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**Research Paper** 

## Non-suicidal Self-injury Leads to Pain Offset Relief

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## ABSTRACT

This article define and explores the nature and correlations of the Non-Suicidal self-injury and Pain offset relief. This survey-based study trying to find the find more data revolving around the statement that non-Suicidal self-injury leads to pain offset relief. For last few decades NSSI has been an area of significance a lot of researchers have been weighing in. Under DSM-5, NSSI is included in as the subject needed to be explored more. There has been a lot of short and longitudinal studies but it still remains a complex issue and studies show conflict over it. The data collected from 130 participants where questions are based on NSSI and pain offset relief, this study tries to find and understand if there is any significant difference for NSSI and pain offset relief in terms of males and females approach to it as well as correlation between these two.

## Keywords: NSSI, Pain offset relief

## **T**on-suicidal self-injury

Non suicidal self-injury, inflicting any kind pain to find a momentary satisfaction. It's been a grave issue among all age groups. Seeking emotional relief through various sort of physical and mental torture. This is basic instinct of our mind to avoid any sort of pain, danger and injury. Even then each year there's millions of people hurt themselves to seek an emotional relief, some sort of self-satisfaction. Most people hurt themselves with a non Suicidal intent, they inflict pain on themselves for various sort of reasons, all to get a momentary relief at the time. This has been a complex issue, the understanding of Non suicidal self-injury has perplexed psychologist for a very long time. In last few decades there has been a lot of studies conducted to have an advance understanding of Non-Suicidal self injury.

There has been a lot of experimental and longitudinal studies over the years to determine the reasons for NSSI. The recent study aligns with the advances of basic psychological science and builds on the support of prior studies. It integrates information from previous experimental and longitudinal NSSI studies. In this study The Non-Suicidal Self-Injury Assessment Tool (NSSI-AT), developed by- Janis Whitlock and Amanda Purington has been used alongside added Likert scale for pain offset relief and self-satisfaction. The recent study integrates information from several previous studies and models.

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## Non suicidal self-injury (NSSI)

Non-Suicidal self-injury (NSSI) refers to intentionally harming own body tissues without having a suicidal intent. NSSI is considered a symptom of borderline personality disorder since the first official classification of personality disorders in the third edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM–III; American Psychiatric Association, 1980). For a long time non suicidal self-injury has been seen as a symptom of borderline personality disorder (BPD) by researchers and clinicians. Recent researches and studies are changing this perception. These studies have shown that Non-Suicidal self-injury is associated with a wide range of different issues such as personality disorders, internalizing and externalizing and can occur in absence of proper psychiatric diagnoses. There have been conflicting studies to explain the Non-Suicidal self-injury and why it occurred. NSSI can be a transdiagnostic phenomenon. In the inclusion of NSSI in some studies it is reflected that self injury without a suicidal intent is distinct from borderline personality disorder and all other psychiatric diagnoses.

Self-harm, self-injury, cutting and self-mutilation are some other terms used for self harming without a suicidal intent. Burning, cutting, banging, scratching, hair pulling(trichotillom ania), ingestion of unhealthy and toxic substance, excessive skin picking (dermatillomania), carving letters or words on skin with sharp objects these are some common ways of self-harm occur in most cases. Research and studies have shown that it is not totally related to borderline personality disorder and can occur in extraordinary well functioning people who have no underlying mental health diagnoses. Self-harm has become a common practice used as a coping mechanism. Use of self-harm vary between different people. Some people use it to provide temporary relief to intense feelings and emotional responses.

As the technology and time progresses, self-harm has spread into a lot of ways it wasn't before. A recent study shows digital self-harm have emerged quite rapidly among adolescents. According to a study done in 2016, data collected from it showed that a large number of teenagers cyber bullied themselves. Males were significantly more likely to report digital self-harm than females. The study found correlation between digital self-harm and factors such as experienced bullying, depressive symptoms, difficulties with identifying sexual orientation and drug use. Past research indicated that females experience self-harm up to 4 times than males. However, since males may engage in different forms of self-harm that are easy to hide or can be explained as the result of some different incidents. There's widely opposing view on this whether gender paradox is real phenomenon or it's a result of bias in data collection.

There has been a lot of misconception regarding non suicidal self-injury. Recent 10 to 15 years of studies she'd lighter on dispelling some of these misconceptions. Historically many researchers have viewed Non suicidal self-injury as a symptom of Borderline personality disorder, NSSI mentioned only once in DSM: IV as a symptom of BPD. After many clinical researches and studies NSSI classified as its own diagnostic entity for further studies in DSM-5. In another misconception in the etiology of NSSI many researchers have child sexual abuse as a primary cause of NSSI, referring NSSI as manifestation, results or even a re-enactment of Child sexual abuse. Meta analytic data show only a modest association between two. In the DSM-5, non-Suicidal self-injury (NSSI) is listed as a proposed disorder under the "conditions for further study" category. This is not officially approved diagnosis and meant for research purposes only so it may not be used for clinical use. It is a common belief that self-injury is an attention seeking behaviour. It is inaccurate in most cases though. People who tend to do self-harm are mostly self-conscious about their Scars and wounds.

They feel guilty about their behaviour and go to great length, try to hide it from other people. In such Non suicidal self-injury cases people hide their Scars from clothing and often give alternative explanations about their injuries. People who inflict self harm with a non-Suicidal intent and do it five or more times over a period of a year and do it to find relief in a negative state, in seek to achieve a positive state or to resolve interpersonal issues fall under the criteria of Non-Suicidal self-injury (NSSI) as per research purposes. People who attempt Self harm with a non-Suicidal intent often choose the body parts which are easily hidden under clothing, and easy to conceal from others. Some common signs to identify if a person is doing self-harm, inflicting pain on himself are their behavior is unpredictable, all of sudden they are isolating themselves, always ensure to have sharp objects close by, their conversations, posts, statements, social media activities display hopelessness and helplessness, experiencing issues in their personal relationships and always question their identity and self-worth.

In the start NSSI thought to occur in group homes and mental hospitals primarily. The research done in last decades it seems to change rapidly. It had been encountered more frequently now in adolescents, high school and university students as well as in high functioning military personnels. In a 1995 study, it found that almost 50% of the therapists are treating a client with NSSI. This figure is more likely to increase rapidly in the light of increasing rates of NSSI. In public and mental health both areas there has been a considerably high growth of interest in NSSI. Many singers and musicians have written songs about NSSI, bands such as indigo girls, Pearl jam, foo fighters, muse, plumb and nirvana to name a few. Talk shows such as opera and some other started to have a devoted segment or episodes to NSSI. Many popular movies such as kids, 28 days and girl interrupted to name a few have featured NSSI prominently. A lot of media outlets started to cover NSSI thoroughly, some popular ones are Reuters, Boston globe, good morning America, MSNBC, New York Times, the Los Angeles Times, associated press to name a few.

NSSI represents a distinct behaviour with its own epidemiology, clinical approach and concomitants. There are several terms that has been used interchangeably and inconsistently to refer to NSSI. This can lead to miscommunication and confusion. There is some terms that are often being used to refer to NSSI that has some similarities and some differences. These are some of most commonly known and used terms that share similarities but also has differences that can lead to confusion of the understanding of NSSI. Self-mutilation, one of the often-used common terms that refer to same behaviour and definition as NSSI. Differences from NSSI and self-mutilation are sometimes it is used to include major self injury associate with psychosis such as limb amputation. It has a more pejorative connotation.

Deliberate self-harm, it is sometimes used to refer to same behaviour and definition as NSSI. Difference between these two terms is Deliberate self-harm sometimes used to include suicidal behaviors. Parasuicide, it is sometimes used to refer to same behaviour and definition as NSSI. Major difference between these two terms is parasuicide most often used to include suicidal behaviors. Wrist cutting, it includes cutting that meets the definition of NSSI. Significant difference is, It is only one of many potential behaviour of NSSI, sometime these attempts includes intent of suicide. Self-abuse, it is sometimes used to refer to same behaviour and definition as NSSI. Differences from NSSI is Equate NSSI with abuse of oneself. It may not be accurate or useful connotation. Self-inflicted violence, it is

also used to refer to same behaviour and definition as NSSI. Differences from NSSI is, It sometimes includes the suicidal intent and some other forms of self-directed violence.

In response to the public interest and increased prevalence of NSSI, several professionals entities have been established in last few decades. It is to better understand, prevent and treat the behaviour as NSSI has been significantly increasing to general population. Self-abuse finally ends alternatives (SAFE) is one of the oldest organizations. It started more than 20 years ago by Drs. Wendy Laker and Karen Contario. It has run treatment programs in Texas, Missouri and Illinois. International society for the study of self-injury (ISSS; www.ISSS web.org) was established in 2006. It was established in the campus of Cornell University during a meeting of approximately 20 mental health professionals. Membership in ISSS has increased to more than 80 mental health professionals and includes members from various communities, countries and continents. Since then, ISSS has held annual meetings. In meetings researchers, clinicians and consumers present the latest findings and perspectives on the nature, prevention and treatment of NSSI. Interdisciplinary national self-injury in youth network Canada (INSYNC) is also a similar organization that has been established in Canada in 2006.it comprises self-injury researchers and clinicians from universities across Canada. A special self-interest group (SIG) is also one of the organization devoted to selfinjuries and suicides, established in 2009. It was established by members of the association for behavioural and cognitive therapies. Many new organizations devoted to NSSI continue to develop in different countries and continents throughout the world.

There is a number of key issues when it comes to understanding and treating NSSI. First and foremost, issue that was established for quite a long time before the studies in last few decades is NSSI is often mistaken for attempted suicide. Later findings debunk this statement yet it is often taken into consideration by general population. This has very important implications for both research and practice. Attempted suicide can involve aggressive and unpleasant measures such as involuntary hospitalization. It is crucial that mental health professionals understand how to distinguish NSSI from attempted suicide to avoid inaccurate treatment selection, procedures and diagnosis. Accurate differentiation of attempted suicide and NSSI is essential for the research on basic aspects such as biopsychosocial correlates, epidemiology, prevalence and treatment. The relation between suicide and NSSI is complex.

The second key issue is relation between mental illness and NSSI. Early researches found NSSI as a feature in some mental illness and disorders. In the previous iterations of the Diagnostic and Statistical Manual of Mental Disorders (DSM; American Psychiatric Association [APA], 1994, 2000), NSSI mentioned only once as a symptom of borderline personality disorder. Since 1983 there have been periodic calls to recognize NSSI as a distinct disorder. Since NSSI can occur across a variety of Mental Disorders, including in people who do not meet criteria of any disorder. Inclusion of NSSI disorder in DSM-5 was intended to increase recognition of NSSI as a unique clinical entity, as well as to facilitate clinical practice and research advancement.

A third key issue regards understanding motivations for NSSI. People go to great lengths to avoid pain and injuries. Helmets, oven mitts, pain killers and caution signs are some of many examples. In contrast, NSSI involves self-inflection of pain on purpose. NSSI is considered a counterintuitive behaviour by many people. People often shroud it with misconceptions and stigma what they find so hard to understand, NSSI is one such phenomena. People who engage in NSSI are often tagged as attention seeking, manipulative

or crazy. Pain offset relief: Relief remains a poorly understood emotion. Even after it's implicated in a wide behavioural and psychological phenomena. Some researchers and theorists associate relief with increased positive effect, but also some other researchers associate relief with diminished negative effects. Relief is one the most common emotional experiences. When someone completes a tough assignment, steps into air conditioning atmosphere in a sunny day, scratches their itch, lie down after a long shift at work, he or she may describe they are feeling relieved. Relief can be experienced through a wide range of events but there are some common factors throughout all sort of experiences for relief. It has been explained in some theoretical perspectives that relief may be one of the few basic positive emotions. This idea is backed by evidence from facial expressions, brain imaging studies and vocal. It is clear from theories and researches that relief is a desired emotional state.

## Pain offset relief:

It simply translates to removal or reduction of the pain. Once whatever is causing the pain is removed or even reduced slightly, it results the people to feel better. Most importantly the pain offset does not simply return people to the state they were feeling before the pain began but it tends to go far beyond that feeling, towards a more pleasant feeling called "relief". This is called pain offset relief. Pain induces negative affect itself but removal of pain (pain offset) induces a powerful state of relief.

Studies have found that people who had higher level of negative emotions has a particularly strong relief effect. These studies help to explain that people who have more negative emotion to reduce have more relief to gain that's why people with higher level of negative emotions are more likely to engage in NSSI. New findings from recent studies have shown that pain induced negative emotions and general emotions both are processed in the same brain areas. This explains that indeed emotional relief and pain relief are essentially the same thing. People often resort to generating pain offset relief in order to generate emotional relief. This means to generating acute, intense pain. This results in Non suicidal self-injury to achieve that. NSSI is an effective emotion relief strategy but NSSI is also a health risk behaviour. In direct terms NSSI can be a good thing for temporary pain relief, emotional relief but it's a bad thing for health.

Pain offset relief can be sentenced as feeling Worse to Feel Better. Removal of pain generates higher sense of relief. People who engage in NSSI are not wired differently than any other person. People just tap into the emotional pain relief that includes the pain offset relief. People who failed to or have trouble finding healthier ways to reduce their stress are more like to engage in self-harm behaviour to seek for the emotional relief.

## Purpose and Rationale of the Study

The purpose of the current study is to analyse the NSSI behaviour among young adults. How they engage into NSSI to see emotional relief, pain offset relief. The current study is to explore the correlation between NSSI and pain offset relief. Most of the studies conducted in the field of NSSI previous social arrangements. Since there has been a significant change in the way of living currently. Young adults are mostly affected by it such as college students, job employees. Confinement and restrictions are some of the factors where NSSI engagement can increase significantly. Current study is conducted to explore more into it. The Rationale of the current study stems from the various previous studies and research on NSSI. NSSI is considered a complex issue. examining the NSSI and pain offset relief through a survey based study will explore more into the correlation between two.

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## Significance of the Study

This study acknowledges the importance of exploring different dimensions of NSSI and its correlation to pain offset relief. A lot of measures in people lives have changed due to restrictions and safety measures of Lockdown. This has taken a toll on every age group. The current study will explore more into it. As it's shown in some previous research confinement and isolation can be a factor for people to engage in NSSI behaviours. With so many restrictions people can seek the satisfaction and lead towards engaging in NSSI. So, it is quite necessary to explore the NSSI under the radar of these uprising situations. The recent changes in daily lives open up a lot of different questions and emotional states that can sometimes lead to NSSI. Taking the new aspect into this survey-based study will explore advance understanding of NSSI and pain offset relief.

## **REVIEW OF LITERATURE**

Non-suicidal Self-Injury: Proper Identification and Treatment Non-suicidal self-injury (NSSI) can be defined as "directly and intentionally inflicting damage to one's own body tissue without intention of suicide and not consistent with cultural expectations or norms." There is an approximately 5.9% prevalence of NSSI in adults and 18% in adolescents. However, some recent reviews of community samples have found mean and pooled rates as high as 17% to18%. Although some research has been conducted in adults, most studies have focused on adolescents, which is the peak age for this behaviour. Recent research suggests an increased prevalence of self-injury, particularly in this age group. NSSI manifests in a variety of different forms, including cutting, skin carving, burning, severe abrading or scratching, punching or hitting, bone breaking, biting, pinching, interfering with wound healing, and (rarely) auto-amputation and ocular enucleation. Cutting is the most common among all of them. "The most common behaviours are self-cutting, self-burning, and self-battery — in other words, punching or banging a body part against a hard surface to create skin bruising," according to Jennifer J. Muehlenkamp, PhD, associate professor of psychology, University of Wisconsin at Eau Claire. Milder behaviours include skin abrading, in which the individual rubs the skin or scratches it severely, with the intent to cause bleeding and skin damage, she told Psychiatry Advisor. Ice burning is also sometimes practiced, especially in the Midwest. She noted that there are gender differences in the method of self-injury chosen, with cutting being more common in females and burning and self-battery more common in males. Moreover, females are more likely to be identified and/or seek help than males. Researcher also explained "It is important not to assume that this behaviour is confined to adolescence and young adulthood. There are individuals throughout the entire age spectrum who suffer from this condition, although the elderly have not been studied." "NSSI is not, in and of itself, a suicide attempt," Dr Muehlenkamp emphasized. On the contrary, it is often "used as a coping strategy to avoid suicide." The psychological impact of NSSI also distinguishes it from nonfatal suicide attempts, since it is associated with decreased negative emotion and increased positive affect. Although NSSI is not a suicide attempt per se, it nevertheless increases the risk for suicide. Risk factors for future suicide include a history of NSSI, feeling repulsed by life, attracted to death, not afraid of suicide or death, and being highly selfcritical, apathetic, or without adequate family support. Dr Muehlenkamp said. "Although self-injury is one of the diagnostic criteria for BPD, less than half of the population who engage in NSSI meet diagnostic criteria for BPD. NSSI is a condition that cuts across all diagnostic categories and also across wide populations."

Choosing a right assessment and course of treatment can be pretty challenging. When they are confronted with the idea of not having that coping behaviour anymore, they can be

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hesitant although they did not want to engage in it." So, proposing a treatment plan must be done sensitively and carefully. There are currently no evidence-based pharmacotherapies approved by the US Food and Drug Administration (FDA) specifically for the indication of self-injury. Some limited data support topiramate, clozapine, and naltrexone as effective in leading to the cessation of self-injury.

Regularly screening in patients at high risk is an important way to identify patients and refer them to appropriate treatment. It is essential for clinicians to monitor their own response to a patient's self-injury "so as to neither reinforce nor ignore this behavior." Dr. Muehlenkamp JJ summarized "The key is to be compassionate so that patients open up to you. Then you can decide if the patient requires additional intervention and what direction to go,"

## Non-suicidal Self-Injury: What We Know, and What We Need to Know

For decades, knowledge about non-suicidal self-injury (NSSI) was limited to only a small handful of empirical studies. However, the last 10 to 15 years have witnessed an explosion of research and significant advances in knowledge about NSSI. This In Review on NSSI was developed to help the field of mental health move forward in these 2 areas. First, this editorial briefly reviews what we now know about NSSI. Next, Margaret S Andover and Blair W Morris describe an emotion regulation model for understanding and potentially treating NSSI and for explaining the emotion regulation function of NSSI in terms of basic emotion models. Finally, Brianna J Turner, Sara B Austin, and Alexander L Chapman provide a systematic review of NSSI treatment outcome research, and note the need for new treatment approaches specifically tailored to target NSSI. We hope that this In Review not only provides state-of-the-art knowledge but also motivates and facilitates future efforts to better understand and treat NSSI.

What We Now Know: Despite some notable exceptions,9–11 few researchers focused attention on NSSI until recently. One might identify the early 2000s as a turning point. Kim L Gratz12 published an influential measure that facilitated research on NSSI, E David Klonsky and colleagues found that NSSI is present and associated with psychiatric morbidity even in nonclinical populations, Matthew K Nock and Mitch J Prinstein13 drew attention to the reasons why people engage in NSSI, and Jennifer J Muehlenkamp (see Muehlenkamp14 and Muehlenkamp and Gutierrez15) argued that NSSI should be distinguished from other SIBs, such as attempted suicide, and regarded as an independent clinical syndrome

**Who Self-Injures?:** NSSI is most common among adolescents and young adults. Lifetime rates in these populations are about 15% to 20%, and onset typically occurs around age 13 or 14. In contrast, about 6% of adults report a history of NSSI. It is unclear whether the lower lifetime rate in adults reflects an increase in NSSI among recent cohorts of adolescents or an artifact of memory by which most adults who self-injured as adolescents do not recall their NSSI. Generally speaking, rates of NSSI appear to be similar across different countries.

Why Do People Self-Injure?: As recent as the early 2000s, the seminal publications addressing why people self-injure were theoretical rather than empirical. Gratz helped draw attention to the empirical literature on NSSI functions, and the paper by Nock and Prinstein was the first to introduce an empirically based model of NSSI functions. Shortly thereafter, Klonsky systematically reviewed the empirical evidence for 7 functional theories. These papers converged on answers to several key questions about why people engage in NSSI.

**The different functions of NSSI can be divided into 2 superordinate categories:** *intrapersonal*— selffocused (for example, emotion regulation and self-punishment); and *interpersonal*— otherfocused (for example, influencing others). The past decade has also seen the development and validation of tools to assess these functions.

Dispelling Misconceptions About Non-suicidal Self-Injury: Research during the past 10 to 15 years has also allowed NSSI researchers to correct several misconceptions regarding the diagnosis, etiology, and functions of NSSI. For example, historically, many have viewed NSSI as, first and foremost, a symptom of BPD. Indeed, in DSM-IV, NSSI appears only once, as part of a symptom of BPD. Another misconception regards the etiology of NSSI. Many have implicated CSA as a primary cause of NSSI, referring to NSSI as a result, manifestation, or even a re-enactment of CSA; but meta-analytic data show that child sexual abuse and NSSI have only a modest association. A final misconception involves the motivation for NSSI. It is sometimes assumed that NSSI primarily functions to elicit attention or reactions from others. It is true that NSSI sometimes serves interpersonal functions; however, across studies by diverse investigators using diverse methods and populations, it has become clear that NSSI is infrequently attention-seeking. Instead, NSSI is most often performed in private as a way to quickly alleviate intense negative emotions.

## Self-Injury /Cutting

Non-suicidal self-injury, often simply called self-injury, is the act of deliberately harming your own body, such as cutting or burning yourself. It's typically not meant as a suicide attempt. Rather, this type of self-injury is a harmful way to cope with emotional pain, intense anger and it's usually followed by guilt and shame and the return of painful Getting appropriate treatment can help you learn healthier ways to cope.

Signs and symptoms of self-injury may include: Scars, often in patterns, Fresh cuts, scratches, bruises, bite marks or other wounds, Excessive rubbing of an area to create a burn, keeping sharp objects on hand, Wearing long sleeves or long pants, even in hot weather, frequent reports of accidental injury. Difficulties in interpersonal relationships, Behavioural and emotional instability, impulsivity and unpredictability, Statements of helplessness, hopelessness or worthlessness.

Common Forms of self-injury are cutting, burning, scratching, banging, carving words or symbols to the skin, piercing skin with sharp objects. If you're injuring yourself, even in a minor way, or if you have thoughts of harming yourself, reach out for help. Any form of self-injury is a sign of bigger issues that need to be addressed.

Talk to someone you trust — such as a friend, loved one, doctor, spiritual leader, or a school counsellor, nurse or teacher — who can help you take the first steps to successful treatment. If someone you love is self-injuring themselves take all talk of self-injury seriously. Self-injury is too big a problem to ignore or to deal with alone. See for emergency help in situations, if you've injured yourself severely or believe your injury may be life threatening, or if you think you may hurt yourself or attempt suicide, call national emergency helpline or your local emergency number immediately. Also consider these options if you're having suicidal thoughts: Call your mental health professional if you're seeing one. Call a suicide hotline. Seek help from your school nurse or counsellor, teacher, doctor, or other health care provider. Reach out to a close friend or loved one. Contact a spiritual leader or someone else in your faith community.

Through self-injury, the person may be trying to Manage or reduce severe distress or anxiety and provide a sense of relief. Provide a distraction from painful emotions through physical pain. Feel a sense of control over his or her body, feelings, or life situations. Feel something — anything — even if it's physical pain, when feeling emotionally empty, Express internal feelings in an external way. Communicate depression or distressful feelings to the outside world, be punished for perceived faults. Self-injury can cause a variety of complications, including Worsening feelings of shame, guilt and low self-esteem. Infection, either from wounds or from sharing tools. Permanent scars or disfigurement. Severe, possibly fatal injury. Worsening of underlying issues and disorders, if not adequately treated. There is no sure way to prevent your loved one's self-injuring behaviour. But reducing the risk of selfinjury includes strategies that involve both individuals and communities. Parents, family members, teachers, school nurses, coaches or friends can help.

## Non-suicidal Self-Injury: Diagnostic Challenges and Current Perspectives

Non-suicidal self-injury (NSSI) involves deliberate and intentional injury to body tissue that occurs in the absence of suicidal intent. Typical examples here might include self-cutting, burning, or self-hitting. To begin to understand something, we must be able to identify and define it. Unless terms and concepts are clear, scientific progress will naturally be slow. Over the last 20 years, the study of what we now call non-suicidal self-injury (NSSI) has become a topic of widespread interest. Clinical interest in behaviours that involve intentional acts of self-injury dates back to the 1930s and to the psychoanalyst Karl Menninger. Menninger used the term self-mutilation, considering such acts to be a form of attenuated suicide. Following this, in the early literature, all nonfatal and deliberate forms of self-injury were viewed as suicide attempts, regardless of whether there was any expressed suicide intent.

For a behaviour to be classified as NSSI (according to both Favazza's definition and the DSM-5 diagnostic criteria) it must be intentional and deliberate. Accidentally cutting oneself is not NSSI. However, in some instances, the role of intentionality can be challenging to establish. For example, NSSI sometimes occurs during dissociative episodes. NSSI is not the only way that people can hurt themselves. Other behaviours, such as drinking too much alcohol, using drugs and sharing needles, engaging in risky behaviours, or engaging in disordered eating behaviours immediately come to mind. Intentional poor medication adherence for a physical illness such as diabetes or heart disease could provide a further example. As with NSSI, each of these behaviours can cause physical harm, physical pain, and negative consequences in both the short- and longer-term. NSSI has been included as a symptom of borderline personality disorder since personality disorders first officially entered the DSM in 1980. NSSI is distinct from borderline personality disorder and all other psychiatric diagnoses. Reflecting this, NSSI disorder (NSSI-D) entered DSM-5 in 2013 as a Condition for Further Study.

Also unclear at the present time, is where – if it is added to the formal diagnostic nomenclature – NSSI-D will be placed. Given the mood benefits NSSI provides, should we think of it as a variant of an Addictive Disorder? Or does it belong with the Disruptive, Impulse-Control, and Conduct Disorders? Other possibilities might include placing NSSI-D with Depressive Disorders, Anxiety Disorders, OCD and Related Disorders, or perhaps even with Neurodevelopmental Disorders. Interventions for NSSI are now being developed. However, much more needs to be done. Given the link between NSSI and suicide risk, treating NSSI may enhance suicide prevention efforts. This provides a powerful incentive to focus research attention to this area in a timely way.

J. M. Hooley, Department of Psychology from Harvard University and J. C. Franklin, florida state University (Received 7/11/17; Revision accepted 10/30/17) investigated how NSSI (Non - suicidal self-injuries) has perplexed the psychologist for decades. To Advance understanding of NSSI - They presented a new model that builds on supported elements of prior models and integrates information from recent experimental and longitudinal NSSI studies. A new model—the benefits and barriers model of NSSI. The result of the study explored various traits, reason and emotions that led to self-mutilation, self-criticism, pain, emotion. The study explores deep into why a new conceptual approach is needed. Barriers and benefits model explains it into four steps of benefits -NSSI improves affect, gratifies self-punishment desires, provides peer group affiliation, can communicate distress or strength. And barriers- lack of awareness about NSSI, positive view of the self, physical pain, aversion to NSSI stimuli and social norms.

Fundamental approach behind this study revolves around two key questions - why so many People find NSSI to be a useful behaviour? And what separates from them who do not?

This study revolves around much prior research - affect regulation and four function models. Most of this research has been cross-sectional, retrospective and self-reported. Some of the previous studies have described the reasons to some extent and emotions behind NSSI. Some studies support the different aspects of the hypothesis.

Emotion dysregulation. These are often conflated in discussions of NSSI. Franklin, Puzia, et al. (2014) found in his study that self-reported emotion reactivity powerfully distinguished between NSSI and non-NSSI groups at the core but it did not predict NSSI over the long period of time as 6 months. Several other studies have found that constructs related to anxiety, depression, impulsivity do not longitudinally predict NSSI. (Glenn & Klonsky, 2011; Tuisku et al., 2014), a recent meta-analysis, reported in their research that affect dysregulation was a significant predictor of NSSI, yielded a surprisingly weak weighted odds ratio of 1.05 (Fox et al., 2015).

## The Nature of Pain Offset Relief in Non-Suicidal self-injury: A Laboratory Analysis

A study conducted by Department of Psychology, University of North Carolina at Chapel Hill by Joseph C. Franklin, Megan E. Puzia, Kent M. Lee, Grace E. Lee, Eleanor K. Hanna, Victoria L. Spring, and Mitchell J. Prinstein (Received 8/28/12; Revision accepted 12/13/12). The present study provided a laboratory investigation of the hypothesis that NSSI frequency would be positively correlated with heightened pain offset relief.

A total number of 42 people participated in this study. 21 participants (10 females and 11 males) in the control group and 21 participants (14 females and 7 males) in the NSSI group. This study is conducted in two aspects. Self-report measures and psycho physiological measures. Self-report measures included- Emotion Reactivity Scale, Difficulties in Emotion Regulation Scale, Self-Injurious Thoughts and Behaviours Interview, Mini International Neuropsychiatric Interview. Psycho-physiological measures included-Startle stimuli and methods, Startle eye blink reactivity, Startle post auricular reactivity. They used shock in present study for Painful stimulus: NSSI proxy because it allowed for high stimulus control in terms of timing, intensity and repetition. Throughout all four psycho-physiological aspects, examination showed that the majority of participants displayed pain offset relief. Results of the study showed that pain offset has powerful effects on both positive and negative affect.

Although within the NSSI group study revealed no significant correlation in any condition between NSSI frequency and pain offset relief. It is critical to understand the mechanisms that drive affect regulation during self-mutilation. The present study supported a unique role for pain offset relief, over and above other potential mechanisms, such as distraction. These findings also supported the existence of a positive function that is independent of the wellknown negative function of Non-Suicidal self-mutilation. However, the present study hasn't provided a strong hypothesis to support a major link between NSSI and suicidal behaviour.

Some results of this laboratory analysis are Consistent with previous studies (Gratz & Roemer, 2008; Nock et al., 2008). These findings suggest that although factors such as affect dysregulation and Non-Suicidal self-injury experience may substantially reduce the barriers to self-mutilation (e.g., pain, aversion to mutilation stimuli), these factors may not strongly amplify the benefits of self-injury (e.g., pain offset relief). This is inconsistent with the hypothesis that opponent processes drive the link between NSSI and suicidal behaviours (Heilbron et al., in press; Franklin et al., 2010; Joiner et al., 2012).

# Feeling Worse to Feel Better: Pain-Offset relief Simultaneously Stimulates Positive affect and Reduces Negative Affect:

A study conducted at University of North Carolina at Chapel Hill By Joseph C. Franklin, Kent M. Lee, Eleanor K. Hanna, and Mitchell J. Prinstein. The research included 40 introductory psychology student as participants to fulfil a partial research requirement. All the participants for the study aged between 18-28years (26 males and 14 females) from different ethnicity. The research was conducted under psycho-physiological measures that included - Startle stimuli, Startle eye blink reactivity, pain stimuli, Shock were used as a primary pain stimuli for this particular research.

Procedure for the study was startle habituation and Experimental block. There were 13 trials done under Startle habituation. Experimental block contains 64 trials with 8 different types. The results of the study explored into correlation between self-harm and pain offset relief. From the pain stimuli and different trials of the study this research explains Startle post auricular reactivity, Startle eye blink reactivity in a detailed manner. All the trials data arranged together showed that pain offset reduced negative affect. This effect tended to be strongest after lower intensity shocks at shorter intervals. The results of the present study suggest that measuring the Startle eye blink and post auricular reactivity simultaneously may be helpful for more advanced research on this topic.

## Non-suicidal self-injury (NSSI) disorder: A preliminary study.

Non-suicidal self-harm (NSSI) has been suggested to be included in the Diagnostic and Statistical Manual of Mental Disorders (5th ed.; DSM-5; American Psychiatric Association, in preparation), but it is feared that NSSI is primarily a function of symptoms of elevated borderline personality disorder (BPD). The purpose of this study was to examine the characteristics of NSSI disorder and compare it to BPD and other DSM Axis I diagnoses commonly seen in clinical practice to help determine whether NSSI should be considered. as a separate and valid diagnostic entity. The research data of the graphs were analysed from the information of 571 patients that were seeking treatment in general practice clinic and graph data was the collection of admissions, screening and discharge Information of those patients.

Patients were classified into one of three groups: NSSI without BPD, BPD (with and without

NSSI) or a comparison condition for those who did not meet the criteria of the first 2 groups. Participants in these 3 groups were compared on admission functioning, psychopathology and diagnostic co-occurrence. Results indicated significant differences between groups in rates of diagnostic co-occurrence, patient history of associated characteristics, and impairment at admission. The NSSI group displayed similar levels of functional impairment as the BPD group, including on indices of suicidality. The BPD group reported an increase in abuse experiences and fewer men compared to the NSSI group. Most members of the NSSI group did not have symptoms of subthreshold BPD or personality disorder not otherwise specified. In conclusion, a potential NSSI disorder can be characterized by high levels of depressive symptoms, anxiety, suicidality, and poor functioning compared to other Axis I diagnoses (APA PsycInfo Database Record (c) 2016 APA, All rights reserved)

## Non-suicidal Self-Injury: An Emotion Regulation Perspective

(Katherine C. McKenzie, James J. Gross). Non-suicidal self-injury (NSSI) is widely thought to serve an emotion-regulatory function. The focus of the present paper is to provide a conceptual framework for understanding how NSSI might modify a person's emotions. NSSI, the subject of this review, includes a wide range of behaviours such as cutting, burning or scratching the skin. NSSI may also include self-hitting, head banging, bone breaking, interfering with wound healing, hair pulling and nail biting that results in bleeding. A wide range of names have been applied to these behaviours over the years, including 'selfmutilation', 'deliberate self-harm' and parasuicide. By definition, the self-harming behaviour in NSSI is not intended to result in death. Theories about the functions of NSSI tend to fall into two camps: intrapersonal and interpersonal. Intrapersonal theories focus on how NSSI functions within the individual, acting to modulate internal states. Interpersonal theories grapple with the influence that NSSI has on other people. For instance, Nock and Prinstein distinguished potential functions of NSSI into four behavioural reinforcers: automatic negative reinforcement, automatic positive reinforcement, social-negative reinforcement and social-positive reinforcement. Emotions are a common thread running through both lay and clinical conceptualizations of NSSI, whether the emotions are feelings of comfort, relief or affiliation. Research comparing support for a variety of models has found consistent evidence for the central role of affect and emotion. However, simply noting that affect and emotion play a central role in NSSI does little to illuminate exactly what that role is. This review seeks to bring an explicit affective-science perspective to bear on the role of emotions in NSSI.

As this review makes clear, it is unlikely that there is one single mechanism underlying the diverse phenomena gathered together under the umbrella term of NSSI. One of the important challenges for future research will be to more precisely define the physiological and psychological mechanisms that underlie particular instances of NSSI.

Simply labeling NSSI as 'emotion regulatory' does not tell us precisely what is going on. This is because at any given moment, NSSI can serve to regulate emotions in many different ways. One key challenge is to clarify the precise functions NSSI may be serving for a given individual in a particular context.

A Cognitive-Emotional Model of NSSI: Using emotion regulation and cognitive processes to explain why people self-injure. Non-suicidal self-injury (NSSI) is a complex behaviour, routinely engaged for emotion regulatory purposes. As such, a number of theoretical accounts regarding the aetiology and maintenance of NSSI are grounded in models of emotion regulation; the role that cognition plays in the behaviour is less well known. In this

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paper they summarise four models of emotion regulation that have repeatedly been related to NSSI and identify the core components across them. then draw on Social Cognitive Theory to unite models of cognition and models of emotion in developing a new Cognitive Emotional Model of NSSI.

This model articulates how emotion regulation and cognition can work in concert to govern NSSI, and offers several new research questions that can be addressed within this framework. Although self-injury is not age-limited, up to one in five adolescents and 13% of young adults self-injure (Muehlenkamp, Claes, Havertape, & Plener, 2012; Swannell, Martin, Page, Hasking, & St John, 2014). Of concern, repetitive NSSI increases later suicide risk (Whitlock et al., 2013). Increasing knowledge of the processes underlying NSSI is therefore of critical importance for the development of prevention and early intervention, to reduce risk of future NSSI and suicide. All emotion regulation models are designed to explain either how healthily functioning individuals naturally regulate responses to emotional stimuli or to explain emotional dysregulation. Each include core assumptions about human mental processes, particularly as they relate to the emotional experience or the link between emotion and behaviour. Although emotion regulation occurs in response to any emotional stimuli, and is thus a regular daily experience, it is most often used to explain how individuals modulate internal and external expressions of emotion when encountering stimuli likely to trigger intense or threatening emotions. Given the breadth of strategies and processes that can come under the banner of emotion regulation, we focus on four models which have been used in relation to NSSI: 1) Gross' (1998) Process Model of Emotion Regulation; 2) Gratz and Roemer's (2004) Difficulties in Emotion Regulation; 3) the Experiential Avoidance Model (Chapman, Gratz, & Brown, 2006); and 4) Selby and Joiner's (2009) Emotional Cascade Model. Examination of the four models in parallel shows strong overlap in construct descriptions. Most models implicitly or explicitly include reference to environmental stimuli, although the location of these stimuli, within or outside of the self, is rarely articulated. Naturally all models refer to the emotional experience, either with regard to the awareness of emotion, the intensity of emotion, or the avoidance of the emotional experience. Cognitive processes are detailed, particularly with regard to how attention is allocated to emotional stimuli. Two models also articulate a role for verbal cognitions (i.e., thoughts). In Gross' model cognitive reappraisal is proposed as one strategy to reframe an emotional event in a way that permits attached emotions to be deescalated. In the Emotional Cascade Model ruminative thoughts intensify the emotional response, which one then escapes through use of unhealthy or avoidant behaviour(s).

A Cognitive-Emotional Model of NSSI (CEM-NSSI): How NSSI fits within a cognitive and emotion regulatory framework is a complex question, but by drawing on the emotion regulation literature, and articulating a role for the core cognitions underpinning behaviour, we can start to formulate hypotheses about why some people engage in NSSI, and why some might engage NSSI rather than other emotion regulation strategies. Based on the work reviewed above we propose a Cognitive-Emotional Model of NSSI. In an attempt to move this field forward they have drawn on Social Cognitive Theory to introduce a Cognitive-Emotional Model of NSSI that can be used to test predictions about the onset and maintenance of NSSI. This is our first attempt to integrate the emotion regulation and cognitive fields to better understand NSSI, and aetiological models will likely be refined with future research. However, we believe the model presented provides novel opportunities to test important theoretical questions about NSSI. Tests of this model, and particularly the ability of the interactions between cognition and emotion regulation to delineate engagement in NSSI from other emotion regulatory behaviours, would be particularly valuable.

## The Addictive Model of Self-Harming (Non-suicidal and Suicidal) Behaviour

Recent literature suggests that both non-suicidal self-injury (NSSI) and suicidal behaviour (SB) can also be conceptualized as addictions. The major aim of this mini review is to review the literature and explore the neurobiological and psychological mechanisms underlying the addiction to self-harming behaviours. This is a narrative review. The authors performed literature searches in PubMed and Google for suicidal behaviour, self-harming, addiction, and "major repeaters." Given the scarce literature on the topic, a subset of the most closely related studies was selected. The authors also focused on three empirical studies testing the hypothesis that major repeaters (individuals with  $\geq 5$  lifetime suicide attempts) represent a distinctive suicidal phenotype and are the individuals at risk of developing an addiction to SB. The authors reviewed the concept of behavioural addictions and major repeaters, current empirical evidence testing concerning whether or not NSSI and SB can be understood as "addictions," and the putative mechanisms underlying them. This review suggests that both NSSI and SB can be conceptualized as addictions. This is relevant because if some individual's self-harming behaviours are better conceptualized as an addiction, treatment approaches could be tailored to this addiction. The major limitation of the present review is that, given the space constraints, we could not expand our review to other interesting topics such as the putative role of impulsivity, a personality trait closely related to SB; impulsivity could be considered as the underpinning psychopathological substrate between mood, addiction, and self-injury behaviour. Indeed, impulsivity has been proposed as the interface between mood and a number of addictive behaviours.

## Brief report: non-suicidal self-injury in adolescence: turning to the Internet for support

Non-suicidal self-injury (NSSI), the deliberate damaging of one's own body tissue (e.g., self-cutting, burning, bruising) without suicidal intent, is a critical adolescent concern. Indeed, research indicates that NSSI associates with myriad mental health difficulties and elevates suicide risk (Lewis & Heath, 2015). Preliminary studies of examining youth NSSI and Internet use suggest that adolescents who engage in NSSI may use the Internet more often and for different reasons than their peers who do not self-injure (Heath, Toste, & McLouth, 2010; Mitchell & Ybarra, 2007). Participants were drawn from a larger pool of participants in Grade 9 (N = 764) from 17 high schools in an urban area taking part in a project investigating stress and coping strategies. Students in earlier grades were not included due to concerns raised by schools and the ethics research board around probing for NSSI online activity in that it may be suggestive for younger students. One hundred and forty-two students (64.1% female), with a mean age of 14.43 (SD = .57) were selected for interviews based on initial NSSI screening. How I Deal with Stress Questionnaire (HIDS; Heath & Ross, 2007). The HIDS was used to collect demographic information and screen for NSSI.

Participants rate their use of 31 healthy and unhealthy stress coping strategies on a fourpoint Likert scale. Self-Injurious Thoughts and Behaviors Interview (SITBI; Nock, Holmberg, Photos, & Michel, 2007). The SITBI is a semi-structured interview assessing NSSI thoughts and behaviours and was used to confirm NSSI status. Adolescents reporting NSSI in the past 12 months on the HIDS and the SITBI/follow-up interviews were placed in the recent NSSI group (n = 58; 79% female) while those reporting NSSI prior to this were placed in the past NSSI group (n = 28; 50% female). A comparison group of at-risk youth reporting risky behaviours, yet no NSSI (n = 56; 55% female) was also formed to ensure that students interviewed were not identifiable to peers as targeted for difficulties.

This is the first study to document that Internet use for emotional health reasons by adolescents who self-injure differs on the basis of NSSI recency. These findings build on previous research indicating that obtainment and provision of support online may, in part, drive online NSSI activity (see Lewis & Seko, 2016). In particular, social media websites may have particular relevance when NSSI has been more recently enacted. The present study also adds to research indicating that those who report a more distal NSSI history are more similar to those with no history than those with a recent NSSI history (Taliaferro & Muehlenkamp, 2015) by suggesting that this may extend to online activities. Despite some research indicating that more females use the Internet to obtain emotional support for NSSI (Lewis & Michal, 2014), the present study found no such gender differences. Further work is thus needed to better understand the extent to which these differences exist and why. Future studies should aim to examine both online and offline professional help-seeking among the same sample of youth.

The nature between pain and relief, the correlation between physical pain and relief and relief after the removal of pain is main motive of the study in two different researches.

Researchers studied specific emotions when a person is relieved of stress, work, or pain. Specifically, investigators reviewed the psychological mechanisms associated with relief, which also occur after relieving pain, also known as pain relief. Experience says the findings suggest that healthy individuals and individuals with a history of self-harm exhibit similar levels of pain relief removed. This finding suggests that pain relief may be a natural mechanism that helps us regulate our emotions. In one study, Joseph Franklin, a graduate student at the University of North Carolina, Chapel Hill, and his colleagues sought to determine what the relief was after relieving the pain. There is relief from positive feelings, or by reducing or reducing negative feelings. Crank's team used recording electrodes to measure participants' negative emotions (eveblink start response) and positive emotions (muscle activity behind the ear) with loud noise. Experiment, loud noise was presented at the time alone and then at other times it was introduced with a low or high intensity shock after 3.5, 6, or 14 seconds. Supporters increased positive emotions and decreased negative emotions after pain offset. The greatest increase in positive emotions occurs immediately after high-intensity tremors, while the largest decreases occur in negative emotions occurring immediately after low-intensity tremors. These findings shed light on the emotional nature of pain and provide relief, and may provide insight. Why some people seek relief through self accidental behaviour. In another study, researchers investigated whether the emotional relief that comes with relieving physical pain may be a possible mechanism that may help explain why some people engage in self-harm behaviours. Inventors with or without a history of emotion distortion and reactivity, self-injuring behaviour and self-harm for mental disorders. Using a similar recording electrode procedure in the first study, Franklin and coworkers were able to measure positive and negative emotions. The response to loud noise, either alone or after receiving a painful blow. Surprisingly, healthy individuals displaced ayed pain offset relief levels that were comparable to individuals with a history of self-harm, and there was no association between pain offset relief and self-harm frequency. These results do not support the hypothesis that increased pain is a risk of relief a factor for future self injury. Furthermore, Franklin and co-workers hypothesize that the greatest risk factors for no suicidal self-injury may concern how some overcome the innate barriers that prevent most people from self-harm.

**Evaluation of reward from pain relief:** Pain is part of the body's defence system and serves as a protective mechanism for the organism's survival. The human experience of pain

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is multidimensional and comprises sensory, affective, and cognitive dimensions. Preclinical assessment of pain has been largely focused on the sensory features that contribute to nociception. Recently, operant behaviours such as conditioned place preference, avoidance, escape from noxious stimulus, and analgesic drug self-administration have been used in rodents to evaluate affective aspects of pain. Operant measures may allow the identification of mechanisms that contribute differentially to reflexive hypersensitivity or to pain affect and may inform the decision to progress novel mechanisms to clinical trials for pain therapy. Additionally, operant behaviours may allow investigation of the poorly understood mechanisms and neural circuits underlying motivational aspects of pain and the reward of pain relief. Pain is a complex multidimensional subjective experience comprising sensory/discriminative, affective/motivational, and cognitive/evaluative There is an unmet need in preclinical pain research for behavioural testing methods that more accurately model aspects of pain that are likely to be important to patients. The aversiveness of pain is the most bothersome clinical problem, but difficult to evaluate in animals. Operant behavioural methods are better suited to investigate features of the complex human pain experience, including aversiveness, because, unlike reflex pain measures, they depend on cerebral pain processing. Here we review one operant method, CPP, and demonstrate that this approach can capture the presence of spontaneous or ongoing pain (including neuropathic, inflammatory, and nociceptive) in animals. Pain unpleasantness (aversiveness) is an important component of sustained non-evoked pain often experienced by chronic pain patients. Neural circuits and mechanisms that influence cerebral processing of pain are not well understood. CPP, as an indirect measure of pain aversiveness in laboratory animals, can be used to investigate these supraspinal mechanisms. We used CPP in rats with postsurgical pain to demonstrate the role of the mesolimbic reward pathway in pain relief elicited by peripheral nerve block. We showed that (1) peripheral nerve block one day following hind paw incision in rats produces CPP; (2) the VTA and NAc, key brain regions of the mesolimbic dopamine reward circuitry, are necessary for pain relief-induced CPP; (3) pain relief results in the activation of dopaminergic neurons in the VTA; and (4) pain relief promotes dopamine efflux in the shell region of the NAc. Thus, similar to natural rewards, relief from pain activates dopaminergic neurotransmission in the mesolimbic reward circuit. Engagement of this circuit appears to be necessary for motivated behaviour, including seeking relief from ongoing pain. Importantly, the mesolimbic reward circuits are conserved across mammalian species including rodents; thus the findings of these studies are likely relevant to human pain. Indeed, fMRI studies in healthy volunteers demonstrate positive fMRI signal in the NAc at the offset of an acute thermal stimulation (pain relief).70 In addition, positron emission tomography (PET) imaging with the dopamine receptor antagonist [11C]raclopride showed activation of dopamine signaling in the NAc following placebo analgesia. In conclusion, operant measures of pain, including CPP, may improve our understanding of the cerebral mechanisms and circuits underlying the affective component of pain and the reward of pain relief. Additionally, operant techniques may help improve translation of potential mechanisms to new pain therapies.

Is the association of deliberate self-harm with emotional relief stable or dependent on emotional context? Even though there is a strong support of emotional relief in deliberate self-harm (DSH), there has not been research that tested the impact of emotional distress on the relief and DSH association. Thus, it remains unclear whether the association of DSH with emotional relief is stable across emotional contexts or context-dependent. This study aimed to examine if the implicit DSH-relief association is stronger in the context of emotional distress (relative to a neutral emotional context).

For this study there were 60 young adult with and without a history of recent recurrent DSH. All were randomly assigned to complete a novel version of the Implicit Association Test (IAT) assessing the correlation between DSH-relief at the baseline following an initial neutral emotion induction) and again following either a neutral or negative (i.e., social rejection) emotion induction. The results of the study were consistent with the hypotheses. the DSH-relief association was stronger among the woman participants who were recent recurrent in DSH in comparison to those without recent recurrent DSH at the baseline. Contrary to the hypotheses though DSH-relief association remained stable following both the neutral and negative emotion inductions among participants with DSH, it became stronger across both conditions for participants without DSH. Limitations to this study can be because of the use of community sample of young adult women that may limit the generalizability to other relevant population like young men, adolescents and clinical populations. Additionally, the negative emotion induction may not have been powerful enough to affect the strength of the learned DSH-relief association among individuals with a repeated history of DSH. The results of the study suggest that repeated use of DSH regarding emotional relief may link associations of DSH with relief that are relatively insensitive to the emotional context.

## METHODOLOGY

Aim of the Study

- To study the influence of Non suicidal self-injury ideation on pain offset relief.
- To study the gender difference on Non suicidal self-injury and pain offset relief.

## **Operational Definitions**

**Non suicidal self-injury:** Non-Suicidal self-injury (NSSI) refers to intentionally harming own body tissues without having a suicidal intent. Self-harm, self-injury, cutting and self-mutilation are some other terms used for self-harming without a suicidal intent. Burning, cutting, banging, scratching, hair pulling(trichotillomania), ingestion of unhealthy and toxic substance, excessive skin picking (dermatillomania), carving letters or words on skin with sharp objects these are some common ways of self-harm occur in most cases.

Pain offset relief: It simply translates to removal or reduction of the pain. Once whatever is causing the pain is removed or even reduced slightly, it results the people to feel better. Most importantly the pain offset does not simply return people to the state they were feeling before the pain began but it tends to go far beyond that feeling, towards a more pleasant feeling called "relief". This is called pain offset relief. Pain induces negative affect itself but removal of pain (pain offset) induces a powerful state of relief. Pain offset relief can be sentenced as feeling Worse to Feel Better. Removal of pain generates higher sense of relief.

#### **Research design**

Research methodology is quantitative and research design is survey design.

## Measures

There will be two different tools will be used to support this research.

1. The Non-suicidal self-injury Assessment Tool (NSSI-AT): the NSSI-AT was developed by Janis Whitlock and Amanda Purington, the Cornell Research program on selfinjury and recovery. From the NSSI-AT tool for the current study only function part that includes 22 questions have been used.

2. Pain offset relief: the author is self-preparing the tool for second variable i.e., pain offset relief or satisfaction. The liker scale (agree, strongly agree, neutral, disagree, strongly disagree) is being used for the preparation of the tool.

## **Participants**

The research project studies a total number of 152 participants in which 22 were excluded and data analysis was done for 130 participants. The participants were all current residents of India. The sample were collected and chosen through online survey.

## Inclusion criteria

The sample chosen are 18-35 years of age which comes under the age group of young adults with the sample size of 152 participants. The researcher has chosen this age group on the basis that most of the individuals of 18-24 years of age are students, 25-30 years of age are unmarried working-class people and 30-35 years of age are married-parental working-class people, within these time frame exist three significant period of human life span, these age ranges include various stress level and non-suicidal ideation on pain relief.

## Exclusion criteria

Researcher has not included samples of those suffering from abnormal behavior and dysfunction such as autism, down-syndrome, schizophrenia. Also, to be noted that samples of non-Indians have not been included in this research.

## Procedure

This study was conducted on 152 participants as a self-report study. 22 participants were excluded due to in accurate or blank responses. N (130) participants data was included and analysed for the study. The sampling method is purposive sampling and the study admiration is performed online. All the participants were requested to read the instructions and consent form carefully, followed by to answer every questions honestly. The tools required for this study were converted into online forms by using Google forms which was circulated online. The informed consent form and demographic data sheet form were attached to the tools form. The contact details of the researcher were provided along with the content form for the participants to contact them regarding any issues or doubts. Confidentiality is ensured for every participant. After the data was collected, the data is transferred to MS Excel and the analysis was done in MS Excel by using analysis, descriptive statistics, standard deviation, K S test, two independent sample t-test and Pearson correlation.

<b>RESULT</b> Table 1: Descriptive Values				
Variable Name	Mean	<b>Standard Deviation</b>	Frequency (N)	
Non-suicidal self injury	32.17692308	13.81408414	130	
Pain offset relief	34.68461538	11.99937635	130	

Table 1 shows the mean and standard Deviation in the scores obtained for Non-Suicidal self injury and Pain offset relief of 130(N) participants.

The mean i.e., Average score calculated for Non-Suicidal self-injury from N (130) responders is 32.17692308. The standard deviation calculated for Non-Suicidal self-injury from the scores obtained by N (130) responders is 13.81408414. The mean i.e., Average

score calculated for Pain offset relief from N (130) responders is 34.68461538. The standard deviation calculated for Pain offset relief from the scores obtained by N(130) responders is 11.9993763.

<u>Iudie 2. Values as on two independent samples i lesi</u>			
Dependent Variable	t value	p value (Sig. value)	
Non-suicidal self-injury	-0.40914	0.34156	
Pain offset relief	-0.00682	0.497285	

## Table 2: Values as on two independent samples t test

## Independent Variable: Gender

Table 2 shows the t value and p value (Sig. Value) of Non-Suicidal self-injury and Pain offset relief.

Where in Non-Suicidal self-injury t value is - 0.40914 and p value (Sig. Value) is 0.34156 for a total number of responders N (130). For pain offset relief t value is - 0.00682 and p value (Sig. Value) is 0.497285 for a total number of participants N (130).

Since the p value is more than 0.05, there isn't a significant correlation between male and female participants for the Non-Suicidal self-injury therefore the hypothesis is disproved. The p value is more than 0.05 for the pain offset relief so there is no significant difference between male and female participants and the hypothesis is disproved.

Table 3: Coefficient Values as on Pearson correlation test

Variable	r value	
Non-suicidal self-injury	0 641172607	
Pain offset relief	0.641172687	

Table 3 shows the coefficient values as on Pearson correlation test.

The r value is obtained from the total number of participants N (130) is 0.641172687. It is less than 0.7 so the correlation between two variables, Non-Suicidal self-injury and Pain offset relief is moderate. So, the hypothesis is disproved.

## DISCUSSION

After analysing the data from a total number of 152 participants, 21 were excluded. The research analysis here was done on 131(N) number of participants. Data obtained from the participants of the study show that there is no significant difference between males and females participants. There has been a lot of previous studies done individually on males and females and on both too. Some studies show that Non suicidal self-injury is more common in females than males. It has been a topic that is up to debate on more than several occasions. Some studies have shown that females are much more visible and open to consult and treatment and use cutting, burning as primarily medium to Non-Suicidal self-injury. These can sometimes be spotted, come to attention of people that leads to prevention and treatment. In the case of males, they are often more discreet about their Attempts of NSSI, they use punching, head banging, cutting that are easy to hide or an excuse for that behaviour. Short term and even longitudinal studies have collected data to find that. But there has been no significant difference in terms of how males and females approach to NSSI.

This has been backed by many previous studies that in pain offset relief there is no significant difference in terms of the gender. In research data males and females experience or approach to pain offset relief has been in various research but there is not enough data to find that there is a significant difference between pain offset Relief.

Correlation between Non-Suicidal self-injury and Pain offset relief is been a reason for conflict for many decades. Data derived from previous study for both of the variables has been different. NSSI is a complex behaviour that needs to explored more over short and long term studies to collect more data on its prevention, regulation and treatment. It has been under DSM-5 as a study to be explored further more. Current study ask more into that direction to find correlation between NSSI and pain offset relief. Some studies had shown that NSSI is an effective way to gain momentary sense of relief but to conflict some also show that it also increases to higher risk of self-harm and can lead to severe complications. The hypothesis has been disproved in the current study to analyse the correlation between two variables NSSI and pain offset relief. Another hypothesis that there is a significant difference between males and females for both of these variables NSSI and pain offset relief has been disproved.

## CONCLUSION

The study is significant to understand the various aspects of Non-Suicidal self injury and pain offset relief. This study tries to explore into the complex issue of NSSI and its correlation to pain offset relief. Even though the hypothesis is rejected, other factors related to these variables can help to understand this concept in greater depth, in future.

#### Limitations

This study deals with certain limitations. First, the sample size is small (130 participants only), in which the females are in greater amount than males. Second, the questionnaire might also affect the answers of the participants (it's a triggering topic and not everyone is open to talk about it). Third, this study is done in a limited manner and not explore to the broader aspects of both of the variables.

#### Need for further research

This study can be used for future reference also. This study will help to provide further information related to these variables. As the hypothesis not proved for this study, which was true for many other research papers, might help to bring this finding into new light and people might further study it.

#### REFERENCES

- Klonsky, E. D., Victor, S. E., & Saffer, B. Y. (2014). Nonsuicidal self-injury: What we know, and what we need to know.
- Selby, E. A., Bender, T. W., Gordon, K. H., Nock, M. K., & Joiner Jr, T. E. (2012). Non-suicidal self-injury (NSSI) disorder: a preliminary study. *Personality Disorders: Theory, Research, and Treatment*, 3(2), 167. Muehlenkamp, J. J., & Gutierrez, P. M. (2007). Risk for suicide attempts among adolescents who engage in non-suicidal self-injury. *Archives of suicide research*, 11(1), 69-82.
- Gratz, K. L., Tull, M. T., Dixon-Gordon, K. L., Turner, B. J., & Chapman, A. L. (2018). Is the association of deliberate self-harm with emotional relief stable or dependent on emotional context? *Journal of behavior therapy and experimental psychiatry*, *60*, 61-68.
- Klonsky, E. D. (2009). The functions of self-injury in young adults who cut themselves: Clarifying the evidence for affect-regulation. *Psychiatry research*, *166*(2-3), 260-268.

- Hooley, J. M., Fox, K. R., & Boccagno, C. (2020). Nonsuicidal Self-Injury: Diagnostic Challenges and Current Perspectives. *Neuropsychiatric disease and treatment*, 16, 101.
- Franklin, J. C., Lee, K. M., Hanna, E. K., & Prinstein, M. J. (2013). Feeling worse to feel better: pain-offset relief simultaneously stimulates positive affect and reduces negative affect. *Psychological Science*, 24(4), 521-529.
- Franklin, J. C., Puzia, M. E., Lee, K. M., Lee, G. E., Hanna, E. K., Spring, V. L., & Prinstein, M. J. (2013). The nature of pain offset relief in nonsuicidal self-injury: A laboratory study. *Clinical Psychological Science*, 1(2), 110-119.
- Klonsky, E. D., Muehlenkamp, J., Lewis, S. P., & Walsh, B. (2011). *Nonsuicidal self-injury* (Vol. 22). Hogrefe Publishing.
- Navratilova, E., Xie, J. Y., King, T., & Porreca, F. (2013). Evaluation of reward from pain relief. Annals of the New York Academy of Sciences, 1282.
- PhD, R. (2020). Self-Harm Not Associated with Pain Relief. Psychcentral.com.
- Batya Swift Yasgur, L. (2020). Nonsuicidal Self-Injury: Proper Identification and Treatment Psychiatry Advisor.
- De Riggi, M. E., Lewis, S. P., & Heath, N. L. (2018). Brief report: nonsuicidal self-injury in adolescence: turning to the Internet for support. *Counselling Psychology Quarterly*, 31(3),397405 https://www.mayoclinic.org/diseases-conditions/self-injury/symptoms-c auses/syc-20350950
- Blasco-Fontecilla, H., Fernández-Fernández, R., Colino, L., Fajardo, L., Perteguer-Barrio, R., & De Leon, J. (2016). The addictive model of self-harming (non-suicidal and suicidal) behavior. *Frontiers in Psychiatry*, *7*, 8.
- Hasking, P., Whitlock, J., Voon, D., & Rose, A. (2017). A cognitive-emotional model of NSSI: Using emotion regulation and cognitive processes to explain why people self-injure. *Cognition and Emotion*, 31(8), 1543-1556.
- Bresin, K., & Gordon, K. H. (2013). Changes in negative affect following pain (vs. nonpainful) stimulation in individuals with and without a history of nonsuicidal self-injury. *Personality Disorders: Theory, Research, and Treatment*, 4(1), 62.
- Franklin, J. C., Hessel, E. T., Aaron, R. V., Arthur, M. S., Heilbron, N., & Prinstein, M. J. (2010). The functions of nonsuicidal self-injury: Support for cognitive–affective regulation and opponent processes from a novel psychophysiological paradigm. *Journal of abnormal psychology*, 119(4), 850.
- Puzia, M. (2012). *The Effect of Pain Offset Relief Conditioning on Attitudes Toward Nonsuicidal Self-injury* (Doctoral dissertation).
- Puzia, M. E., Lee, K. M., Chung, G., Hanna, E. K., Spring, V. L., & Franklin, J. C. (2012, September). Pain Offset Relief Conditioning Reduces Negative Affect Toward Self-Injury Stimuli: A Startle Eyeblink Investigation. In *Psychophysiology* (Vol. 49, Pp. S42-S42). 111 River St, Hoboken 07030-5774, NJ USA: Wiley-Blackwell.
- Nock, M. K. (2008). Actions speak louder than words: An elaborated theoretical model of the social functions of self-injury and other harmful behaviors. *Applied and Preventive Psychology*, *12*(4), 159-168.

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#### **Conflict of Interest**

The author declared no conflict of interests.

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