injury is a manipulative act.					
Self-injury allows one to experience feelings of euphoria.					
Self-injury is a “woman’s problem.”					
Self-injury can provide a release for anger.					
Self-injury expresses emotional pain.					
The best way to help someone who self-injures is to make him/her stop.					
People who self-injure have been the victims of sexual abuse.					
Self-injury is a failed suicide attempt.					
Self-injury can provide an individual with help in dealing with problems.					
Self-injury is a coping strategy.					
Self-injury is attention seeking.					
Self-injury helps a person maintain a sense of identity.					
Everybody who self-injures suffers from Munchausen’s Disease (self-inflicted injuries which are calculated to produce specific symptoms that will					

lead to medical hospital admissions).					
Self-injury can provide escape from depression.					
People who self-injure need psychiatric hospitalization.					
	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree

Self-Injury Defined: Please refer to the definition below when the term self-injury (SI) is used:

Self-injury is the deliberate, self-inflicted harm of an individual's body to reduce psychological distress, without the intention to die as a consequence. Examples of self-injurious behaviors may include cutting, scratching, self-hitting, self-burning, and/or banging head. People who do not engage in self-injury generally find the behavior offensive or socially unacceptable.

- 24.) At what age do you think most people begin to engage in self-injury?
- Before 9 years of age
 - 9 – 12 years of age
 - 13 – 15 years of age
 - 16 – 22 years of age
 - Over 22 years of age
- 25.) What percentage of people in the general population engages in self-injury?
- <1%
 - 1 – 5%
 - 6 – 10%
 - 11 – 15%
 - 16 – 20%
 - 21 – 25%
 - >26%
- 26.) In general, what impact do you think self-injurious behavior has on those that engage in the behavior?
- They do fine. They are able to do for themselves what most people are able to do (i.e., go to school, hold a steady job, manage finances appropriately, etc.).
 - They have some problems meeting the demands of everyday life, but their functioning is only slightly different than most people's functioning (i.e., miss more classes than most students, change jobs more than other people, have trouble dealing with daily stress, etc.).
 - Their functioning is impaired in some way (i.e., only one of the following areas affected – interpersonal relationships, school, work, personal care).
 - Their functioning is impaired in multiple ways (i.e., more than one area affected – relationships, school, work, personal care).

27.) Please indicate your agreement with the following statements:

	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
Self-injury is evident in the popular media (Internet, music, movies, TV, magazines).					
Internet forums (message boards, chat rooms, blogs, etc.) specifically about self-injury are easily accessible.					
The media (TV, movies, music, Internet) has become a mechanism for spreading information about self-injury.					
People my age have been influenced by the media (TV, movies, music, Internet) to self-injure.					
I have known someone who began self-injuring after seeing or talking about self-injury with a face-to-face peer.					
I have known someone who began self-injuring after seeing or talking about self-injury with someone online.					
Self-injury can spread among members of a peer group by talking about it or witnessing other members doing it.					
Of the people I know who self-injure, I believe the media has had a greater influence than a peer group member in promoting them to self-injure.					
	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree

28.) How long have you been a member of MySpace? Please type your answer in the form of "XX years, XX months" (i.e., 2 years, 4 months).

○ _____

29.) How many groups do you belong to on MySpace?

- None
- 1
- 2-3
- 4-5
- 6-8
- 9-11
- 12-14
- 15-17
- 18-20

- 21 or more
- 30.) Of these groups, how many are primarily for people who self-injure (i.e., the description or name of the group is clearly for people who self-injure)?
- None
 - 1
 - 2-3
 - 4-6
 - 7-9
 - 10-11
 - 12 or more
- 31.) Please list the names of the three you visit/reference the most. If you belong to two or less groups, please type "N/A" in the remaining blanks.
- 1.) _____
- 2.) _____
- 3.) _____
- 32.) For the group you listed as number 1 above, how long have you been a member of this group?
- I don't belong to any groups primarily for people who self-injure.
 - Length of time (XX years, XX months) _____
- 33.) How do you participate in the group that you ranked as number 1 on the previous page?
- I initiate communication and respond to other members' communications by posting blogs, comments, bulletins, and/or by sending messages.
 - I respond to other members' communications, but I generally do not post blogs, comments, bulletins, and/or send messages.
 - I only read other members' communications, and I do not post blogs, comments, bulletins, and/or send messages.
- 34.) Based on your response to number 33, how frequently do you participate in this way?
- Daily (# times per day): _____
 - Weekly (# times per week): _____
 - Monthly (# times per month): _____
 - Less than monthly (please explain): _____
- 35.) How often do you login to self-injury groups on MySpace?
- Daily (# times per day): _____
 - Weekly (# times per week): _____
 - Monthly (# times per month): _____
 - Less than monthly (please explain): _____

- 36.) Why do you belong to and/or participate in MySpace self-injury groups? Mark all that apply.
- A.) For informal support (i.e., “I am here for you”).
 - B.) To gain new information about how to self-injure (i.e., a new method of self-injury).
 - C.) To help other people when they are trying to stop self-injuring.
 - D.) To share information with others about how to hide wounds and scars from self-injuring.
 - E.) Because I feel that I do not have anyone else to trust when I need to talk about my self-injury.
 - F.) To share information with other people about how to self-injure.
 - G.) I like to talk to other people about things they are also experiencing, such as relationship problems, depression, an eating disorder, etc.
 - H.) For advice on how to hide my wounds or scars from self-injuring.
 - I.) Belonging to and participating in these groups helps relieve anxiety for me.
 - J.) I do not self-injure (please list the reasons you belong to these groups in the space provided for “other” comments).
 - K.) Other (please specify): _____

- 37.) Of the items you selected above, what are the top three reasons you participate in self-injury groups on MySpace? Please use “1” for being the most important reason, “2” for the second most important, and “3” for the third most important reason. In the spaces provided, put the letters that represent the responses you selected above. Put “N/A” in the blank if there are less than three reasons that you participate in these groups.

- 1.) _____
- 2.) _____
- 3.) _____

- 38.) Respond to the following statements based on how you feel your participation in MySpace group(s) has influenced you.

	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
My participation in a self-injury group has decreased my self-injurious behaviors.					
My participation in a self-injury group has not changed my self-injurious behaviors.					
I have tried new forms of self-injury that I learned about from other people’s postings on MySpace (i.e., web pages, pictures, blogs, videos, comments, etc.).					
I have shared a self-injury					

technique that I use or have used with someone else on MySpace.					
I have supported other people in their decision to stop self-injuring through my communications on MySpace.					
My participation in self-injury groups has made me become cautious of how I talk about self-injury to other people online.					
If I wanted to stop self-injuring, or when I did decide to stop self-injuring, I could find/found support from people I met through MySpace.					
My participation in a self-injury group has allowed me to share my knowledge about self-injury with other people.					
Being a member of self-injury groups allows me to talk about self-injury freely without being judged.					
	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree

39.) Indicate the extent to which you agree with the following statements:

	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
Self-injury is evident on social networking websites not primarily devoted to self-injury.					
I feel that my self-injurious behaviors are accepted more by the people I have met online than people I know in person.					
I believe that the public needs to be more educated about self-injury.					
I feel I can talk freely about self-injury with my face-to-face peers who don't self-injure.					
After talking to someone who self-injures about self-injury, a					

person may be more likely to begin self-injuring.					
I have distanced myself from my face-to-face friends because of their reactions to learning that I self-injure.					
People treat me differently when they learn that I self-injure.					
Self-injury is a topic that the public finds difficult to openly discuss.					
	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree

- 40.) On MySpace, what methods of self-injury are other people using that you have seen (i.e., videos, pictures, etc.) or read about (i.e., blogs, comments, etc.)?
- Cutting
 - Scratching
 - Burning
 - Punching, hitting (self or objects with the body)
 - Breaking bones
 - Pulling hair out
 - Picking scabs to interfere with healing
 - Banging body parts on objects
 - Ingesting harmful materials
 - None
 - Other (please specify) _____
- 41.) If you answered “none” on the previous question, leave this item blank and proceed to the next question. If you answered other than “none” on the previous question, please answer this question: Of the above options, what are the three most common methods of self-injury that you have seen or read about on MySpace? In the space provided, put the letters that represent the responses you selected above. “1” should be the most common, “2” should be the second most common, and “3” the third most common.
- _____
 - _____
 - _____
- 42.) Many people frequently communicate (via e-mail, instant messaging, group sites) with others they met through MySpace. How many of these MySpace friends do you have?
- None
 - 1
 - 2-3

- 4-6
 - 7-9
 - 10-12
 - 13-15
 - More than 15
- 43.) Of the friends that you met on MySpace, how many do you talk to about self-injury?
- None
 - 1
 - 2-3
 - 4-6
 - 7-9
 - 10-12
 - 13-15
 - More than 15
- 44.) Of your friends you met on MySpace that you are closest to (i.e., chat often with, send messages to frequently, read and respond to each others' blogs, etc.), do you know if any of them have self-injured within the last year?
- Yes, I know of at least one friend who has self-injured in the last year.
 - No, none of my friends have self-injured in the last year.
 - I am not sure if any of my friends have self-injured in the last year.
 - I do not know if any of my friends have ever self-injured.
- 45.) If you answered yes to the previous question, indicate the number of close MySpace friends that have self-injured within the last year.
- 1 individual
 - 2-3 individuals
 - 4-5 individuals
 - 6-7 individuals
 - 8-9 individuals
 - More than 10 individuals
 - I answered "no" or "not sure" to the previous question.
- 46.) How many face-to-face close friends do you have (i.e., friends you did not meet online and with whom you interact in person with on a frequent basis)?
- None
 - 1
 - 2-3
 - 4-6
 - 7-9
 - 10-12
 - 13-15

- More than 15
- 47.) How many of these face-to-face friends do you talk to about self-injury?
- None
 - 1
 - 2-3
 - 4-6
 - 7-9
 - 10-12
 - 13-15
 - More than 15
- 48.) Of your face-to-face friends that you are closest to (i.e., talk to often, spend time with frequently, call on the phone, send text messages to, etc.), do you know if any of them have self-injured within the last year?
- Yes, I know of at least one friend who has self-injured in the last year.
 - No, none of my friends have self-injured in the last year.
 - I am not sure if any of my friends have self-injured in the last year.
 - I do not know if any of my friends have ever self-injured.
- 49.) If you answered yes to the previous question, indicate the number of close face-to-face friends that have self-injured within the last year.
- 1 individual
 - 2-3 individuals
 - 4-5 individuals
 - 6-7 individuals
 - 8-9 individuals
 - More than 10 individuals
 - I answered “no” or “not sure” to the previous question.
- 50.) For the items below, mark which friends (your face-to-face friends, your online friends, both, or neither) would be most likely to think the following ways about self-injurious behavior.

	Face-to-Face Friends	Online Friends	Both	Neither
Self-injury is a way for a person to cope with his or her emotions.				
People who have a lot of anxiety are more likely to self-injure.				
People self-injure to feel alive again when they feel “out of it.”				
Self-injury is a way for someone to				

avoid committing suicide.				
Self-injury is a way for someone to gain attention from other people.				
People who self-injure consider it to be a part of their identity or who they are.				
Self-injury is a form of self-punishment.				
People self-injure just for the thrill and excitement.				
Self-injury is something that people grow out of.				
People who engage in self-injury are in need of mental health services.				
These friends would encourage someone that self-injures to get help.				
People who self-injure do not need professional help (i.e., medication, therapy, etc.).				
People who self-injure should explore alternatives for help besides people they meet online (i.e., meet with someone face-to-face; talk to a counselor, teacher, pastor, doctor, etc.).				
If they knew someone self-injured, these friends would think less of that person.				
These friends pity people who self-injure.				
These friends have a hard time talking about self-injury because it distresses for them too much.				
Self-injury is such a “different” behavior that it has changed our relationship for the negative.				
Self-injury is such a “different” behavior that it has changed our relationship for the positive.				
These friends are very concerned about my self-injurious behaviors.				
These friends are not very concerned about my self-injurious behaviors.				

These friends accept me for who I am and are okay with my self-injuring.				
--	--	--	--	--

Based on your interactions in one or more MySpace groups, select the person that you know best, and respond to the following questions.

- 51.) In general, which of the following best describes your MySpace friend's primary reaction regarding your self-injurious behavior?
- He/she felt sorry for me.
 - He/she knows I self-injure and that I do not want to/cannot stop self-injuring, so he/she tries to support me however he/she can.
 - He/she thinks people who self-injure are confused about life and do not know how else to handle it.
 - He/she feels that it is my life and that it is my choice to self-injure, so he/she is okay with it.
 - He/she thinks people who self-injure just want to know what it feels like.
 - He/she doesn't think of me any differently than he/she did before he/she knew I self-injured.
 - It really bothers him/her that I self-injure and he/she really wants me to stop.
 - He/she thinks I need professional help to stop self-injuring and he/she has told me he/she wants to assist me in getting this help.
 - This friend does not know that I self-injure and I would never tell him/her that I do.
 - This friend does not know that I self-injure because I have never had the opportunity to tell him/her.
 - This friend does not know that I self-injure: I would like to tell him/her if the appropriate opportunity came up.
 - Other (please specify)_____
- 52.) Keep thinking of the same friend as in the question above. In general, what impact does your friend seem to indicate to you that self-injury has on your functioning?
- No impact: He/she thinks I do fine and that I can do for myself as most people are able to do (i.e., go to school, hold a steady job, etc).
 - Slight Impact: He/she thinks that I have some problems meeting the demands of everyday life, but that overall my functioning is only slightly different than other people's functioning (i.e., miss more classes than most students, change jobs more than other people, have trouble dealing with daily stress, etc.).
 - Moderate Impact: He/she thinks that my functioning is impaired in some way, but that I only really struggle with one area of life (i.e., only one of the following areas affected – passing my classes, making it through a work day, etc.).

- High Impact: He/she thinks that my functioning is impaired in multiple ways (i.e., more than one area affected – struggling with most of my classes, not able to keep a job for long, trouble in personal relationships with others, etc.).
- I don't have any friends that would tell me these things.
- Of my friends who would tell me these things, none have ever mentioned anything.
- This friend does not know that I self-injure.

Based on your involvement in one or more face-to-face social groups, select the person that you know best, and respond to the following questions.

- 53.) In general, which of the following best describes your face-to-face friend's primary reaction regarding your self-injurious behavior?
- He/she felt sorry for me.
 - He/she knows I self-injure and that I do not want to/cannot stop self-injuring, so he/she tries to support me however he/she can.
 - He/she thinks people who self-injure are confused about life and do not know how else to handle it.
 - He/she feels that it is my life and that it is my choice to self-injure, so he/she is okay with it.
 - He/she thinks people who self-injure just want to know what it feels like.
 - He/she doesn't think of me any differently than he/she did before he/she knew I self-injured.
 - It really bothers him/her that I self-injure and he/she really wants me to stop.
 - He/she thinks I need professional help to stop self-injuring and he/she has told me he/she wants to assist me in getting this help.
 - This friend does not know that I self-injure and I would never tell him/her that I do.
 - This friend does not know that I self-injure because I have never had the opportunity to tell him/her.
 - This friend does not know that I self-injure: I would like to tell him/her if the appropriate opportunity came up.
 - Other (please specify)_____
- 54.) Keep thinking of the same friend as in the question above. In general, what impact does your face-to-face friend think self-injurious behavior has on those that engage in the behavior?
- No impact: He/she thinks I do fine and that I can do for myself as most people are able to do (i.e., go to school, hold a steady job, etc).
 - Slight Impact: He/she thinks that I have some problems meeting the demands of everyday life, but that overall my functioning is only slightly different than other

- people's functioning (i.e., miss more classes than most students, change jobs more than other people, have trouble dealing with daily stress, etc.).
- Moderate Impact: He/she thinks that my functioning is impaired in some way, but that I only really struggle with one area of life (i.e., only one of the following areas affected – passing my classes, making it through a work day, etc.).
- High Impact: He/she thinks that my functioning is impaired in multiple ways (i.e., more than one area affected – struggling with most of my classes, not able to keep a job for long, trouble in personal relationships with others, etc.).
- I don't have any friends that would tell me these things.
- Of my friends who would tell me these things, none have ever mentioned anything.
- This friend does not know that I self-injure.

Thank you for participating in this study!

Participants who complete this survey are eligible to participate in a raffle for one of four \$30 U.S. Bank Visa gift cards. To participate in the raffle, click on the link below. You will be prompted to provide your name and postal address. The information you provide will be independent from your survey responses. Click here to participate in raffle.

****Link to e-mail to participate in raffle for gift cards will be included here.****

Appendix B

E-mail to Group Moderators

Dear Moderator:

My name is Emily L. Boeckmann and I am a graduate student at Western Kentucky University in Bowling Green, Kentucky. I am contacting you to ask you to post an announcement on your group site inviting your members to participate in an online survey about self-injury and Internet use.

I became interested in working with people who self-injure after completing a short internship with a private counselor who worked with youth who self-injured. I am still very passionate about working with people who self-injure, and I need your help and the help of your group members, to do so. It is apparent that little is known about people who self-injure, and that there is very little information regarding self-injurious behaviors and the Internet. My survey is designed to gain information that will help professionals understand self-injury from the thoughts and perspectives of those who self-injure.

Your voices need to be heard to help us better understand self-injury so that we can educate others on this important topic. Please consider posting the information below on the homepage of the MySpace group that you moderate so that your group members can access it. You can preview the survey at http://www.surveymonkey.com/s.aspx?sm=6I5eYmZ5cNBZOX_2bP1LYo8A_3d_3d.

The survey is anonymous, and questions pertain to their general demographic information, their current knowledge of self-injury, their personal experience regarding self-injury, and their thoughts concerning their online and face-to-face peers' perceptions of self-injury. After completing the survey, each participant will be given the opportunity to enter his or her name into a raffle for one of four \$30 Visa gift cards.

To ensure that everyone who wishes to participate has the time to do so, I am asking that the link to my survey remain posted for 30 days. In addition, once you have informed me that the link and information regarding my survey have been posted to your homepage, I would appreciate being granted temporary access to your group's page to verify that the link is working properly.

If you have any questions, please feel free to contact me via e-mail at emily.canning@wku.edu, or send me a message via my MySpace page <http://www.myspace.com/sibresearch>. You may also contact my thesis supervisor, Dr. Elizabeth Jones, at elizabeth.jones@wku.edu. This research has been approved by the Institutional Review Board at Western Kentucky University.

Sincerely,
Emily L. Boeckmann
School Psychology Graduate Student

Appendix C

E-mail to Moderators once Permission has been Granted

Dear Moderator:

Thank you for choosing to allow your group members to have the chance to participate in this research opportunity. Please post the invitation below on your group's page. You can most easily do this by cutting and pasting.

As stated in my original message, to ensure that everyone who wishes to participate has the time to do so, I am asking that the link to my survey remain posted for 30 days. In addition, once you have the invitation posted to your group's homepage, please let me know. Once you have informed me that the link and information regarding my survey have been posted to your group's homepage, I would appreciate being granted temporary access to your group's page to verify that the link is working properly.

If you have any questions, please feel free to contact me via e-mail at emily.canning@wku.edu, or send me a message via my MySpace page <http://www.myspace.com/sibresearch>. You may also contact my thesis supervisor, Dr. Elizabeth Jones, at elizabeth.jones@wku.edu.

Thank you,
Emily L. Boeckmann
School Psychology Graduate Student

Invitation to be posted:

Please consider participating in a survey about self-injury!

Here's your opportunity to inform others about self-injury and your experiences.

You will have the opportunity to enter a raffle for one of four \$30 Visa gift cards upon completion of the survey.

Click Here to Take the Survey

Appendix D
HSRB Revisions Memo

May 28, 2008

Mr. Rubino,

I would like to make an amendment to the procedure of my thesis project, which is filed with HSRB as “Boeckmann HS08-173.” As stated in my original human subjects application, I sent e-mails to group moderators via their MySpace profile asking them to post a link to my survey on their websites. Between Friday, May 9th and Monday, May 12th I contacted 21 group moderators with this request. Of those moderators, only 6 have responded to my request, two of which are having difficulties posting the link on their page as it is not “copying and pasting” correctly. The other 15 moderators have either not read their message or have not responded yet. In addition, there were 3 group moderators that I could not contact due to privacy constraints on their personal online profiles.

Due to the lack of response from moderators and to the problems some moderators are having with the link I am sending them, I am requesting permission to join the groups to post the link to my survey myself. I will post a letter with the link asking people to participate (see below).

Please let me know if this modification to my research procedure is acceptable.

Thank you,
Emily L. Boeckmann

Appendix E
Modified Invitation

Hello Group Members,

I care about people who self-injure, and I would like to know more about what you think and how you feel about self-injury and online groups.

Please consider this to be an opportunity to inform others about self-injury and your experiences by participating in a survey on self-injury. After completing the survey, you will be given the opportunity to enter your name into a raffle for one of four \$30 Visa gift cards (information will remain separate from survey responses).

Your voices need to be heard to help us better understand self-injury so that we can educate others on this important topic. [Click Here to Take Survey](#).

I greatly appreciate your help! If you have any questions, please feel free to contact me via my MySpace page <http://www.myspace.com/sibresearch>. You may also contact my thesis supervisor, Dr. Elizabeth Jones, at elizabeth.jones@wku.edu. This research has been approved by the Institutional Review Board at Western Kentucky University.

Sincerely,

Emily L. Boeckmann
School Psychology Graduate Student
Western Kentucky University

Appendix F

Human Subjects Review Board Approval Letter

WESTERN KENTUCKY UNIVERSITY
Human Subjects Review Board
Office of Sponsored Programs
301 Potter Hall
270-745-4652; Fax 270-745-4211
E-mail: Sean.Rubino@wku.edu

In future correspondence please refer to HS08-173, April 28, 2008

Emily Boeckmann
c/o Dr. Elizabeth Jones
Psychology, WKU

Dear Emily:

Your revision to your research project, "Self-Injury Knowledge and Internet Usage," was reviewed by the HSRB and it has been determined that risks to subjects are: (1) minimized and reasonable; and that (2) research procedures are consistent with a sound research design and do not expose the subjects to unnecessary risk. Reviewers determined that: (1) benefits to subjects are considered along with the importance of the topic and that outcomes are reasonable; (2) selection of subjects is equitable; and (3) the purposes of the research and the research setting is amenable to subjects' welfare and producing desired outcomes; that indications of coercion or prejudice are absent, and that participation is clearly voluntary.

1. In addition, the IRB found that you need to orient participants as follows: (1) signed informed consent is not required as "clicking" on the indicated link will imply consent; (2) Provision is made for collecting, using and storing data in a manner that protects the safety and privacy of the subjects and the confidentiality of the data. (3) Appropriate safeguards are included to protect the rights and welfare of the subjects.

This project is therefore approved at the Expedited Review Level until August 31, 2008

2. Please note that the institution is not responsible for any actions regarding this protocol before approval. If you expand the project at a later date to use other instruments please re-apply. Copies of your request for human subjects review, your application, and this approval, are maintained in the Office of Sponsored Programs at the above address. Please report any changes to this approved protocol to this office. A Continuing Review protocol will be sent to you in the future to determine the status of the project.

Sincerely,
Sean Rubino, M.P.A.
Compliance Manager
Office of Sponsored Programs
Western Kentucky University
cc: HS file number Boeckmann HS08-173