Self-Injurious Behaviors: Art Therapy Group for Recovery Maintenance in Adults with SIB

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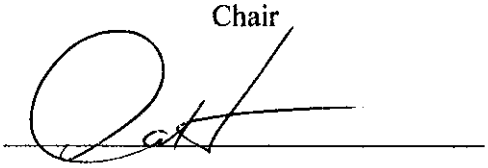

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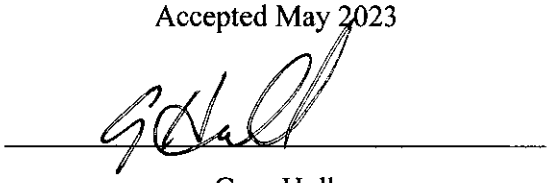

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Abstract

Art therapy treatment groups can be beneficial in addressing the gaps in the treatment of adults in the recovery of self-injurious behaviors (SIB). A literature review was used to explore the immense impact of SIB on adults and adolescents, with a focus on the long-term nature of SIB. This literature review resulted in an art therapy group proposal that addresses the specific needs of this population. This is the first known group proposal that specifically addresses the needs of adults with SIB during their recovery journey. The group is centered around building skills to maintain recovery from SIB.

Keywords: self-injurious behaviors (SIB), art therapy, maintenance, recovery, treatment

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Dedication

I would like to express my deepest appreciation toward my friends and family. A special thank you to my mom Katrina; my stepdad Jeramy; my dad Reggie; my stepmom Ang; and my aunt Jennifer. Your undying patience and support are extremely appreciated. Thank you for listening to me, comforting me, and feeding me. This journey would not have been possible without all of you. I am extremely grateful for my mom Katrina; words cannot express how much you have aided me on this journey. Lastly, I thank my cat, Wilson, for his companionship and comic relief.

Table of Contents

List of Tables

Chapter I

Introduction

Self-harm or self-injurious behaviors (SIB) is a broad category with heavy implications. There are several assumptions that SIB only takes place during adolescence and misconceptions that SIB is always linked to suicide. Research has suggested that these misconceptions are false and have provided new information about SIB (Caicedo & Whitlock, 2009). SIB can commonly serve as a coping mechanism and a way to self-regulate emotions. This knowledge has suggested that SIB may have long-term implications that are not recognized in treatment (Klonsky, 2008).

During development, adolescents endure physical, mental, and emotional changes while constantly exploring their identity and place in social circles. These changes and exploration of identity cause them to become emotionally vulnerable and susceptible to outside influences, which may contribute to SIB manifesting in adolescence (Hawton et al., 2012). Although SIB often continues into adulthood, it often does not onset during adult development (Groschwitz et al., 2015).

The prevalence of SIB in adolescents and adults is large enough to garner clinical concern. SIB has been present in all forms of media and has been the subject of trends online, such as The Blue Whale Project (Khasawneh et al., 2020). SIB is often treated when it is severe enough to threaten someone's well-being. There is very little screening and prevention for SIB in healthcare. Self-reporting of SIB can be discouraged because of the fear of hospitalization, the disappointment of family, and worry about the stigma surrounding SIB (Fox et al., 2021).

Research suggests that SIB is primarily used as a coping mechanism instead of suicidal intent or punishment (Kothadia et al., 2022). SIB serves as an emotional regulatory tool and causes the person to feel better, creating a maladaptive coping pattern. This function impacts the

brain chemistry and may support a dependency on SIB (Groscwitz & Plener, 2012). These factors contribute to the theory that SIB is a long-term condition that can impact a person their entire life (Guerry & Prinstein, 2009).

A traditional literature review explored SIB's prevalence, impact, function, and treatment of SIB. It provided the necessary literature to develop a six-week art therapy proposal for adults with SIB. Art therapy and adults have often been under-researched with SIB treatment. This group proposal aims to identify art materials and develop art therapy directives that may benefit SIB treatment in adults.

Operational Definitions

Adolescence development - The physical and cognitive changes that contribute to identity development (Broderick & Blewitt, 2015).

Adult development - Navigating life changes, finding structure, and constantly rebuilding it (Levinson, 1986).

Maintenance – Keeping your body and mind in a stable condition that promotes health and healing (American Psychological Association, n.d.; Merriam-Webster, n.d.).

Recovery – Cessation and abstinence of SIB. This can include the absence or lingering of maladaptive thoughts and the building of resilience (Lewis et al. 2019).

Recovery maintenance – Learning skills that decrease SIB urges, thoughts, and patterns and increase resilience, self-efficacy, and problem-solving (Lewis and Hasking, 2020; Lewis et al., 2019).

Self-disclosure - Telling a parent, family member, therapist, or health care provider about inflicting SIB on yourself (Fox et al., 2021).

Self-injurious behaviors (SIB) - Deliberate physical harm to oneself. Common forms are cutting, scratching, biting, and burning. They are also referred to as self-harm, non-suicidal self-injurious behaviors (NSSI), and self-mutilation (Kothadia et al., 2022).

Chapter II

Methods

This research used a traditional literature review to develop a nine-week art therapy group proposal for adults with SIB. The group focused on recovery maintenance. This review included a thematic analysis that synthesized gathered data into a matrix to organize and analyze the information (Cronin, 2008). The thematic analysis aided in identifying and understanding the benefits of art therapy treatment for SIB by analyzing primary themes (Maguire & Delahunt, 2017). A matrix was used to review scholarly research and to identify the needs of this population, approaches to treatment, and any existing art therapy treatments. The primary need of this population was identified as developing skills to maintain recovery from SIB. This information was used to create art directives, identify appropriate art materials, and recommend assessments and screening tools.

Chapter III

Literature Review

Lifespan Development from Adolescence to Adulthood

Adolescent Development

Throughout development from middle childhood to adolescence, the brain and body undergo several changes, such as puberty, hormones, and brain growth (Broderick & Blewitt, 2015). Several theorists, including Erikson, have organized and identified stages of development. Erikson's fifth stage of development is the adolescence period, where individuals are developing their identity (Orenstein & Lewis, 2021). Erikson theorized adolescent identity exploration as a complex and ongoing process. He explained that ego identity in adolescence can be seen as a crisis in which adolescents learn who they are through their experience of events (Broderick & Blewitt, 2015).

During adolescent development, teens navigate physical, mental, and social changes, and for many, this developmental time is confusing (Christie & Viner, 2005). During this time, adolescents are experiencing puberty, figuring out sexual identity and their brain development prioritizes concrete thinking. According to Christie and Viner (2005), these factors must be considered when working with adolescents in all care settings, especially when addressing mental health needs.

Adolescents are vulnerable as they navigate social and psychological development, especially when exploring personal identities (Christie & Viner, 2005). A significant adolescent milestone is an increase in independence and a decrease in familial dependence. Adolescents learn emotional, physical, and financial freedom when they are considered adults (Christie & Viner, 2005).

Adolescents and Self-Injurious Behaviors. In a meta-analysis by Hawton et al. (2012) of research about hospitalized adolescents, they found that from 2001 to 2011, around 10% of adolescents reported engaging in self-injurious behaviors (SIB). Through their findings, Hawton et al. (2012) noted that female adolescents report engaging in SIB more than males. The average age of onset for SIB is 12 years old, with females reporting the highest rating of SIB between the ages of 13 to 15. After age 15, SIB in females and males becomes equal. Their analysis shows that this trend may be linked to the physiological and biological changes in females during puberty.

The data reviewed did not account for non-hospitalized adolescents; because of this, they hypothesize that the number of adolescents that engage in SIB is higher in the community. They explained that SIB in adolescents is often only self-disclosed if they are forced to because of the need for hospitalization. Unless the SIB is severe enough to be discovered or adolescents are hospitalized for other reasons, the rates of SIB are not fully understood.

This data was supported by the findings of Fox et al. (2021), who conducted an online survey of over 1,000 adolescents ages 13 to 17. The surveys assessed patterns of youth disclosure of SIB and the barriers that prevent disclosure. Their results found that teens disclose SIB to their close friends more than their parents and health providers. Additionally, youth are more likely to disclose SIB than suicidal behaviors or attempts because of fear of hospitalization. Fox et al. (2021) suggested that many adolescents will not disclose their SIB to health providers due to fear of parental involvement, worry, and possible hospitalization.

Throughout development, adolescents seek autonomy and to individuate from their parents. They often experience moodiness and increased conflicts with their caregivers. As this exploration of independence grows, so does their reliance on their social network. Developing

close friendships and navigating social groups are hallmarks of adolescent development that can impact an adolescent's life (Broderick & Blewitt, 2015).

A significant developmental milestone in adolescence is social autonomy and identifying with peers (Christie & Viner, 2005). A community-based longitudinal sample study by Schwartz-Mette and Lawrence (2019) investigated the peer impacts of youth on SIB. Their research assessed 93 dyads of friends between the ages of 13 to15. Individual participants were recruited and then asked for their closest friends to participate. They assessed these participants and then conducted follow-up assessments at three months and then at six months. Their findings suggested that social influence within the friendship dyads had an impact on SIB behaviors. They explained that negative qualities within the friendship exacerbated the amount of SIB within the dyad. Overall, their findings suggest that adolescent social influences and friendships have an impact on SIB.

Adult Development

Lifespan development has been studied by a wide variety of theorists, such as Sigmund Freud, Erik Erikson, and Jean Piaget. Each theorist presents life stages that illuminate different aspects that shape adult psychological development (Broderick & Blewitt, 2015). For this literature review, Levison's stages will be discussed because they provide a broad view of adult development.

Levison

Levinson (1986) noted the complicated history of adult development and the accompanying issues on human development from ages 17 to 65. Throughout these stages of development, adults encounter many transitions that cause them to constantly rebuild the structure of their lives. Meaning that they spend most of their lives finding structure and then

changing it as they go through the stages of human development (Levinson, 1986).

For this research, Levison's (1986) stages from ages 17 through 45 are discussed. Based on the available research on SIB in adults, it has been noted that 45 years old is the maximum age, whereby there is a gap until research emerges with older adults (65 years and older). Forty-four is the final stage in middle adulthood – late middle age. (Medley, 1980). SIB in older adults (65 years and older) has a different impact than in middle-aged adults. SIB is often more severe, the methods are different, and it poses a greater risk of harm (Troya et al. 2019).

Levison (1986) breaks up the cycle of human development into eras, and within those eras are stages of development. The second era, *early adulthood,* encompasses ages 17 to 45. The first stage, *early adult transition*, encompasses ages 17 through 22 and explains the developmental transition from adolescence to early adulthood. Individuation and relationships are highly valued during this shaky transition. The second stage, *entry life structure for early adultho*od (ages 22 to 28), is where adults are building the initial structure of their lives. This could include a steady career, home, and family unit. The third stage, the *age 30 transition* (ages 28 to 33), explains the important structural changes that adults must undergo while transitioning from their 20s to their 30s, such as re-evaluating career choices and the overall direction of their life. The fourth stage, *culminating life structure for early adults (*ages 33 to 40), details the celebration of youth while completing early adulthood. This could include career and familial milestones while exploring the idea of their youth. The fifth stage, *midlife transition (*40 to 45), details the transitional shift between early and middle adulthood. This could include additional structural changes such as career choices or familial choices.

Adults and SIB

Klonsky (2011) conducted a randomized phone survey throughout the United States. This study aimed to gather general knowledge about self-injurious behaviors in the general U.S. population. They sought to obtain specific information about SIB that is not cited in previous literature, including the epidemiology, methods, context, and clinical characteristics. Through this method, they surveyed 439 adults over the age of 18. Of the 439 individuals, 61.3% were women, 28.8% were younger than 64, 94.5 % had graduated from high school, 6.4% were African American, and 3.0% were Latino/Hispanic (Klonsky, 2011). They found that among their sample, .9% of adults performed SIB throughout 12 months. Additionally, 5.9% of their population reported engaging in SIB continuously throughout their lives. Klonsky (2011) surveyed the mode of SIB and found that cutting, scratching, and scraping the skin was the most common form. They also found that SIB was more common under 30 and among unmarried individuals.

Due to the complexity of human nature and the successive stages of development that adults face, Buckmaster et al. (2021) studied SIB in adults from a phenomenological perspective. They conducted a semi-structured interview with six adults with SIB and their one chosen family member. These interviews aimed to view the impact of familial relationships and patterns on SIB and how SIB impacted those familial relationships.

Buckmaster et al. (2021) found four themes that persisted in the interviews. The first theme of familial/societal culture included overly involved or neglectful family members with a sub-theme of pressure to keep appearances. These factors were the main drive behind the participants hiding their SIB. The second theme, *familial relationships,* explained that certain relationships in their families became triggers for their SIB. The third theme, *inner conflict,*

involved the client's internal battle with relying on SIB as a coping mechanism. *Familial conflict* also falls under this theme and is defined as the emotional distress that accompanies the experience of patience and frustration with family members who engage in SIB. The last theme, *generational impact,* had two subthemes: *rewriting the story* and *repeating the pattern*. In the subtheme *repeating the pattern*, participants voiced having worries about repeating negative familial patterns that they were exposed to as children. In the second subtheme *rewriting the story,* participants explained how they were determined to disrupt negative familial patterns and create a more accepting environment for their children.

Creating the Context

Definition and Prevalence of Self-Injurious Behaviors

Although the core function of SIB can be related to adolescents and adults, there are key differences in the risk factors for suicide that SIB presents for adolescents and adults (Kothadia et al., 2022). Kothadia et al. (2022) completed a literature analysis on non-suicidal self-injury (NSSI) to determine risk factors for adolescents and adults. NSSI and SIB are terms used interchangeably in scholarly literature. For children, risk factors include childhood mistreatment, bullying, loneliness, substance abuse, family problems, and sleep issues. For adults, risk factors include incarceration, substance abuse, mood disorders, and emotional dysregulation.

Function of Self-Injurious Behaviors

Guerry and Prinstein (2009) used the cognitive vulnerability stress model in a longitudinal study of 143 adolescents with SIB to examine factors that predict SIB as a long-term solution to emotional regulation. They found that the participants who were more likely to internalize negative attributes would engage in SIB when they reported an increased amount of stressful life events. In addition, their results suggested that SIB has a trend. They found that

there is an absence of SIB for six months after release from psychiatric care; this is called the *remission slope*. It is followed by the *maintenance slope* where SIB is low or remains the same for around a year. The research did not extend beyond one year to provide additional information on SIB trends.

Long-Term Impacts of Self-Injurious Behaviors

The Impact of Self-Injurious Behaviors on the Adolescent Brain

In Germany, Groscwitz and Plener (2012) conducted a large-scale literature review on adolescents who engaged in SIB to understand the neurobiology of the behavior. They gathered articles using search terms: self-injurious behaviors, self-mutilation, non-suicidal self-injurious behaviors (NSSI), NSSI, self-injury, self-harm, deliberate self-harm (DSH), DSH, self-mutilation, and auto-mutilation. They expanded their research criteria to articles in all fields of neurobiology and relevant textbooks. Their analysis of the literature found that neuroimaging and neurotransmitter studies indicate that those with SIB have an insufficient stress response.

Furthermore, Groscwitz and Plener (2012) explained that their data analysis showed that SIB serves as a stress regulator in adolescents through the hyperarousal of the limbic structure before and after the act of SIB. In addition, they found evidence that low triglyceride levels are found in those with SIB and, therefore may be used as a predictor for the behavior. Additionally, SIB changes the levels of endogenous opioids that elicit hypoalgesia (decreased sensitivity to pain) and analgesia (inability to feel pain). This data supported the compulsory and addictive quality of SIB. These findings may enhance SIB's psychotherapeutic and pharmacological treatments in adolescents and young adults.

Schreiner et al. (2020) conducted an experimental study using dMRI to study the impacts of SIB on white matter microstructure in females ages 13 to 21 that reported SIB and a

comparison group of age and gender-matched individuals that did not report any SIB or psychological disorders (Schreiner et al., 2020). While open to all genders, only one male participated, and his data were excluded from the analysis.

They found that the individuals in the SIB group showed lower amounts of white matter microstructure in the brain than the control group. These results suggested that low levels of white matter microstructure may represent a neurobiological vulnerability to maladaptive coping mechanisms during development. Further analysis indicated that consistent, pervasive, and severe SIB might negatively impact the organization of white matter and that disorganized white matter may be a predictive factor of persistent SIB. The findings stress the importance of early intervention to decrease the potential impact of SIB on the developing adolescent brain (Schreiner et al., 2020).

Huang et al. (2021) conducted a descriptive, experimental study in China using fMRI to assess the brain structure of 67 females (ages 13 to 19) with major depressive disorder (MDD) to investigate the impact of SIB on anomalous neural function. All participants were experiencing their first episode of MDD, and half of the group reported SIB. Participants on psychiatric medications were required to abstain for four weeks before the start of the study. Huang et al. (2021) found that those with SIB showed a distinct difference in brain structure than those without SIB, demonstrating that those with SIB show differences in visual information processing, perception of emotions, and integration of affective and cognitive information processing. Since all participants were in the first episode of MDD, the researchers suggested that the differences in anomalous neural function are not a direct result of SIB but may be predictors of the behavior. Huang et al. (2021) stated that these differences might explain the correlation between SIB and MDD in some individuals. Huang et al. (2021) believe that this

study offers a new perspective for future studies on how differences in the brain may predict future SIB.

Cummings et al. (2021) conducted a systematic review of both human and animal studies to understand the impact of SIB on pain and reward systems in the brain. In their analysis, they found that sensitivity to socio-affective pain and reward systems may contribute to the use and escalation of SIB. Furthermore, developmental sensitivity, emotional salience, and affect regulation may raise the perception of socio-affective pain in adolescents and thus exacerbate the socio-affective risk pathways within the adolescent brain. This suggests that the adolescent brain is highly susceptible to chemical changes due to SIB.

Long-Term Impacts of Adolescence SIB into Adulthood

Plener et al. (2015) conducted a systemic review of longitudinal studies on SIB in adolescents and young adults. Using the search terms deliberate self-harm (DSH) and non-suicidal self-injury (NSSI), they analyzed results from 32 studies. They found that the rates of SIB were liable to change drastically between assessment points. Plener et al. (2015) discovered that rates of SIB increased and decreased across the studies and the rate of ceasing SIB decreased compared to participants initiating new SIB. The analysis of results suggests that rates of SIB are overall inconsistent.

Overall, the analysis of these studies showed that rates of SIB increased in younger adolescents and then decreased in older adolescents and young adults. These findings suggested that SIB takes a natural course, starting in early adolescence and decreasing in late adolescence. (Moran et al., 2012; Plener et al., 2015). Throughout their analysis, they also found that depressive symptoms, past behavior of SIB, and gender (specifically female) are predictors of

continued SIB. These findings stress the importance of prevention and early intervention of adolescents who engage in SIB (Plener et al., 2015).

In Sweden, Beckman et al. (2016) conducted a longitudinal study with a follow-up to assess the risk of suicide and mental illness in adults with the onset of SIB in adolescence. Using information from national databases, they studied 13,731 people (18 to 24) hospitalized for SIB for the first time between 1990 and 2003. For comparison, for every person with SIB, they researched 10 people without SIB for a total sample of 137,310 people (62.3% women). Both cohorts' information from national databases was monitored until 2009 (Beckman et al., 2016).

At the end of the information collection, 3.5% of the cohort died by suicide. Beckman et al. (2016) suggested that those with SIB have a 16-fold risk of suicide and a higher risk of moderate to severe mental illness than those in the general population. In addition, they found that participants with a family history of suicide and a mental disorder at the study's baseline were more likely to experience adverse outcomes within the follow-up time. Overall, the results of this longitudinal study suggested that SIB onset in adolescence may be a sign of mental illness in adulthood (Beckman et al., 2016).

In Germany, Groschwitz et al. (2015) conducted a follow-up study to understand current SIB rates in young adults treated for SIB during adolescence. Fifty-two young adults with at least one episode of SIB were interviewed, and the average time since their first hospitalization for SIB was 4.8 years. The average age at follow-up was 21.5 years; 94.2% were female, all participants completed school, and 23.1% completed secondary school. The average onset was 13.87 years, and the common method was cutting, with most participants using multiple methods. At the time of the interview, 53.8% were not in treatment or receiving medication for mental illness, while 36.5% were currently in psychological treatment, and 30.8% were on

psychiatric medications. The average instances of SIB since hospitalization was 50 times. Groschwitz et al.'s (2015) study showed only a slight decrease in SIB in adulthood compared to other literature, with 50% still engaging in SIB. Their results demonstrated that higher levels of psychological impairment and suicide risk were associated with frequent SIB. They reported that early onset of SIB was not a predictor of persistent SIB, but it did correlate with more instances of SIB in adolescence and the increased chance of a diagnosis of borderline personality disorder (BPD) in young adults.

In Sweden, Dukantaite et al. (2021) conducted a longitudinal study over 10 years to identify long-term implications for adults with adolescent-onset SIB, specifically focusing on the positive and negative aspects of mental health in young adulthood. At the start, they had 991 participants with an average age of 13 (50.3% female) and retained 557 participants with an average age of 25 (59.2% female). Dukantaite et al. (2021) reported that overall rates of SIB from pre to post decreased and the overall rates were higher compared to other literature. Their results showed that all participants reported mental health problems, especially adult participants with repetitive and stable acts of SIB. In addition, the results indicated that the onset of SIB in adolescence poses an increased risk of mental health issues for up to 10 years. Their results stress the importance of screening and early intervention for SIB. Lastly, they expressed the need for additional research on cessation factors of SIB.

Although Plener et al. (2015) analysis results suggested that SIB rates across the literature are inconsistent, this research has common themes. The results of Beckman et al. (2016) and Dukantaite et al. (2021) both suggested that the onset of SIB in adolescence may lead to an increased risk of mental illness problems and diagnoses in adulthood. This coincides with Groschwitz et al. (2015), whose results suggested that early onset of SIB correlates with an

increased chance of a diagnosis of borderline personality disorder (BPD) and frequent rates of SIB.

Long-Term Impacts in Adulthood

In the UK, Sinclair et al. (2010) conducted a prospective longitudinal cohort study using data from hospitals, self-reports, and interviews during a six-year follow-up to learn the long-term health outcomes of those hospitalized for SIB. Data was collected on 150 participants from one hospital (31.3% first episode and 63.8% more than one episode of SIB) with an average age of 28.4. Data collection occurred at the start of the study, 18 months post-study, and an interview was completed post six years of the study. Data were analyzed with Chi-squared and T-tests.

They found that the mortality, morbidity, and quality of life were worse than the general population. Although a small number of participants died in the study, all deaths were due to unnatural causes (e.g., drug overdose, suicide, and accidents; Sinclair et al., 2010). The suicides consisted of methods such as insulin injection, drowning, jumping from a considerable height, and overdose. At the six years follow-up interview, they discovered that repetitive acts of SIB correlated with lower quality of life, including worse physical health, mental health, and general functioning and higher rates of alcohol use, physical illness, and depression (Sinclair et al., 2010). Due to the high dropout rate of men in this study, gender impacts could not be analyzed (Sinclair et al., 2010). They recommend administering a quality-of-life questionnaire as part of the evaluation tools. Additionally, due to the high rates of reported alcohol misuse (50%), further studies should include screening tools for substance use.

Troya et al. (2019) conducted a systemic literature review with a narrative approach to identify characteristics of SIB in older adults. Their analysis found risk factors for repetitive SIB in older adults. These risk factors included being single, living alone, being between the ages of

60 to 74 years old, being female, alcohol abuse, having a history of a mental illness, and having a diagnosis of muscle skeletal disease. Troya et al. (2019) suggested that older adults pose a higher risk for repetitive SIB and suicide. SIB in older adults may be lower than in younger adults, but these episodes pose a more significant health risk. Their analysis found that older adults commonly engage in SIB through self-poisoning due to their access to medication. These results raise awareness for the broad scope of SIB and provide valuable information for the treatment of SIB in older adults.

Hawton and Hariss (2006) conducted a prospective investigation to gain information on SIB in older adults and the outcome of this behavior. Continuous data were collected, they studied 730 participants over 60, who all experienced their first hospitalization from SIB between 1978 and 1997, with the average time between hospitalization and follow-up being 23 years. Data was last collected in 1997. Hawton and Hariss (2006) reported that this participant group had a high death rate, primarily by suicide, with the mode being self-poisoning and overdoses. They noted that participants who reported SIB before their first hospitalization showed a strong predictor for suicide. They urged that their findings demonstrated that SIB in the older adult population needs to be taken seriously and poses an increased risk of suicide.

Murphy et al. (2012) conducted a multicenter cohort study in Europe to demonstrate the seriousness of SIB and its correlation to suicide in older adults over the age of 60. They gathered information on 1,177 participants admitted between 2000 to 2007 to six hospitals in three large cities in England. The Multicenter Monitoring of Self-Harm Project collected the mode, frequency, and severity of SIB episodes of the participants, 16.7 % reported repeated SIB, and the results found that the risk of suicide was 67 times higher. Specifically, men above the age of 75 posed the most significant risk of suicide, especially if their mode of SIB was considered

violent. As a result of these findings, Murphy et al. (2012) recommended that including suicide prevention strategies at the ER may reduce suicidality.

The literature results suggested that SIB in older adults over the age of 60 is more severe and poses an increased risk for suicide (Hawton & Harris, 2006). Murphy et al. (2012) urged that there should be an increased focus on suicide prevention for this population. In addition, Sinclair et al. (2010) found that repetitive acts of SIB correlate with a low quality of life, which includes low physical and mental health, high rates of alcohol use, and increased risk of physical illness and depression. This coincides with Troya et al. (2019), whose results suggested that SIB puts older adults at risk for additional health risks, repetitive SIB, and suicide.

Recovery Maintenance

For this thesis, recovery maintenance is understood to be the remission of clinical symptoms related to pathology. This includes the cessation and then abstinence of SIB. Mumme et al. (2017) conducted a systematic review to gather and synthesize relevant research on SIB cessation. They analyzed nine articles with quantitative, qualitative, and mixed methods. They found that interpersonal and intrapersonal factors were the largest component of SIB cessation. They identified that family support was the most important interpersonal factor in stopping SIB. They listed several reasons for this, including having strong role models and emotional connections within the family system. The most important intrapersonal factors were self-esteem and self-efficacy. Promoting these factors increased emotional regulation and the ability to process negative emotions.

Gelinas and Wright (2013) conducted a qualitative analysis of 44 university students that stopped SIB. They used standardized questionnaires and open-ended questions to collect data on factors that contributed to SIB cessation. Within the data, they found six central reasons for

cessation. The first reason was the realization that SIB was “stupid and futile” (p. 379). The participants explained that SIB stopped being a release for them, and they then felt embarrassed by the act of SIB. The second reason was the embarrassment of scars and fear of negative attention from family and friends. The third was interpersonal factors such as family disapproval or wanting to please a friend. The fourth reason was formal and informal help and support. This included professional therapy and support from friends and family members. The fifth reason was the desire to be healthy and mentally well. The last reason was the development of other coping strategies, including positive and self-destructing coping mechanisms. Gelinas and Wright (2013) also identified barriers to SIB cessation: mental illness, interpersonal issues, addiction, and stress.

Humanistic Perspective

Lewis and Hasking (2020) developed a person-centered framework to treat SIB. This framework consists of goals and core values of treatment that promote cessation of SIB. The main belief of this framework is that recovery is individualized and non-linear. On top of this belief is realistic expectations of recovery, that progress will ebb and flow, and total stopping of SIB can be unrealistic. They also encouraged the normalization of thoughts and urges because they may never halt completely. The goals of this model are to foster self-efficacy, identify strengths, and find alternatives to SIB. The last part of the model addresses self-acceptance, they explain that treatment should focus on addressing underlying problems that may contribute to SIB, accepting scarring, and addressing personal disclosure of SIB.

Lewis et al. (2019) conducted interviews with 233 adults that have recovered from SIB to gain information on what factors contributed to their cessation and recovery. Their analysis of results suggested that recovery from SIB includes more than stopping the act of SIB. According

to participants, recovery includes self-acceptance, absence of SIB thoughts, psychological recovery, and the usage of coping skills. In addition, the analysis suggested that recovery is a process that develops resilience. Other results proposed that recovery is linear and there is a developing evolution of SIB recovery.

Behavioral Perspective

Hawton et al. (2016) conducted a systematic review and meta-analysis of psychosocial interventions used in the treatment of SIB. They analyzed 29 articles, 18 of which used cognitive behavior therapy (CBT) and three dialectal behavior therapy (DBT). Their results suggested that both DBT and CBT are effective treatments for self-harm. CBT aided in reducing the number of participants that repeated SIB at the sixth and twelve-month follow-up. The results of the DBT analysis suggested that DBT reduced the frequency of SIB in clients with borderline personality disorder.

Slee et al. (2008) conducted an experimental study to test the efficacy of CBT in addition to routine treatment for SIB. They sorted 90 participants aged 15 to 35 into an experimental group and a control group. The experimental group participated in their regular treatment plus 12 sessions of CBT that specifically targeted SIB over the course of five and a half months. This treatment focused on identifying and then changing the underlying mechanisms of SIB by focusing on how the three elements of the cognitive triangle, emotions, thoughts, and behaviors, play into the repetition of SIB. They focused on developing problem-solving skills, increasing emotion regulation, and changing thought patterns. Their results showed an increase in problem-solving skills and self-esteem with a reduction in SIB. This suggests that building self-esteem and problem-solving skills through changing thought patterns, behaviors, and emotions is effective at reducing SIB.

Raj et al. (2001) conducted a mixed-method, experimental study with CBT as a treatment for SIB with 40 adult participants that were already seeking routine care for SIB. The experimental group contained 20 participants that attended 10 CBT sessions over the span of three months. The control group included 20 participants with SIB that participated in their routine care. Their treatment focused on addressing maladaptive thinking patterns and poor problem-solving skills attributed to SIB. At the three-month follow-up, only the experimental group saw an increase in problem-solving skills, which improved their ability to handle negative emotions.

Kothgassner et al. (2021) conducted a systematic review and meta-analysis of a shortened form of DBT designed for adolescents (DBT-A) to treat SIB. They analyzed 21 studies and found that DBT-A reduced rates of SIB in adolescents. Treatment consisted of individual and family sessions that focused on reinforcing emotion regulation skills and reducing maladaptive behaviors. In family sessions, there was an emphasis on addressing dysfunctional behavior and communication between the parents and the child.

Mehlum et al. (2014) conducted a single-blind experimental study on DBT-A for SIB treatment. Over the course of 19 weeks, 77 adolescents with SIB who had traits of borderline personality disorder were sorted into an experimental group and a control group. The control group received routine treatment, while the experimental group only attended a one-hour-long individual session and one two-hour family session per week. Their results showed a decrease in SIB.

Misconceptions

Due to SIB being a complicated topic of concern, several misconceptions contribute to the stigma of SIB. As part of Cornell's Research Program on Self-Injurious Behavior in

Adolescents and Young Adults, Caicedo and Whitlock (n.d.) summarized misconceptions about SIB and condensed them into 15 points. From their data, they concluded that understanding these misconceptions is beneficial both clinically and socially. These misconceptions are:

- Only women engage in SIB.
- SIB is suicidal.
- Only teenagers engage in SIB.
- SIB is attention-seeking and untreatable.
- Everyone with SIB is mentally ill and should be in psychiatric care.
- SIB is only cutting.
- Those with SIB are manipulative.
- Everyone with SIB had bipolar disorder.
- Those with SIB enjoy the pain or cannot feel it.
- Everyone who engages in SIB is a part of the gothic/emo subculture.

These misconceptions may contribute to the negative stigma surrounding SIB. Stainiland et al. (2022) investigated how the media depicts SIB using the terms self-harm, self-injury, self-abuse, self-cutting, self-mutilation, and parasuicide. After analyzing their findings, they settled on a qualitative analysis of 545 articles. Out of this analysis, they found six ways in which the media frames SIB.

The first, *mentally unwell*, is when reporters frame every act of SIB as a symptom of a mental illness. The second, *inevitable suicide*, is when they report that every act of SIB will eventually lead to suicide. The third, a *tragic outcome,* is when they frame SIB as a reaction to an event. The fourth, *a manipulation tactic,* is when SIB is framed as a strategy to manipulate loved ones. The fifth, *an epidemic,* is when they are framing SIB as an epidemic rather than a

coping mechanism. The last, *threatening and dangerous,* is when they report SIB associated with a crime (Stainiland et al., 2022).

These popular media framings are contributing to the stigma of SIB. This stigma can have detrimental impacts such as discouraging someone from getting help. It also contributes to the myth that SIB will always lead to suicide. Furthermore, these framing styles contribute to self-stigma. Hearing these media messages could induce feelings of negativity and shame (Stainiland et al., 2022).

Suicide

McAllister (2003) reviewed the literature to understand the multiple meanings of SIB. Out of their review, they found several themes surrounding how SIB is treated in research and other literature. The theme relevant to this literature review is *self-harm and suicide.* This theme explained that SIB is automatically thought of as taboo because it goes against the instinct of self-preservation, which is a part of human nature. They explain that the act of SIB is not linked to suicidal ideation or suicide attempts. Factors such as loss, grief, hopelessness, and shaming could contribute to the shift from SIB to suicidal ideation (McAllister, 2003).

Wright and Wright (2011) explored suicide and SIB in the context of treatment. They primarily focused on educating healthcare workers on the differences between suicide and SIB. They believed that education is the key to more compassionate and competent care for those with SIB. They explained that SIB often serves as a function of emotional regulation and therefore has no connection to suicide. Education on SIB itself and how it may manifest in individuals may be the key to better care. They explained that compassionate care for those with SIB should focus on the patient and managing the behavior instead of completely stopping it.

Edmondson et al. (2016) identified a lack of understanding of SIB as a barrier to effective treatment in the healthcare setting. They conducted a systematic literature review that focused on collecting firsthand accounts of participants with SIB. They used the method of "best fit" to identify articles, and they analyzed 152 total studies, 39 of these studies were interviews, and 113 were questionaries (pg.111). From their analysis, they found several themes which ranged from SIB as punishment and SIB as a positive experience.

The themes included managing distress and affect regulation, exerting interpersonal influence, punishment, dissociation, sensation seeking, and averting suicide. *Managing distress* and *affect regulation* included quotes of participants explaining that they preferred physical pain over emotional pain because it was easier to manage. They also explained that SIB was a distraction and something they could focus on. *Exerting interpersonal influence* involved using SIB to seek help from someone, which resulted in attention and comfort. It was also explained to physically see their pain. With *punishment,* participants explained that they used SIB to punish themselves and those close to them. *Dissociation* involved using SIB to either come out of a dissociative state or induce it. *Sensation seeking* involved using SIB to become excited and get an adrenaline rush (Edmondson et al., 2016).

Two additional themes viewed SIB as a positive experience: self-validation/mastery and defining self. Those with SIB explained that they used it to become a master of something, and it served as a form of self-validation for them. Other participants explained that SIB became a defining experience of who they were, and it became a positive experience for them (Edmondson et al., 2016).

Goth Subculture

A common misconception is that every person with SIB is part of the Gothic or Emo subculture. However, little research has been conducted in this area. Hughes et al. (2018) conducted a systematic review of existing literature that explored this topic. They aimed to explore if there was a substantial link between alternative subcultures and SIB. They settled on 12 articles, two were qualitative studies, and 10 were quantitative studies. Their analysis suggested that within these alternative subcultures, SIB was normalized. Membership inside these groups may enhance victimization and therefore create a risk for SIB. In general, they concluded that membership in alternative subcultures puts participants at a greater risk for SIB.

Young et al. (2014) expanded on the link between alternative subcultures and SIB. They surveyed 452 German youth (average age: 25 years old). The survey asked them to identify what group they belonged to (e.g., goth, emo), and additional questionnaires were used to measure SIB for all participants. They found that half of those who identified as an alternative group member (goth and emo) engaged in SIB to reinforce identity, regulate emotions, and communicate distress. They found that those who identified as an alternative were four – to – eight times more engaged in SIB than other identities that were present in the survey.

Trnka et al. (2018) took a different approach when investigating this connection. They set out to interview participants inside these subcultures. They were able to conduct 14 semi-structured interviews for an average of 59 minutes. All participants were Caucasian Czechs. They used a semi-structured interview and qualitative analysis and found that those in this community viewed suicide as a natural outcome of strong emotions and as a solution to life's problems. They found that suicidal ideation and attempts were very common in their participants and their social networks. Participants recorded having excitement after the act of SIB and

explained that SIB scars and wounds were a sign of affiliation. Members often did not hide their scars and may post pictures of them.

Their qualitative data was not sufficient to generalize about this population. Therefore, they did not suggest that suicide and SIB are correlated within this group. Their results suggested that attitudes could be shaped by peers by social contagion. Social contagion is defined as attitudes and behaviors spreading from individual to individual within a group due to the vulnerability of the group members (American Psychological Association, n.d). Those who belonged to this subculture had a high tolerance for SIB and suicide, which may result in desensitization. They concluded that membership in this group was a risk factor for SIB, as it increased exposure to problem behaviors such as SIB and suicide (Trnka et al., 2018).

Attitudes and Healthcare

Ribeiro Coimbra and Noakes (2022) conducted a thematic literature review that analyzed 10 studies. The goal of this analysis was to look at the attitudes of healthcare professionals toward patients with SIB and address if these attitudes had an impact on treatment. Through their analysis, they found several themes. The most relevant were *the emotional impact of working with patients with SIB, worry and fear,* and *professional roles.* The overall results suggested that most mental health staff had little confidence or knowledge of working with SIB. Ribeiro Coimbra and Noakes (2022), stated that this apprehension to work with SIB did impact the treatment of these individuals.

McGough et al. (2021) conducted semi-structured interviews with 14 mental health nurses ages 35-55; each interview lasted around 35 minutes. This study was conducted to find out how mental health nurses view treating those with SIB. The main themes were *the healthcare system* and *nurses' level of preparedness to work with SIB.* The main findings suggested that

nurses generally felt worn out after working with patients with SIB and their comfort level of working with this group increased over time and experience. They found that the more severe the SIB, the more discomfort the nurses felt. The researchers identified a need to educate and prepare nurses for every level of SIB. They stated that positive attitudes for nurses were important because they provided safety and reassurance for patients with SIB.

Taylor et al. (2011) conducted a systematic review of 31 studies. This review aimed to find out how mental health nurses and other staff in healthcare view SIB to improve mental health training and treatment. Through their results, they found that most patients were unsatisfied with communication, staff knowledge of SIB, management of treatment, and aftercare planning. These factors contributed to the overall negative experience that those with SIB face in treatment. Research suggested that improving staff knowledge of SIB could help improve treatment experiences.

Treatment Studies

Art Therapy

Sternudd (2014) used a qualitative analysis of autobiographical SIB content to investigate the underlying meaning of visuality and self-cutting. They used material from *A Collection of Personal Stories* by Wulff (2004), which contained self-described accounts and pictures of SIB mainly sourced from women ages 15 to 20. Their analysis suggested that the visual site of self-inflicted wounds and blood is a significant factor in the act and display of SIB. They found that blood may act as a communication for pain and suffering and scars may act as a method of group identification.

Due to the visual nature of SIB, visual arts have been utilized as an additional treatment. According to Whisenhunt and Kress (2013), the use of art therapy can increase self-awareness

and, therefore, may benefit SIB clients who are unaware of the risks that SIB poses. The benefits of art materials for this population include the tactile nature of artmaking, which may help with relaxation and self-soothing. Artmaking can be communicative and cathartic, allowing those with SIB to communicate feelings without verbal communication and enhance a sense of emotional relief. These benefits were conceptualized into several art therapy directives that included drawing and collage. Each directive listed relevant objectives and processing questions to enhance readiness for change and to identify positive coping mechanisms.

Scott (1999) used visual art directives in a phenomenological case study of a woman diagnosed with dissociative identity disorder (DID). This participant exhibited SIB since she was a child and experienced multiple hospitalizations. Throughout this case study, the participant created four artworks and poems that revealed additional information about her experiences than did her verbal communication. They found twelve descriptive themes within her work: dissociation, the variable experience of pain, losses due to behavior, control issues, reenactment, shame and guilt, hopelessness, triggers, sexuality, self-punishment, interventions, and disclosure. Their results suggested that SIB for this client represented a metaphor for her DID.

Milia (1996) conducted a case study with an adolescent female with a history of SIB, depression, and anxiety. During treatment, Milia (1996) saw that the participant used art to symbolize her SIB, allowing her to process heavy emotions in a safe environment. They used clay, paint, pastels, and drawing instruments. Each session was primarily client-led, and this allowed the client freedom with these art materials. The case study suggested that the art materials acted as skin and allowed her to express frustration, anger, and relieve tension. Milia (1996) found that the entire artmaking process brought up trauma and heavy emotions that the client then processed throughout the session.

Cooper and Milton (2003) conducted an art therapy group, in conjunction with treatment-as-usual, at a rural residential treatment facility with six adult women with SIB. The group ran twice a week for one and a half hours; they observed this group for four months. The art directives aimed to unify the group and decrease anxiety through structured directives that can be freely interpreted. From their observations, they saw that the group acted as a safe place to explore emotions and fostered adaptive patterns of thinking. Within this group, the art therapist used her vitality and sensations to engage the participants. She acted as a mirror for them intending to encourage personal and constructive forms of expression to replace SIB.

Group Therapy

Turner et al. (2014) conducted a systematic review of 40 studies to find the most effective treatments for SIB. From the quantitative analysis, they found two studies in which emotion regulation group therapy (ERGT) was used for SIB and had significant results. Their results found that ERGT aids in the development of emotional regulation, emotional acceptance skills, and strategies to aid in identifying ways to pursue goals and values. These studies found that 47% of participants abstained from SIB at the nine-month follow-up. Overall, results suggested that ERGT lowers SIB frequency while increasing periods of abstinence.

Gratz et al. (2012) conducted a study to measure if ERGT impacted the frequency of SIB in women with borderline personality disorder (BPD). They conducted a random control trial with 22 women and an open trial with 23 women. Both groups participated in ERGT for 14 weeks, they attended a 90-minute session once a week. These sessions focused on educating participants about the impact of emotional avoidance on mental well-being. In addition, they focused on increasing emotional regulation, controlling behaviors instead of emotions, and emotional acceptance. Their results showed a decrease in SIB in both groups, citing that those

changes in emotion dysregulation aided in the reduction of SIB. Gratz et al. (2012) used these results to explain that emotional regulation is suggested to be the main mechanism of change for SIB.

Lawson (2022) conducted a systematic literature review to synthesize compassion-focused therapy (CFT) groups that can be used to treat SIB. CFT aims to develop self-compassion and empathy for the client. Lawson (2022) conceptualizes that self-shame and self-criticism are the main driving factors of SIB and how CFT groups can be used to treat these underlying issues. Eleven papers were reviewed, and four themes were identified: moving from self-criticism to self-compassion, aversion to compassion, group process, and skills development.

Lawson (2022) applies each of these themes to SIB treatment. *Self-criticism to self-compassion* encompasses soothing emotional distress through psychoeducation. They explain that if participants can understand their motivation behind SIB, they could then develop empathy for themselves. This empathy can decrease shame and self-blame surrounding SIB. *Aversion to compassion* explains that those who are in treatment for any type of medical diagnosis often think that they are not worthy of any type of compassion. Specifically, those with SIB often have trouble accepting compassion for themselves because they believe that they do not deserve it. Lawson (2022) conceptualizes that if participants understood exactly why they have aversions to compassion, then they will start to remove what blocks them from self-compassion.

The group process is conceptualized as those with SIB building connections and reinforcing that they are not alone in their recovery. The use of a group can form a sense of community and decrease the level of shame. The group format can also help those with SIB to develop compassion for each other, which may help them learn compassion for themselves. The last theme is the *development of skills.* The use of a group is conceptualized as helping others be

open to compassion by receiving compassion from others, which is the first step toward empathy. These themes work to activate the soothing system, which increases the capacity of individuals to accept that they are deserving of positive states of mind. When then can lead to the increased acceptance of positive emotions.

Rayner et al. (2021) conducted a mixed methods study to gather data on compassion-focused group therapy (CFGT) for SIB treatment. They conducted a group for 12 weeks with three participants using questionnaires and focus groups throughout treatment. They conducted a three-month follow-up after the end of treatment. At the end of treatment, their results showed a slight decline in the Generalized Anxiety Disorder Assessment – 7 (GAD-7) questionnaire and Patient Health Questionnaire (PHQ-9) and no change in the client's self-compassion. At the three-month follow-up, their results showed an additional decrease in GAD-7 and PHQ-9. The participants self-reported the benefits of the treatment, such as higher levels of self-compassion and additional understanding of emotions, behaviors, and thoughts. The participants explained that the interpersonal skills of the therapist and the relationships of group members were the key to this treatment.

Wood et al. (2002) conducted an experimental, single-blind pilot study with 63 adolescents ages 12 to 16 with SIB to test the effectiveness of developmental group psychotherapy. They split the participants into two groups, one group only participated in routine care while the experimental group participated in developmental group therapy in addition to their routine care. Their results suggested that developmental psychotherapy in a group format aided in decreasing the repetitions of SIB in the experimental group. participants.

This review analyzed research from multiple aspects of SIB by first laying down a developmental foundation. Research about adolescent and adult development was analyzed.

Then, the context of SIB was created by defining SIB and its prevalence and illuminating the function of SIB. The long-term impacts of SIB were addressed through a neurological, developmental, humanistic, and behavioral lens. Misconceptions of SIB were defined and analyzed to address the impact of stigma and shame on those with SIB. Healthcare staff treatment of these individuals was addressed and recommendations were given to improve treatment experiences. Lastly, art therapy and group therapy treatments targeting SIB were explored.

Chapter IV

Results

I conducted a thematic literature review consisting of 57 articles. This review acted as a tool to identify the needs of adults with SIB and gaps in treatment where art therapy can be used. A literature matrix was used to organize the data. All sources were retrieved from IUPUI OneSearch and Google Scholar. The following search terms were used: self-harm, self-injurious behaviors, non-suicidal self-injury, self-mutilation, art, and art therapy. Out of 57 resources, 54 included SIB, and only three included art therapy and SIB. The remaining resources were utilized to build a comprehensive understanding of SIB as a foundation for a treatment group proposal for adults with SIB. This literary foundation illuminated important themes in the research; these themes are SIB cessation, adolescent and adult development, the function of SIB, the impact of healthcare attitudes of SIB on treatment, long-term impacts of SIB, misconceptions about SIB, protective factors, recovery, stigma, and treatment. See Appendix A for the literary matrix.

There were several limitations to this research. The first limitation was the lack of available scholarly resources on adults with SIB and art therapy as a treatment for SIB. The second limitation was search terms; some limited words and phrases could be used. The third limitation was the focus on recovery maintenance, which has been completely unresearched for SIB. The fourth limitation was the time limit of doing a thesis within one academic year.

Chapter V

Discussion

Introduction

Based on the literature review, a group proposal was developed for adults with SIB. The group sessions are structured into four themes: emotion regulation, problem-solving, thought patterns and behaviors, and community. Emotion regulation stems from emotion regulation group therapy (ERGT) which has been demonstrated through research that to support longer periods of abstinence of SIB (Turner et al., 2014). Building problem-solving skills and addressing thought patterns and behaviors has been correlated with a decrease in SIB by supporting self-esteem and coping mechanisms (Slee et al., 2008). The last theme is community, building a sense of community within this population can aide in decreasing levels of shame and developing compassion for themselves (Lawson, 2022).

Needs of the Population

There are numerous factors of SIB not being met with treatment due to misconceptions. First, SIB is being treated as a one-time issue that does not have long-term impacts. Sinclair et al.'s (2010) results from a longitudinal cohort study found that those who were hospitalized for SIB had a lower quality of life up to six years after hospitalization. This included poor mental health, poor physical health, and higher rates of depression, alcohol use, and physical illness (Sinclair et al., 2010).

Secondly, SIB is only treated if a client self-discloses. Self-disclosure typically happens when SIB is at a level that requires medical treatment or intervention. At this point, the symptomology is significant and requires a higher level of treatment (Hawton et al., 2012). Thirdly, adults with SIB are often overlooked in medical and mental health treatment settings.

The lack of screening for SIB means that routine medical treatment inhibits early intervention. This allows for clients to continue SIB behaviors and potentially exacerbate symptoms until treatment becomes required (Murphy et al., 2012).

The typical onset for SIB is in adolescence, and without intervention can continue into adulthood (Hawton et al., 2012). With treatment, these adults can cease SIB, but they need to learn and practice skills for maintenance recovery. Research showed that SIB is a long-term issue, changing brain chemistry, and being addictive due to its function as a coping mechanism (Groscwitz & Plener, 2012). Unlearning these changes and developing problem-solving skills, emotional regulation, and positive coping mechanisms are the key to maintaining the progress of recovery (Lewis & Hasking, 2020; Mumme et al., 2017).

Group Therapy

Group therapy is beneficial for the treatment of SIB. Developmental psychotherapy in a group format aided in decreasing repetitions of SIB (Wood et al., 2002). ERGT focused on developing emotional regulation, increasing emotional acceptance, changing emotion dysregulation, and teaching ways to pursue personal values and goals (Turner et al., 2014; Gratz et al., 2012). CFT in a group format utilized the interpersonal skills of the therapist and group members to develop self-compassion and empathy. CFT acknowledges that individuals may have an aversion to self-compassion, and through this approach, they will work through those barriers. CFT focuses on activating the soothing system within the body to increase positive thoughts and states of mind, and accepting positive emotions (Lawson, 2022; Rayner et al., 2021).

Art Therapy

Individual and group art therapy addresses the visual aspect of SIB that serves the purpose of communication and group identity (Sternudd, 2014). Artmaking can be another avenue of communication that may ease the burden of self-disclosure, allowing for valuable information to be gained from a client's images (Scott, 1999). The tactile and kinesthetic nature of art materials can facilitate relation and self-soothing of the maker throughout the art-making process (Whisenhunt & Kress, 2013). In addition, the art-making process can be used to symbolize SIB, allowing them to process difficult emotions in a safe and stable environment without harm to themselves (Milia, 1996). Lastly, group artmaking facilitated a safe space for others to explore adaptive patterns of thinking and heavy emotions (Cooper & Milton, 2003).

Proposal

Group therapy has proved to be more beneficial to treating SIB than individual therapy (Wood et al., 2002). Being an adult with SIB can be stigmatizing, a group format can aid in reducing that stigmatization. The theoretical approach for this group is a blend of CBT, ERGT, and CFGT. These theories work to inform the art therapy directives, format, and processing questions used for this group. CBT has been shown to aid in changing maladaptive thought patterns and behaviors that can promote SIB cessation (Raj et al., 2001). ERGT has been utilized to gain emotion regulation and self-esteem, which promotes recovery from SIB (Turner et al., 2014). CFGT is used to create compassion for oneself, which can support recovery from SIB (Rayner et al., 2021).

The nine-week group proposed will meet for 90 minutes once a week. I hypothesize that the amount and duration of the sessions will support rapport building and group bonding and offer enough time to explore group needs in depth. This closed group should not exceed ten

members, due to the logistics of art directives and the need for the group to be a safe and cohesive space.

Each session will follow this structure:

- Opening ritual: 15 minutes
- Art therapy directive: 30 to 40 minutes
- Processing questions: 20 to 30 minutes
- Closing ritual: 15 minutes

The opening ritual will consist of a "check-in." The facilitator will use handouts from The Big Book of Blob Trees (Wilson & Long, 2018) as a tool for check-in and check-out. This process will support emotional identification and reflection while creating a group ritual.

Initial Stage: Forming. ERGT has been shown to increase abstinence from SIB by promoting self-esteem and problem-solving skills. This theory focuses on emotional regulation skills that improve emotional acceptance. These skills are then used to identify ways to pursue values and goals (Turner et al., 2014).

Table 1

Session 1

Session one: Identification of emotions	
Theme	Emotion regulation
Goals	• Introduce group members. • Identify and name both positive and negative emotions.
Opening Ritual	• Each participant will briefly introduce themselves to the group. • The Big Book of Blob Trees handout
Materials	• Tissue paper of at least 10 different colors • One sheet of paper (18" x 12") with two pre-drawn circles (about 7 inches in diameter) • Glue sticks • Scissors

Directive	Emotion Pie - Therapist will explain why identifying emotions is beneficial (e.g., We need to feel emotions to process them. Identifying emotions is the first step to being able to feel them). - Label one circle as a "good day" and one circle as a "bad day". - Focus on the emotions of a bad day and share them with your small group. - Write at least 5 different emotions on the piece of paper under the circle titled "bad day". - Assign one color of tissue paper to each emotion, each emotion should have a different color of tissue paper. - Fill in the "pie" with colors of tissue paper as it coordinates with the emotions they feel on a bad day. - Repeat this process but with emotions on a "good day."
Processing Questions	• How was the process of identifying 5 emotions for a "good day" and 5 emotions for a "bad day"? • Was one set of emotions easier to identify than the other? • What emotions did you identify? Did any of them take over your "pie"?
Closing Ritual	The Big Book of Blob Trees handout
Rationale	Collaging with tissue paper is a low-risk task with limited decision-making in the creative process. Using resistive materials to identify emotions supports the affective and perceptual components of the expressive therapies continuum (ETC). Art directives on this level can aid in emotional processing (Hinz, 2019).

Table 2

Session 2

Session Two: Identifying emotions in the body	
Theme	Emotion regulation
Goals	• Identify how emotions manifest within the body. • Identify what is emotion regulation. • Explain ways to increase emotion regulation.
Opening Ritual	The Big Book of Blob Trees handout
Materials	• Markers (10 pack of Crayola markers per person) • One life-size outline of a gingerbread body
Directive	In the Body - Therapist will introduce emotion regulation and explain how emotions impact the body (e.g., the face gets hot when you are angry). - Therapist will guide clients to reflect inward and begin to identify emotions. - Discuss the following questions. What emotions were you able to identify? Where did you feel them in your body? - As a group, use this body form to identify the emotions in the body. - Explain guidelines of group artmaking (e.g., respecting space and artwork made by peers). - Use color, shape, and symbols to fill in the body shape using their examples and experiences.
Processing Questions	• How does this topic relate to emotions experienced during SIB occurrences? • What did you learn about your body? • How was the experience of making art as a group?
Closing Ritual	The Big Book of Blob Trees handout
Rationale	To regulate emotions, group members need to be aware of how they manifest in their bodies. Markers are both resistive and fluid materials and therefore support affective and cognitive processes. This provides a balance between thinking of emotions and feeling them. Illustrating these emotions on a body form aids in the connection of the two by providing a visual learning component. Group artmaking is beneficial to building group morale and connection (Hinz, 2019).

Table 3

Session 3

Session three: Self-soothing and coping skills	
Theme	Emotion regulation
Goals	• Identify self-soothing and why it is beneficial. • Name positive coping skills that can assist in self-soothing.
Opening Ritual	The Big Book of Blob Trees handout
Materials	• Felting needles • Wool Roving (in multiple colors) • Felting pads • Squares of white material to felt on (8” x 11” or smaller)
Directive	Safe Landscape - In a small group, define coping skills. What are they? Why do we need them? For example, we need them to self-soothe and regulate our emotions. - Repetitive motions offer self-soothing due to their kinesthetic qualities. - Use the materials to needle felt a landscape that makes you feel safe (e.g., sunset, a mountain, a meadow).
Processing Questions	• How did you feel after completing your needle felting? • Where is your landscape? • What about this place makes you feel safe?
Closing Ritual	The Big Book of Blob Trees handout
Rationale	The repetitive movements of needle felting connect the artmaking to the kinesthetic section of the ETC. Kinesthetic movements can aid in processing strong emotions, which improves emotion regulation. The repetitive motion of needle felting can become rhythmic and therefore promote self-soothing. To capitalize on the soothing nature of the materials, the art directive focuses on building a safe landscape (Hinz, 2019).

Transition Stage: Storming. Building problem-solving skills in CBT involves looking through the components of the cognitive triangle and identifying what needs to be changed to promote mental wellness. Results from previous studies suggested that building problem-solving

skills can reduce the occurrence of SIB because it supports divergent thinking patterns (Slee et al., 2008).

Table 4

Session 4

Session Four: Identifying common problems that create distress	
Theme	Problem-solving
Goals	• Identify problems in our daily lives. • Recognize and explain how these problems impact us.
Opening Ritual	The Big Book of Blob Trees handout
Materials	• White paper (8.5” x 11”) • Scissors • Glue sticks • Magazines (at least 3 per person) • Range of pre-cut images (people, places, objects)
Directive	A collage of common problems - Discuss common problems and the propensity for them to build over time. - Focus on large and small problems. - Use collage images to make a representation of your problems.
Processing Questions	• What about these problems stand out to you? • Are any of these problems coming from the same source?
Closing Ritual	The Big Book of Blob Trees handout
Rationale	The first step to building problem-solving skills is to identify common and daily problems. Once these are identified, group members can work on recognizing positive and negative ways of solving these problems. Collage is utilized to visually identify and respond to problems. Pre-cut images are offered to enhance the scope of images available. Collage is a resistive material supporting cognitive and symbolic processing in the ETC. Art directives in the cognitive component of the ETC can aid in logical thinking and problem-solving (Hinz, 2019).

Table 5

Session 5

Session Five: Identifying current ways of problem-solving	
Theme	Problem-solving
Goals	• Identify current methods of problem-solving. • Identify if this method is helpful or harmful to well-being.
Opening Ritual	The Big Book of Blob Trees handout
Materials	• Piece of paper (8.5" x 11") • Drawing materials (e.g., markers, colored pencils, cray pas, oil pastels)
Directive	Miracle Machine - Create a miracle machine that solves all your problems.
Processing Questions	• What is the name of your machine? • What does your machine do? • Can you implement any of the machine's skills into your life?
Closing Ritual	The Big Book of Blob Trees handout
Rationale	This art directive uses metaphor to build problem-solving skills by recognizing internal and external resources. Working in metaphor with resistive materials supports cognitive and symbolic processing in the ETC. Symbolism allows for more abstract thinking which facilitates self-knowledge. Working at this level increases creative problem-solving skills, which promotes self-acceptance (Hinz, 2019).

Table 6

Session 6

Session Six: Coping with SIB urges as a mode of addressing problems and self-soothing	
Theme	Problem-solving
Goals	• Develop urge surfing skills to cope with SIB urges.
Opening Ritual	The Big Book of Blob Trees handout
Materials	• Carving tools per person (Speedball Lino© set no. 1) • Paper (printmaking paper, 11" x 14")

	• Water-based printmaking inks (black, white, blue, red, yellow) • Brayers (soft rubber brayers, 6”) • Easy to cut, unmounted linoleum squares (6” x 8” or similar size) • Large wooden spoons
Directive	Riding the Wave - Therapist will define triggers and how they can be managed to utilize the image of a wave. - Therapist will model the appropriate use of art-making tools and explain that carving offers repetition and supports self-soothing. - Therapist will use instrumental music to discourage talking and encourage reflection and connection to the music. - Carve a wave. Use the printmaking materials to print this wave. Use wooden spoons to aid in printing by hand.
Processing Questions	• Have you “rode the wave” of an urge before? • How did the movement of carving compare to the movement of needle felting? • Do you feel confident that you can “ride the wave” of a SIB urge?
Closing Ritual	The Big Book of Bob Trees handout
Rationale	SIB urges need to be addressed in the group. At this point, the group members should have established trust and therefore may feel comfortable directly discussing their SIB experiences. This directive builds from the needle felting directive that can promote self-soothing. Psychoeducation is used to help group members understand the stages of the urge to SIB, and how to cope with them. Carving promotes a deeper emphasis on kinesthetic movements and supports self-soothing (Hinz, 2019).

Working Stage: Norming. This group proposal is informed by the CBT cognitive triangle: thoughts, emotions, and behaviors. Changing one of these components to support mental wellness can impact the other elements, creating a beneficial change. This is useful for building recovery maintenance skills because it teaches group members how to intervene to change unwanted thoughts patterns, emotions, or behaviors to support their well-being (Slee et al., 2008).

Table 7

Session 7

Session seven: Addressing maladaptive thought patterns	
Theme	Thought Patterns and Behaviors
Goals	• Identify cognitive distortions. • Identify how maladaptive thoughts can influence our emotions and behaviors.
Opening Ritual	The Big Book of Bob Trees handout
Materials	• Paper (8.5" x 11") • Colored pencils
Directive	Cognitive Distortion Story - Therapist will explain the cognitive triangle and cognitive distortions. - Write 1-2 distorted thoughts on your Post-it© note. Place your note on the wall anywhere within the room. Walk around the room and read all of the notes, select 1 that is not your own. - Draw what that thought looks like to you. - Write a story about your drawing that offers a resolution or different perspective on this thought.
Processing Questions	• What did you draw? • How did drawing a cognitive distorted thought illuminate the distortion? • What was your solution to the thought?
Closing Ritual	The Big Book of Bob Trees handout
Rationale	Colored pencils are a resistant material that facilitates cognitive control and safety. Using resistive materials when working with cognitive distortions decreases emotional responses, which allows for logical thinking and problem-solving. This art directive is in the cognitive/symbolic level of the ETC, which promotes creative problem-solving and logic. Creating images supports the externalizing of thoughts and language around distortions. (Hinz, 2019).

Table 8

Session 8

Session Eight: Stigma and Shame	
Theme	Thought patterns and behaviors.
Goals	• Normalize feelings and behaviors associated with SIB.
Opening Ritual	The Big Book of Bob Trees handout
Materials	• Watercolor paper (12 x 18, or a similar size) • Crayons (8 pack, per person) • Watercolor paints (washable watercolor pan set of 8) • Brushes (a variety of shapes and sizes) • Water (1 cup per person) • Scissors • White liquid glue • String (white or black) • Pencil (1 per person)
Directive	Support Bracelets - Therapist will normalize shame as human emotion, but note the impact of shame on our thoughts, feelings, and actions. - Think of a time during a SIB occurrence when they felt shame. Using a crayon, write this occurrence on the paper. - Using watercolors, fill your paper with color. - As their papers dry, group members will share their occurrences that they wrote down. The therapist will then facilitate a discussion on how shame and SIB stigma have impacted their lives. - Once the paper dries, cut it into 1 to 1.5 -inch strips. - Therapist will demonstrate how to apply glue and roll the paper around a pencil to create a bead. - Once the beads are made, trade beads with other group members. - String your beads to create a bracelet.
Processing Questions	• How did it feel to write and then paint over your shame story? • What reactions did you have to hearing other group members' stories? • In what ways do you cope with shame? • How was painting with watercolor vs other materials, such as colored pencils?
Closing Ritual	The Big Book of Bob Trees handout

Rationale	Stigma and shame are embedded in SIB which can lead to isolation. Being a part of a group can aid in reducing isolation and stigma. Sharing stories of shame within the group allows the members to be vulnerable to one another and receive compassion from the group. Creating and sharing within the group setting supports compassion towards others and the self. Watercolor is utilized for this directive because it is a fluid material, which are used to provoke emotion within the artmaking process. These materials are utilized towards the end of the group because previous sessions established safety and control. This allows group members to feel safe to freely experience emotion (Hinz, 2019).

Final Stage: Adjourning. The goal for the final stage is to celebrate the group's achievements, as well as provide closure to the end of the group. Throughout this process, the group member's bond will strengthen, emphasizing the importance of an ending ritual for the group (Abudi, 2010).

Table 9

Session 9

Session nine: Termination	
Theme	Community
Goals	• Identify the benefits of being a part of a group.
Opening Ritual	The Big Book of Bob Trees handout
Materials	• Small rectangles of cardstock (2" x 4", or similar size) • Materials from previous groups, excluding needle felting. (markers, colored pencils, watercolor paint, crayons, printmaking materials, tissue paper, collage images)
Directive	Artist Trading Cards© - Therapist will explain that artist trading cards are small pieces of art to give to others as a symbol of time spent together. - Create at least 1 card to share with each group member. - Focus on what you learned and how this group and its members impacted you.
Processing Questions	• How has being a part of a group of people with SIB impacted you?

	• Has hearing other people's experiences made you feel less isolated from your experiences? • What have you learned from being a member of this group?
Closing Ritual	The Big Book of Bob Trees handout
Rationale	The purpose of artist trading cards is for group members to share a piece of their experience with everyone in the group. These cards serve to symbolize and remember the group experience. Having a physical token of group membership supports feelings of community. Giving group members the freedom of materials allows for them to feel control over the artmaking process and explore materials that they responded well too (Hinz, 2019).

Limitations

This proposal is theoretical in nature and based on a literature review. The available scholarly research for art therapy groups for adults with SIB is limited. Furthermore, this group proposal is based on restricted literature resources for adults with SIB and recovery maintenance. SIB recovery has large gaps in research, including how to maintain recovery progress. The time and size of the group will be determined by the group's needs.

Recommendations

It is recommended that an assessment tool be used before and after administering this group. Several SIB assessments can measure the severity and frequency of SIB. The assessment type is best determined by the clinician's expertise and client needs. There is a variety of assessments for SIB that can be utilized.

Chapter VI: Conclusions and Recommendations

After reviewing available research on SIB, it is evident that SIB is more complex than it has been conceptualized in treatment. Due to the complex nature of self-disclosure, SIB is only being treated when it is severe enough to warrant medical treatment. While in treatment it has been reported that staff are unprepared and often unpleasant when treating SIB. There is little to no support offered after treatment has been completed. This lack of follow-up care and the low quality of care creates a cyclical pattern of unsuccessful treatment.

SIB is a long-term problem, not a one-time event. SIB can alter adolescent brain and emotional development, provide in-group membership, and have addictive qualities. In-group bonding results from the shared identification of scars and cuts. The functions of SIB as a coping mechanism and changes in brain development support addictive qualities.

This research informs the needs of adults with SIB. Due to the onset of SIB in adolescence and the treatment of SIB as a one-time event, adults with SIB have been overlooked in treatment and research. Even in recovery, adults with SIB may still actively engage in and have urges to self-injure. Art therapy can assist in treating and addressing the needs of adults with SIB.

The research identified recovery maintenance as a need for this population. The proposed art therapy group supports adults with SIB by developing skills to maintain their recovery. These skills include problem-solving, emotional regulation, changing thought patterns, and increasing self-esteem. In other treatment approaches, these skills have reduced the frequency of SIB. Teaching these skills through art therapy directives could provide recovery maintenance support for this population.

Recommendations

It is recommended that this research is used to inform the treatment of adults with SIB. The lack of knowledge of SIB has contributed to inadequate treatment for individuals, and a gap in care for adults with SIB. This lack of knowledge has contributed to the perpetuation of the cycle of SIB. Providing additional support and care for this population could help to end this cycle. Educating healthcare professionals and providing aftercare support for individuals with SIB would be the most beneficial. Since this proposal is theoretical, it is recommended that providers use their clinical judgment and expertise in implementation, data collection, and assess the effectiveness. This clinical implementation and dissemination of findings will strengthen the available research for SIB and address a critical gap in services.

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Appendix A

Literature Matrix

Author, Date	Population			Themes														Mode		Treatment					
	Adolescent	Adult	Family	Cessation	Development	Function of SIB	Healthcare	Long Term Impact			Misconceptions		Protective Factors	Recovery	SIB	Stigma	Treatment	Group	Individual	Art Therapy	CBT	CFT	CFGT	DBT-	ERGT
								Adolescent Brain	Adolescent	Adulthood	Goth	Suicide													
Beckman et al., 2016		X								X					X										
Broderick & Blewitt, 2015	X				X																				
Buckmaster et al., 2021		X	X												X										
Caicedo & Whitlock, 2009											X	X			X										
Christie & Viner, 2005	X				X																				
Cooper & Milton, 2005		X													X		X	X							
Cummings et al., 2021	X							X							X										
Daukantaitė et al., 2021	X								X	X					X										
Edmondson et al., 2016						X	X								X										
Fox et al., 2021	X														X										
Gelinas & Wright, 2013		X		X											X										
Gratz et al., 2012		X													X		X	X							X
Groschwitz & Plener, 2012	X							X							X										
Groschwitz et al., 2015	X	X							X	X					X										
Guerry & Prinstein, 2009	X					X									X										
Hawton & Harriss, 2006		X								X					X										
Hawton et al., 2012	X														X										
Hawton et al., 2016	X	X													X		X		X		X			X	
Huang et al., 2021	X							X							x										
Hughes et al., 2018	X	X									X				X										
Khasawneh et al., 2020															X										
Klonsky et al., 2011		X													X										
Klonsky, 2008						X				X					X										
Klonsky, 2011		X													X										
Kothadia et al., 2022	X	X													X										
Kothgassner et al., 2021	X		X												X		X		X					X	
Lawson, 2022		X													X		X	X				X			

Author, Date	Population			Themes														Mode		Treatment					
	Adolescent	Adult	Family	Cessation	Development	Function of SIB	Healthcare	Long Term Impact			Misconceptions		Protective Factors	Recovery	SIB	Stigma	Treatment	Group	Individual	Art Therapy	CBT	CFT	CFGT	DBT-	ERGT
								Adolescent Brain	Adolescent	Adulthood	Goth	Suicide													
Lewis & Hasking, 2021				X										X	X		X								
Lewis et al., 2019		X												X	X										
Levinson, 1986		X			X																				
McAllister, 2003												X			X										
McGough et al., 2021		X					X								X		X								
Medley, 1980		X			X										X										
Mehlum et al, 2014	X		X												X		X		X					X	
Milia, 1996	X														X		X		X	X					
Moran et al., 2012	X								X						X										
Mummé et al., 2017	X	X		X											X										
Murphy et al., 2012		X								X					X										
Plener et al., 2015	X	X							X						X										
Raj et al., 2001		X													X		X		X		X				
Rayner et al., 2022		X													X		X	X					X		
Ribeiro Coimbra & Noakes, 2022		X					X								X		X								
Schwartz-Mette & Lawerence, 2019	X														X										
Schreiner et al., 2020	X							X							X										
Scott, 1999		X													X		X		X	X					
Sinclair et al., 2010		X								X					X										
Slee et al., 2008	X	X													X		X		X		X				
Stainiland et al., 2022												X			X	X									
Sternudd, 2014	X	X													X										
Taylor et al., 2009		X					X								X		X								
Tmka et al., 2018		X									X				X										
Turner et al., 2014		X													X		X	X							X
Troya et al., 2019		X								X					X										
Whisenhunt & Kress, 2013															X		X			X					
Wood et al., 2001	X														X		X	X							
Wright & Wright, 2011						X	X					X			X										
Young et al., 2014		X									X				X										