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The Effects of Treatment on Self-Mutilating Behaviors

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Abstract

This study examines the relationship between self-harm and treatment. Specifically, 153 college students at East Texas Baptist University answered a survey concerning severity and frequency of self-harming acts. Verbal instructions that were roughly the same for every class were given along with a consent form that emphasized confidentiality, anonymity, and the right to not complete or begin the survey. Each participant responded to questions asking about self-harming instances, treatment, demographics, and social-desirability. The hypothesis is that those who self-harm and receive treatment will self-harm less frequently and less severely than those who self-harm and do not receive treatment.

However, the hypothesis was not supported. There was no implication that severity differed in self-harmers who did not receive treatment compared to self-harmers who did receive treatment because of lack of data. There was evidence that those who self-harm and receive treatment are more likely to do so longer and more frequently (in the number of incidences) than those who do not receive treatment. There is also evidence that those who receive treatment are more likely to do so if the problem is more severe in terms of number of self-harming types.

Introduction

Self-mutilation can be defined as "the act of attempting to alter a mood state by inflicting physical harm serious enough to cause tissue damage to one's body" (Martinson, 2001, p.1) or "any self-directed, repetitive behavior that causes physical injury" (Fong, 2003, p.1). Self-mutilating behaviors include cutting, burning and head-banging, but can also include carving, scratching, branding, marking, biting, bruising, hitting, poisoning, and picking or pulling the skin or hair.(Martinson, 2001) Other forms of self-inflicted harm are more severe. One of these which is less common is auto enucleation which is the removal of an eye (Fong, 2003).

The terms "self-mutilation" and "self-harm" will be used interchangeably in this paper. Also called self-injury, deliberate self-harm or parasuicide is generally used as a coping method and approximately one to four percent of the United States population is involved in self-harm (approximately three million people) (Martinson, 2001; McAllister, Creedy, Moyle, & Farrugia, 2002; Mehta, 2004). A history of sexual abuse, emotional repression, and physical abuse is often present. Males and females of all ages self-harm, but the majority of self-harmers are adolescent females. This may be because male self-harm is less reported than female mutilation because women are more likely to seek help (Taylor, 2003). According to Hjelmeland and Grøholt, these male and female self-harmers may have similar characteristics (2005).

Self-mutilation is a growing problem. The field of psychology has taken particular notice of this occurrence and is working on treatments (Farrand, 2005). The occurrence of this problem continues to increase, especially within certain gender and age groups. There is statistical evidence that this is a reoccurring behavior. In fact, 30% of those who self-harm repeat within a

year with 13% of those being major repeaters, meaning they have had at least five episodes of self-harm within their lifetimes (Evans, 2000).

Frequently reported groups of self-harmers include adolescent girls, college students, and males and females who are in high-stress situations (Fong, 2003). One study suggests that adolescents may be more prone to self-harm than adults because of unstable self-esteem and/or cognitive immaturity (Hjelmeland & Grøholt, 2005). This was implied in a study done by Gratz, Conrad, and Roemer where 14% of a sample of 500 college students reported they had self-mutilated at least once during their lifetimes with 18% of those doing so more than ten times and 10% doing so over 100 times (2002). One caution in regard to the generalizability of this study is the fact that the college sample had a high percentage of non-traditional students.

Certain factors are correlated with a tendency for individuals to harm themselves. One factor is the comorbity of a psychological disorder, especially mood and personality disorders including depression, mental retardation, borderline-personality, bipolar disorder, autism, and Lesch-Nyhan syndrome. Other factors such as having an impulsive personality, a history of abuse, dissociation, low self-esteem, and multiple social problems can also increase risk (Souter & Kraemer, 2004; Gratz, Conrad & Roemer, 2002). Because this problem is multifaceted and is not exclusively a psychological, medical, or behavioral problem, researchers and caregivers are trying to find the best way to treat this problem. As Evans so clearly puts it, “to date, no single intervention has been shown to be effective in reducing repetition of deliberate self-harm” (2000, p. 44).

Treatment

Because self-harm is classified as a behavioral, psychological, and medical problem, the treatment varies from patient to patient, depending on who is helping the individual and what the

underlying causes are that prompt the person to harm. All current treatments fall into the categories of medication, psychological therapy, self-help, and preventative measures.

Medication

Medication for self-mutilation is typically used for those with psychological or physical problems that affect the person in such a way that self-harm is more likely. When medication is used, it is specific to the individual. These medications are used specifically to help stabilize mood, ease depression, and calm anxiety (Fong, 2003).

If those who harm themselves are doing so because of depression, an antidepressant will generally be used. Antidepressants work by increasing serotonin levels in the brain, which reduces impulsiveness, anger, and other negative emotions (Gaspar, Cases, & Maroteaux, 2003). Much research has been done on the effect of antidepressants, so their side effects are known along with their positive effects. Some side effects that antidepressants have include vomiting, hair loss, confusion, anxiety, syncope (fainting), palpitations, blurry vision, mood swings, irritability, weight gain, insomnia, and sexual dysfunction (Cheung, Levitt, & Szalai, 2003). This medication is fairly safe and effective, so it is widely used to treat those who self-harm and also have depression. An increase in serotonin levels has been strongly correlated with the decrease of self-harm in the studies done, but only few studies with empirical evidence exist (Fong, 2003). One such experiment did show a reduction in self-harm instances, but the trial population was small (Raj, Kumaraiah & Bride, 2001).

Those who harm themselves with borderline personality disorder or mental retardation may be given atypical antipsychotics, the second generation of antipsychotics, in order to ease their urge to self-harm. This medication reduces physical aggression and can influence mood, anxiety, impulsiveness, and behavior control in a positive way in those groups (Fong, 2003).

Controlled trials using atypical antipsychotics on borderline-personality and mentally retarded patients are not relevant to self-harm.

Mood stabilizers are used to help patients gain control over their emotions. They are most appropriate for those who self-mutilate and are bipolar or whose self-harm is cyclical. Anxiolytics, which are specific mood stabilizers, have a sedative effect that can control the attempt to self-harm. These drugs are highly abused and can cause behavior disinhibition, the loss of behavior control. This is especially true for mentally retarded patients. However, they also have potential for emergency situations in which the patient will harm him or herself if not stopped, but controlled studies are meager (Fong, 2003).

Opiate antagonists are drugs that stop the production of opiates. These drugs may reduce the urge to self-harm but have negative side effects. Liver damage, nausea, and gastrointestinal disturbances can result from the use of these drugs. Although the effect opiate antagonists have on those who self-harm is unknown, it is highly probable that the effect will be positive because these drugs have been shown to help control impulsivity, a common problem with those who self-mutilate. Testing of this drug has only been done on those harmers with autism and mental retardation. Their effectiveness for self-mutilation is unproven (Fong, 2003).

If patients suffer from Lesch-Nyhan syndrome, a syndrome in males created by an error of purine metabolism that results “in neurological, renal, and musculoskeletal manifestations” they may suffer from severe self-harm without being able to control themselves (Fardi, Topouzelis, & Kostanos, 2003, p. 51). This is estimated to occur in 1 of every 100,000 to 380,000 births. Males with this syndrome harm themselves by repetitive biting, which may cause severe harm and in some cases amputation of fingers and tongue. For this specific disorder, treatment generally consists of prescription drug use and preventative measures that cover the

teeth. As for medication for Lesch-Nyhan patients, Allopurinol is used because it prevents musculoskeletal manifestations, but it does not seem to control motor or behavioral issues. Valium can also be used in order to relax the muscles. Hydroxytrytophan prescribes with decaboxylase inhibitors has been proven to decrease self-mutilation, while tetrabenazine, diazepam, haloperidol and Phenobarbital have also been successful in this area as long as a dopamine deficiency was the main cause of the problem. Carbamazepine was also shown to stop the self "abuse in three of four patients" (Fardi, Topopizelis & Kostanos, 2003, p. 52).

Other forms of treatment for patients with this specific disorder include the extraction of both permanent and primary teeth or the prescription of an oral mouthpiece in order to cover the teeth. A child with this mouth guard may have difficulty accepting it initially, but will usually grow to accept it, thus preventing further damage. However, acceptance may take some time; indeed, the child in the case study did not accept the mouth guard completely for nearly four years after initial introduction (Fardi, Topoizelis & Kostanos, 2003).

Psychological Therapy

If the patient's main problem is psychological and is not caused physically from an imbalance in the chemistry of the brain, psychological therapy will most likely be used. The issue with therapy is that, on average, only 40% of those offered therapy keep their appointments (Evans, 2000). There are several types of psychological therapy, and the most common form used for those who harm themselves is psychotherapy.

Psychotherapy is therapy that fully evaluates the situation. It is used to understand what the underlying reason is that causes patients' turmoil, and in this specific instance, what causes them to harm themselves. For this treatment, individual therapy is most often used. This therapy can be used to enable patients to understand their negative emotions and causes for self-harm

while teaching them new coping methods. This is effective because commonly self-harm is used as a coping method when situations seem out of control (Martinson, 2001).

Psychotherapy is becoming less frequently used because of insurance issues with reimbursement. Insurance companies would much rather pay for medication that can be used at a lower cost for a shorter amount of time, but the problem with this is that the patient may not understand the mental and emotional state that caused the self-harm in the first place. This can be a problem because if the patient ever stops using the medication there is nothing preventing him or her from regressing to self-harm once again. If the insurance company does decide to pay for therapy, it will most likely only cover the cost for a short period of time with the result that the therapy does not have the desired long-term effect (Talan, 2005). There is no confirmation that psychodynamic psychotherapy, a psychotherapy in which the client and therapist meet more often than other types of therapy, can reduce the act of self-harming, but it has been proven to help create boundaries and give guidelines to the patient, which can be helpful for a person who feels out of control. Patients report feeling better after being taught new coping methods, but its effectiveness on impulsivity or harming has yet to be proven (Fong, 2003).

In a recent study, a controlled trial with a 6-month follow-up was used on 119 adults who self-harmed. Patients in the experimental group, 58 in all, were treated with four 50-minute psychodynamic interpersonal therapy sessions while patients in the control group, 61 in all, received usual care which was unspecified. This therapy was shown to reduce suicidal ideation and deliberate-self harm for the patients (House, 2002).

Dialectal behavior therapy is used to treat behavioral disorders by combining “cognitive, behavioral, and supportive interventions” (Fong, 2003, p. 7). This therapy has been proven to decrease the rates of the act of self-harm from nine acts per year to an average of one and a half

acts per year, a significant decrease. This therapy is most effective because it combines the use of behaviorist and cognitive practices. Both influence patients to harm themselves, so it is understandable that they should both be treated in order to get the best results. It has been shown to reduce the number of attempts up to six months, but after a year the effect had disappeared (Raj, Kumariaha & Bhide, 2001).

In a study by Raj, Kumariaha, and Bhide, cognitive-behavioral therapy was used on 20 patients who came in for treatment for self-harm but did not have psychological or personality disorders. Subjects were screened in this way so that medication results could not confound results from therapy. In this experiment, the experimental group received ten cognitive-behavioral therapy sessions over two to three months with follow-up letters sent out and booster sessions available. The control group had routine medical treatment, but had the option to go to therapy. The results show the experimental group had more benefits than the control group, especially in the areas of feelings about the future, problem solving skills, and personal control. Even though the results were positive, within three months a small percentage (5%) of the patients in the experimental group self-harmed once again. The control group was not reported in this instance (Raj, Kumariaha & Bhide, 2001.)

Many other forms of therapy have been attempted. For example, relaxation training and group therapy have been subjects of experimentation, but the results have been mixed. This training and therapy had poor results in an experiment that used a group of women who self-harmed. In fact, in some cases the women said the group therapy made their self-harm worse (Huband & Tantam, 2004). Signed contracts stating patients will not harm themselves have been ineffective, but in some cases emergency plans, which are not related to signed contracts, do seem to be effective for first-time harmers. These emergency plans provide a backup for when

the pressure to self-harm seems to be too great to bear. The “emergency card” system was also experimented with. In this program, patients were allowed to have an emergency card, which they could use if they saw no way of resisting the urge to harm themselves. The card had “information on how to make privileged contact with psychiatric services as an alternative to” self-harming (Evans, 2000, p. 45). This does not, however, help those who repeatedly self-harm. In fact, the emergency card system has been shown to have a negative effect on repeaters in one small study (Evans, 2000). In other cases, however, it did not show any results (Skegg, 2005).

One study by Crowe and Bunclark, which was conducted in an inpatient unit for those who self-harm in the United Kingdom, used medication and therapy together. The medication included antidepressants, mood stabilizers, and antipsychotics and was based on the individual’s need. The therapy included a daily community group, a weekly coping skills group, family therapy, and a once a week resident’s group, which was also available for those who had been discharged. This group of patients excluded those who had a history of violence to others, arson, severe psychosis, or substance abuse. The treatment lasted approximately six months per individual. Using this approach 58 self-mutilators were treated with 32 of them significantly reducing the frequency of self-mutilation, 23 having no change, and 3 actually increasing their self-mutilating acts. Patients stayed an average of 4.6 months in the unit (Crowe & Bunclark, 2000).

While some of these methods can be effective when used in the right situation, there can be disadvantages. Therapy will be ineffective if patients do not desire to change or face their problem (Martinson, 2001). Also, if a patient sees the positive support he is getting from helpers as positive reinforcement, he may continue harming himself in order to keep that attention. The best way to deal with this issue is to teach a person how to cope, with the emphasis on not

harming himself. The positive result of therapy can also be improved if the patient develops a close emotional relationship with a person in whom he can confide. This is especially true if the person is also physically close. If the person in whom the patient confides is overprotective, under concerned, or unknowledgeable, however, the results may be negative (Huband & Tantam, 2004). If the patient does open up to the designated person and a negative response occurs, the harmer may once again feel as if he has to hide his self-harm and deal with it on his own or with the help of only his therapist.

Self-Help

While these therapies and medications may have a positive effect, they must be used under the guidance of a person who is educated in this area. This can often be embarrassing to those who self-harm, especially to those who go to great lengths in order to hide their afflictions or make up stories about their injuries so that no one will find out about their destructive behavior. If this is the case and the harmer wants to stop this disruptive and unhealthy behavior, the person may try self-help.

Self-help is either treatment without the supervision of a certified professional or treatment done with "up to one hour of professional and five hours of non-professional support" (Farrand, 2005, p. 61). If those who self-mutilate intend to help themselves, there are books, imagery resources (imagined scenarios), and other suggestions that may provide an escape from their negative mental state. Self-help treatments are most likely to be effective within the first two weeks after the afflicted individual is exposed to the self-help method, but too often people feel as though the material used is not applicable to them or requires too much effort (Farrand, 2005).

The following ideas have not been systematically evaluated. As of now, there are no controlled studies on their effectiveness. Imagining the act of harming oneself seems to be an effective way to get the emotional satisfaction without the physical act of harming (Williams, 2005). This is still mentally unhealthy and individuals who use this technique should go on to get therapy to deal with their issues. Other plans may include exercise, ripping up an old book or newspaper, taking a bath, putting body lotion on places the person would like to harm, focusing on breathing, or biting into a mildly hot pepper (Mehta, 2004).

Preventative Measures

Unlike the other treatments, the child protection approach identifies children who are at risk for self-harming and influences them in a positive way so that they are less likely to self-mutilate in the future. These children have the risk factors stated earlier, the most common indicators being social or abuse problems. Because some believe self-harm is a gateway to suicide, another scale used to predict self-harm is the Beck Suicide Intent Scale. This scale is used to measure the likeliness that the individual will commit suicide. More specifically, the circumstances section of the scale has been used to predict self-harm, but with very little effectiveness (Harriss, Hawton, & Zhal, 2005, p. 51-52).

According to the child protection method, if the adolescent does inflict himself or herself and is sent to a hospital, the child must be admitted into pediatric care and not simply discharged from the hospital. This is because studies show that a person who is not assessed may have a higher rate of completing suicide or repeating the act of self-harm (Boyce, Carter, Penrose-Wall, Wilhelm, & Goldney, 2003). After they have been moved to the pediatric ward, these children go through psychological tests that help caregivers make a sound decision on how the child would best benefit from treatment. Those who are hypomanic, meaning they suffer from “auditory

hallucinations, disordered thoughts, and delusions," are generally diagnosed quickly so they get the care they need (Souter & Kraemer, 2004, p. 260).

Many factors contribute to the success of this program, such as the attitude of staff. This treatment can have negative effects in cases in which the child receives poor hospital care, so caution must be taken to ensure the medical staff is well-educated and has positive attitudes towards those who self-harm (Mackay & Barrowclough, 2005). This act of intervention, when used with teaching problem-solving techniques, may decrease psychological distress and the number of suicide attempts, but it also may not (Raj, Kumaraiah & Bhide, 2001). Sometimes this intervention fails to reduce the number of instances of self-harm (Skegg, 2005). Crowe and Bunclark's study showed that it is impossible to stop all incidents of self-harm by supervision or prevention alone, but that these interventions can reduce the frequency or severity of the incidents (2000).

Conclusion

Treatment methods for this problem are increasing in number. Medication used includes antidepressants, atypical antipsychotics, mood stabilizers, muscle relaxants, and opiate antagonists, but the effectiveness of these are not well known because of the small numbers of patients in the experiments. Therapies include psychotherapy, psychodynamic interpersonal therapy, dialectal behavior therapy, cognitive-behavioral therapy, relaxation training, and emergency plans.

Evidence shows that some treatments, specifically medications such as antidepressants for those harmers who also suffer from depression, and Phenobarbital and carbamazepine for those mutilators who also have Lesch-Nyhan syndrome, and psychodynamic interpersonal therapy are consistently more effective than other forms of treatment. There is only evidence that

self-help influences the person effectively within the first two weeks, and most methods of self-help have no supporting evidence at all since those who attempt self-help usually do not report their successes or failures to anyone. Those who struggle with self-harm have many treatment options to choose from, whether it be self-help, medication, or therapy. As for those who are at risk for self-harm, preventative approaches are available.

Hypothesis

Based on the literature discussed above, especially those focused on teen self-injury (Gratz, Conrad, & Roemer, 2002; Hjelmeland & Grøholt, 2005), it is hypothesized that self-harming college students who have received some form of treatment will be less likely to repeat self-harming acts than those who have not received any form of treatment. It is further hypothesized that among college students with a history of self-harm, acts of self-harm will be less severe among those who have received treatment than in those who have not. Because people respond differently to treatment, no matter what it is, any treatment is considered to be better than no treatment.

Methodology

Participants

The participants included East Texas Baptist University college students in classes selected by convenience. These classes include Introduction to Psychology, Rhetoric and Composition, Introduction to Research Methods, Psychology of Adolescence, and Social/Experimental Research.

Design

Independent t-tests were run on all 17 items in the Gratz Deliberate Self-Harm Inventory along with treatment and demographic items from the researcher-constructed

questionnaire comparing self-mutilators who received treatment to self-mutilators who did not receive treatment. An independent t-test was also run on the Marlowe-Crowne Social Desirability Scale to see if there was a difference between self-harmers and non-self harmers in the self-report survey in terms of low and high defensiveness. The questionnaires were handed out in a shotgun approach to classes at East Texas Baptist University to a sample population of one hundred and fifty-three students.

Materials

The research material included an altered version of the Deliberate Self-Harm Inventory by Gratz, which is a 17 item questionnaire assessing "frequency, severity, duration, and type of self-harming behavior" (Gratz, Conrad, Roemer, 2002, p. 130). This supplemented a researcher constructed questionnaire asking for demographics and whether individuals have ever sought treatment for self-harm, what type of treatment(s) were received, and how well the treatment(s) worked for them on a Likert scale ranging from one to five. Most answers to questions were circled, but a few were open-ended.

The treatment section included all of the treatments described in this paper along with an "other" option. All questions had a "not applicable" answer so no one person was singled out for taking more time than the others in order to avoid embarrassment. The questionnaire did not ask for a name so anonymity was kept, and students were not required to participate. Individuals' responses were confidential in this study. The Marlowe-Crowne Social Desirability Scale was also be used to ensure responses are not biased. See Survey in Appendix A.

Procedure

Each class was approached at the beginning of the class period with a brief explanation of the survey (informing the participants of the nature of the survey), and instructions. They were

asked if they wished to participate. The brief explanation let the students know that this research was on life experiences and did not disclose too much information before participants filled out the survey.

In the verbal instructions, instructors told the participants that their answers were confidential and anonymous, that they were not required to participate, and that if they chose to participate they could stop participating at any time. This was restated in the informed consent form that participants were required to sign and hand in before they began participation. The participants were also instructed not to participate if they had done so already and were encouraged to be open and honest if they did participate. During the instruction period, the participants were also told that the survey would take five to ten minutes to complete. Some of the participants were rewarded for participating by being given extra credit on an exam. The survey was either immediately taken after the instructions had been given or was taken later in the period, after taking a test for the class they were enrolled in. Students in this study took the survey in their classrooms. In some cases after each survey was received, the instructor thanked the students for participating.

Results

The following are the statistically significant results yielded from the research on a one-tailed scale. The participants completed a retrospective report survey, and the researcher analyzed the data using SPSS to see if there was an effect of treatment on self-harm in terms of severity and frequency.

Duration of Cutting

An independent sample *t* test was performed comparing the mean duration of cutting for self-harmers who cut and received treatment (M=2.75, SD=1.5) with that of self-harmers who cut

and did not receive treatment (*M*=1.00, *SD*=.000). The alpha level was .05 for all of the tests run. This test was found to be statistically significant, *t* (7)= 2.66, *p*=.033, indicating that those who received treatment cut for a longer period of time than self-harmers who cut and did not receive treatment. A score of one indicated the participant had cut himself either one incidence or one year, a score of two and three-quarters indicated the harmer had cut an average of nearly three years. The strength of the relationship between receiving treatment and the duration of cutting, as indexed by eta², was .50. This is a strong association. A moderate association is .10. (A strong eta² must approach .15.)

Frequency of Scratching

An independent sample *t* test was performed comparing the mean number of incidences of scratching that self-harmers who had scratched themselves and received treatment (*M*=2.2, *SD*=1.64) with that of self-harmers who scratched themselves and did not receive treatment (*M*=1.56, *SD*=1.01). This test was found to be statistically significant, *t* (12)= -.918, p=.044, indicating that self-harmers who scratched themselves and received treatment were more likely to have scratched themselves between six and ten times while self-harmers who scratched themselves and did not receive treatment were more likely to scratch themselves between one and eight times. A score of two was representative of scratching between six and ten times while a score of one was representative of scratching between one and five times. The strength of the relationship between receiving treatment and the frequency subjects scratched themselves, as indexed by eta², was .06.

Duration of Punching

An independent sample *t* test was performed comparing the mean duration of punching for self-harmers who punched themselves and received treatment (*M*=4.5, *SD*=.707) with that of

self-harmers who punched themselves and did not receive treatment (M=4.5, SD=3.41). This test was found to be statistically significant, t (10)= .00, p=.023, indicating that those who punch themselves and received treatment punched themselves on average just as long as self-harmers who punched themselves and did not receive treatment (an average of four and a half years). However, there was a greater deviation for self-harmers who punched themselves and didn't receive treatment indicating that those who receive treatment for punching themselves were more likely on average to do so for a longer period of time. The strength of the relationship between the duration of punching oneself and receiving treatment, as indexed by eta², was .00, which is a weak association. See Appendix B for table.

Treatment

A cross tabs analysis was conducted on the types of treatment and the effectiveness of that treatment. Antidepressants were reported as being very poor, poor, and very good in terms of effectiveness while family therapy was reported as being poor and very good. Self-help books were reported to be good while therapy in general was reported as being poor in effectiveness. "Other treatment" was also reported as being very good. Eleven types of treatment were reported as being used to treat self-harm, but only seven of those were given ranking in effectiveness. The data on the other four was missing. A graph was also created to show the connection between the number of types of self-harming acts and whether or not the participant received treatment. This graph indicated that the more types of self-harm the participant had done, the more likely he or she was to receive treatment (See Appendix C).

Discussion

The 153 participants who completed this survey ranged in age from 17 to 47 with the majority of those being 19 and 20. Thirty-five percent of the participants admitted to self-

harming in one way or another. Fifty-seven of the participants were male while eighty-six were female. Twenty of the surveys were thrown out because a majority of the information was missing or because the participant had answered in a biased manner. Thirteen of the participants reported being physically or sexually abused, and 140 of the participants reported being of the Christian religion. There was no correlation between any of the descriptive variables and the self-mutilation variable. This includes social desirability. Two participants reported having a personality disorder, seven reported having a psychological disorder (two of those self-harmed), and twelve reported having a mood disorder (six of those self-harmed), 44 reported they considered themselves impulsive, and over half (23) of those self-harmed. It is also reported that the more types of self-harm the participant had done, the more likely he or she was to receive treatment (see graph in Appendix C).

The scale used to indicate severity in this study, that is, if the person had ever been to the hospital for treatment because of their self-harm, was not useful because only one participant indicated he or she had done so. The significant result about the duration of cutting, between those who cut and did not receive treatment with those who did, did not support the hypothesis. Those who received treatment had cut for a longer period of time than those who did not. This may be because the people who are harming themselves do not consider it unhealthy until it passes a point of loss of control. This idea is also supported by the duration results from the punching data and the frequency results from the scratching data, which both indicated that self-harmers who received treatment did so after harming more often or for a longer period of time than their counterparts who did not receive treatment.

Future Suggestions

One problem with this research is the lack of generalizability because most of the participants are between the ages of 18 and 25, associate themselves with the Christian religion, and are most likely in the middle or upper socio-economic status. Another problem is the fact that only the Gratz Self-Harm Inventory and Marlowe-Crowne Social Desirability Scale were used. The modifications made on the Gratz inventory had no statistical basis but were only used in order to better understand the data by making the questions closed-ended. Also, no published scales were used to determine self-esteem or stress. It also would have been more revealing if race and social economic status had been asked. Another problem is the fact that sexual and physical abuse were lumped together in the survey. All of these problems taken into consideration, a larger more diversified sample along with item analysis, revision, and inclusion of published scales could be used to increase the validity of this survey. Reliability could also be increased by repeating this research in another setting.

Appendix A

Date of Birth __/__/____

Gender: Male Female

What is your current level of stress on a scale from 1-10, 1 being the lowest and 10 being the highest?

1 2 3 4 5 6 7 8 9 10

What is your current level of self esteem on a scale from 1 to 10, 1 being the lowest and 10 being the highest?

1 2 3 4 5 6 7 8 9 10

Are you aware that you have a personality disorder? Yes No

If yes, what is it? _____

Are you aware that you have a psychological disorder? Yes No

If yes, what is it? _____

Are you aware that you have a mood disorder? Yes No

If yes, what is it? _____

Would you consider yourself impulsive? Yes No

Have you ever been sexually or physically abused? Yes No

What religion are you?

Christian Islam Atheist Hindu Buddhist

Other _____

Have you ever intentionally (i.e., on purpose)

1. *Cut your wrist, arms, or any other area(s) of your body (without intending to kill yourself)? Circle one:*

1. Yes 2. No

If yes,

How old were you when you first did this?

Before age 10 10-12 12-14 14-16 16-18 18-20 20+

How many times have you done this?

1-5 6-10 11-15 15+

When was the last time you did this?

This Week Last Week Last Month Last 3 Months Last 6 months Last Year More than a year ago

How many years have you been doing this? (If you are no longer doing this, how many years did you do this before you stopped?) _____

Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment? Yes No

Have you ever intentionally (i.e., on purpose)

2. *Burned yourself with a cigarette?*

1. Yes 2. No

If yes,

How old were you when you first did this?

Before age 10 10-12 12-14 14-16 16-18 18-20 20+

How many times have you done this?

1-5 6-10 11-15 15+

When was the last time you did this?

This Week Last Week Last Month Last 3 Months Last 6 months Last Year More than a year ago

How many years have you been doing this? (If you are no longer doing this, how many years did you do this before you stopped?) _____

Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment? Yes No

3. *Burned yourself with a lighter or a match?*

1. Yes 2. No

If yes,

How old were you when you first did this?

Before age 10 10-12 12-14 14-16 16-18 18-20 20+

How many times have you done this?

1-5 6-10 11-15 15+

When was the last time you did this?

This Week Last Week Last Month Last 3 Months Last 6 months Last Year More than a year ago

How many years have you been doing this? (If you are no longer doing this, how many years did you do this before you stopped?) _____

Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment? Yes No

4. *Carved words into your skin?*

1. Yes 2. No

If yes,

How old were you when you first did this?

Before age 10 10-12 12-14 14-16 16-18 18-20 20+

How many times have you done this?

1-5 6-10 11-15 15+

When was the last time you did this?

This Week Last Week Last Month Last 3 Months Last 6 months Last Year More than a year ago

How many years have you been doing this? (If you are no longer doing this, how many years did you do this before you stopped?) _____

Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment? Yes No

Have you ever intentionally (i.e., on purpose)

5. *Carved pictures, designs, or other marks into your skin?*

1. Yes 2. No

If yes,

How old were you when you first did this?

Before age 10 10-12 12-14 14-16 16-18 18-20 20+

How many times have you done this?

1-5 6-10 11-15 15+

When was the last time you did this?

This Week Last Week Last Month Last 3 Months Last 6 months Last Year More than a year ago

How many years have you been doing this? (If you are no longer doing this, how many years did you do this before you stopped?) _____

Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment? Yes No

6. *Severely scratched yourself, to the extent that scarring or bleeding occurred?*

1. Yes 2. No

If yes,

How old were you when you first did this?

Before age 10 10-12 12-14 14-16 16-18 18-20 20+

How many times have you done this?

1-5 6-10 11-15 15+

When was the last time you did this?

This Week Last Week Last Month Last 3 Months Last 6 months Last Year More than a year ago

How many years have you been doing this? (If you are no longer doing this, how many years did you do this before you stopped?) _____

Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment? Yes No

7. *Bit yourself, to the extent that you broke the skin?*

1. Yes 2. No

If yes,

How old were you when you first did this?

Before age 10 10-12 12-14 14-16 16-18 18-20 20+

How many times have you done this?

1-5 6-10 11-15 15+

When was the last time you did this?

This Week Last Week Last Month Last 3 Months Last 6 months Last Year More than a year ago

How many years have you been doing this? (If you are no longer doing this, how many years did you do this before you stopped?) _____

Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment? Yes No

Have you ever intentionally (i.e., on purpose)

8. *Rubbed sandpaper on your body?*

1. Yes 2. No

If yes,

How old were you when you first did this?

Before age 10 10-12 12-14 14-16 16-18 18-20 20+

How many times have you done this?

1-5 6-10 11-15 15+

When was the last time you did this?

This Week Last Week Last Month Last 3 Months Last 6 months Last Year More than a year ago

How many years have you been doing this? (If you are no longer doing this, how many years did you do this before you stopped?) _____

Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment? Yes No

9. *Dripped acid onto your skin?*

1. Yes 2. No

If yes,

How old were you when you first did this?

Before age 10 10-12 12-14 14-16 16-18 18-20 20+

How many times have you done this?

1-5 6-10 11-15 15+

When was the last time you did this?

This Week Last Week Last Month Last 3 Months Last 6 months Last Year More than a year ago

How many years have you been doing this? (If you are no longer doing this, how many years did you do this before you stopped?) _____

Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment? Yes No

10. *Used bleach, comet, or oven cleaner to scrub your skin?*

1. Yes 2. No

If yes,

How old were you when you first did this?

Before age 10 10-12 12-14 14-16 16-18 18-20 20+

How many times have you done this?

1-5 6-10 11-15 15+

When was the last time you did this?

This Week Last Week Last Month Last 3 Months Last 6 months Last Year More than a year ago

How many years have you been doing this? (If you are no longer doing this, how many years did you do this before you stopped?) _____

Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment? Yes No

Have you ever intentionally (i.e., on purpose)

11. *Stuck sharp objects such as needles, pins, staples, etc. into your skin, not including tattoos, ear piercing, needles used for drug use, or body piercing?*

1. Yes 2. No

If yes,

How old were you when you first did this?

Before age 10 10-12 12-14 14-16 16-18 18-20 20+

How many times have you done this?

1-5 6-10 11-15 15+

When was the last time you did this?

This Week Last Week Last Month Last 3 Months Last 6 months Last Year More than a year ago

How many years have you been doing this? (If you are no longer doing this, how many years did you do this before you stopped?) _____

Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment? Yes No

12. *Rubbed glass into your skin?*

1. Yes 2. No

If yes,

How old were you when you first did this?

Before age 10 10-12 12-14 14-16 16-18 18-20 20+

How many times have you done this?

1-5 6-10 11-15 15+

When was the last time you did this?

This Week Last Week Last Month Last 3 Months Last 6 months Last Year More than a year ago

How many years have you been doing this? (If you are no longer doing this, how many years did you do this before you stopped?) _____

Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment? Yes No

13. *Broken your own bones?*

1. Yes 2. No

If yes,

How old were you when you first did this?

Before age 10 10-12 12-14 14-16 16-18 18-20 20+

How many times have you done this?

1-5 6-10 11-15 15+

When was the last time you did this?

This Week Last Week Last Month Last 3 Months Last 6 months Last Year More than a year ago

How many years have you been doing this? (If you are no longer doing this, how many years did you do this before you stopped?) _____

Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment? Yes No

Have you ever intentionally (i.e., on purpose)

14. *Banged your head against something, to the extent that you caused a bruise to appear?*
1. Yes 2. No

If yes,

How old were you when you first did this?
Before age 10 10-12 12-14 14-16 16-18
18-20 20+

How many times have you done this?
1-5 6-10 11-15 15+

When was the last time you did this?
This Week Last Week Last Month Last 3 Months
Last 6 months Last Year More than a year ago

How many years have you been doing this? (If you are no longer doing this, how many years did you do this before you stopped?) _____

Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment? Yes No

15. *Punched yourself, to the extent that you caused a bruise to appear?*
1. Yes 2. No

If yes,

How old were you when you first did this?
Before age 10 10-12 12-14 14-16 16-18
18-20 20+

How many times have you done this?
1-5 6-10 11-15 15+

When was the last time you did this?
This Week Last Week Last Month Last 3 Months
Last 6 months Last Year More than a year ago

How many years have you been doing this? (If you are no longer doing this, how many years did you do this before you stopped?) _____

Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment? Yes No

16. *Prevented wounds from healing?*
1. Yes 2. No

If yes,

How old were you when you first did this?
Before age 10 10-12 12-14 14-16 16-18
18-20 20+

How many times have you done this?
1-5 6-10 11-15 15+

When was the last time you did this?
This Week Last Week Last Month Last 3 Months
Last 6 months Last Year More than a year ago

How many years have you been doing this? (If you are no longer doing this, how many years did you do this before you stopped?) _____

Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment? Yes No

Have you ever intentionally (i.e., on purpose)

17. *Done anything else to hurt yourself that was not asked about in this questionnaire?*
1. Yes 2. No

If yes,

What is it? _____

How old were you when you first did this?
Before age 10 10-12 12-14 14-16 16-18
18-20 20+
How many times have you done this?
1-5 6-10 11-15 15+
When was the last time you did this?
This Week Last Week Last Month Last 3 Months
Last 6 months Last Year More than a year ago
How many years have you been doing this? (If you are no longer doing this, how many years did you do this before you stopped?) _____
Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment? Yes No

If you have ever done any of the previously mentioned things, did you receive treatment?
1. Yes 2. No

If yes, which treatment(s) did you receive? Please Circle.

Medication

Opiate antagonists- such as Naltrexone Antidepressant(s)

Atypical Antipsychotics - such as Risperdal Muscle Relaxants

Mood Stabilizers- such as Lithium Carbonate other(s) _____

Therapy

Group therapy Relaxation training Psychotherapy

Dialectal Behavior Therapy Cognitive Behavioral Therapy Signed Contracts

Emergency Cards Family Therapy

Psychodynamic Interpersonal therapy- short-term supportive psychotherapy

other(s) _____

Prevention Strategies:

Child protection Method

Self-Help

Books Pamphlets Imagery resources (imagined scenarios)

Self-distracting (ripping up a book, exercise, biting into a hot pepper, etc.)

Not Applicable

If you have received treatment(s), how effective was it? Please list in the blanks the treatment type.
_____ _____ _____

1. Very Poor	1. Very Poor	1. Very Poor
2. Poor	2. Poor	2. Poor
3. Fair	3. Fair	3. Fair
4. Good	4. Good	4. Good
5. Very good	5. Very good	5. Very good

Please complete each item below with your response. There are no right or wrong answers, so please feel free to answer honestly. Please write "T" for True and "F" for false. Please write legibly.

1. Before voting I thoroughly investigate the qualifications of all the candidates.

2. I never hesitate to go out of my way to help someone in trouble.

3. It is sometimes hard for me to go on with my work if I am not encouraged.

4. I have never intensely disliked anyone.

5. On occasion I have had doubts about my ability to succeed in life.

6. I sometimes feel resentful when I don't get my way.

7. I am always careful about my manner of dress

8. My table manners at home are as good as when I eat out in a restaurant.

9. If I could get into a movie without paying and be sure I was not seen, I would probably do it.

10. On a few occasions, I have given up doing something because I thought too little of my ability.

11. I like to gossip at times.

12. There have been times when I felt like rebelling against people in authority even though I knew they were right.

13. No matter who I'm talking to, I'm always a good listener.

14. I can remember "playing sick" to get out of something.

15. There have been occasions when I took advantage of someone.

16. I'm always willing to admit when I make a mistake.

17. I always try to practice what I preach.

18. I don't find it particularly difficult to get along with loudmouthed, obnoxious people.

19. I sometimes try to get even, rather than forgive and forget.

20. When I don't know something I don't at all mind admitting it.

21. I am always courteous, even to people who are disagreeable.

22. At times I have really insisted on having things my own way.

23. There have been occasions when I felt like smashing things.

24. I would never think of letting someone else be punished for my wrongdoings.

25. I never resent being asked to return a favor.

26. I have never been irked when people expressed ideas very different from my own.

27. I never make a long trip without checking the safety of my car.

28. There have been times when I was quite jealous of the good fortune of others.

29. I have almost never felt the urge to tell someone off.

30. I am sometimes irritated by people who ask favors of me.

31. I have never felt that I was punished without cause.

32. I sometimes think when people have a misfortune they only got what they deserved.

33. I have never deliberately said something that hurt someone's feelings.

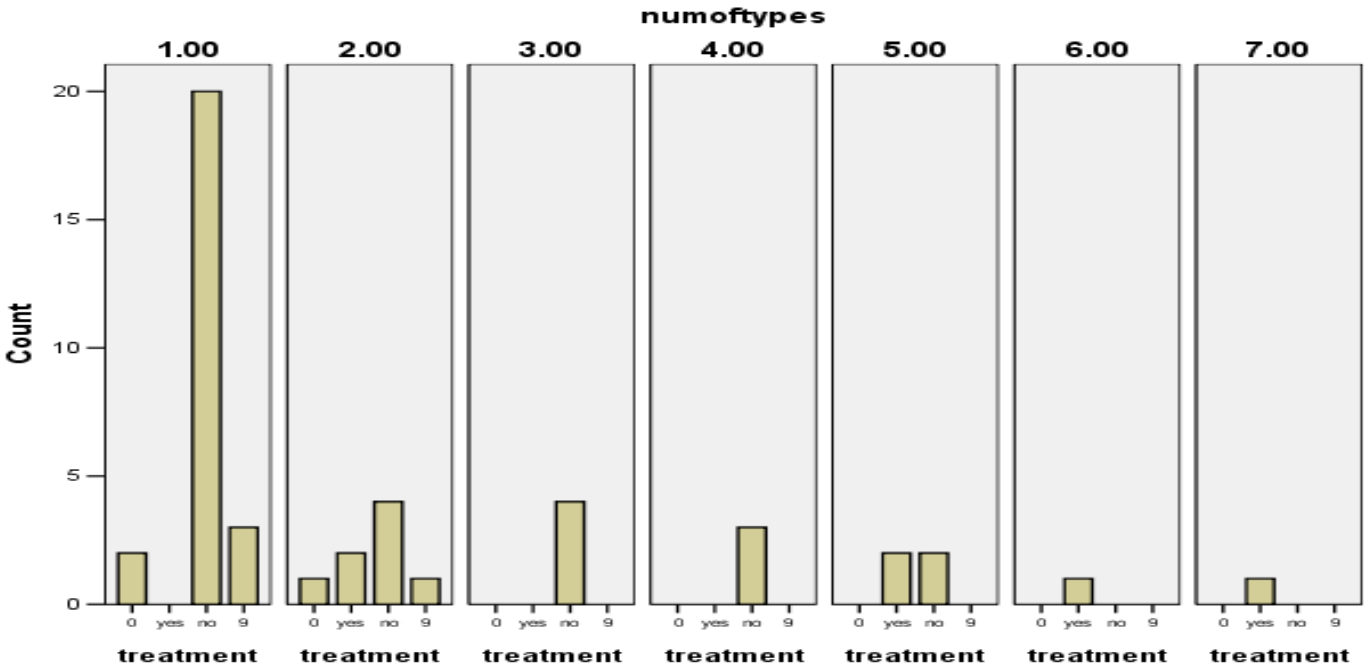
Appendix B

Statistically Significant *T*-Test Results between Self-Mutilators and Treatment

Group Statistics						
	treatment		N	Mean	Std. Deviation	Std. Error Mean
Duration: cut	yes	1	4	2.75	1.500	.750
	no	2	5	1.00	.000	.000
Times: scratch		1	5	2.20	1.643	.735
		2	9	1.56	1.014	.338
Duration: punch		1	2	4.50	.707	.500
		2	10	4.50	3.408	1.078
Independent Samples T-test						
		F		Sig.	T	Df
Duration: cut		48.611		.000	2.657	7
Times: scratch		5.075		.044	.918	12
Duration: punch		7.184		.023	.000	10

Appendix C

Number of Types of Mutilation Utilized Compared to Treatment Received



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