Examining Therapeutic Approaches towards Injurious Behaviours in Adolescents: Perspectives on Influence, Efficacy & Prevention

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Abstract

This qualitative research investigates professional perspectives on adolescent non-suicidal self-injury (NSSI) and outward-directed injurious (ODI) behaviours through in-depth interviews with twelve professionals across mental health, education, and social services in New Zealand. Utilising thematic analysis, the study reveals insights into how these behaviours represent interconnected manifestations of underlying emotional regulation challenges shaped by individual vulnerabilities, relationship dynamics, and systemic factors. Four key themes emerged: The Duality of Aggressive Expression, Environmental and Developmental Influences, Building Therapeutic Connections, and System Complexities and Bridge-Building. The research extends theoretical understanding by examining how risk factors influence behavioural expression, highlighting the connection between neurodevelopmental differences, trauma histories, and family dynamics. By challenging traditional conceptual frameworks, the study identifies significant gaps between evidence-based interventions and real-world implementation, ultimately offering recommendations for more integrated treatment protocols, enhanced professional support systems, and comprehensive care pathways for vulnerable youth.

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Chapter One: Introduction

Non-suicidal self-injury (NSSI) represents a significant public health concern that poses substantial challenges to healthcare systems and communities, particularly among adolescent populations. This increasingly growing behaviour reveals complex expressions of emotion within young people that current understanding and interventions struggle to fully address. While traditionally conceptualised separately, emerging research suggests NSSI and outward-directed injurious (ODI) behaviours may represent different expressions of similar underlying struggles with emotion regulation and distress management (Kranzler et al., 2018; Richmond et al., 2019).

NSSI is defined as the deliberate, direct injury of one's body tissue without suicidal intent and for purposes not socially sanctioned (Nock, 2009; Klonsky & Muehlenkamp, 2007). The terminology used to describe this behaviour has varied, including terms such as self-wounding, moderate self-mutilation, parasuicide, and deliberate self-harm (Klonsky et al., 2003).

While NSSI most commonly manifests through skin cutting, typically performed on arms, legs and stomach, it may also include burning, scratching or interfering with wound healing (Whitlock et al., 2008; Kelada et al., 2018; Kress & Hoffman, 2008). In contrast, ODI behaviours manifest through aggressive actions like punching walls, deliberately falling or purposely engaging in physical altercations (Nock, 2010). Recent research suggests these different behavioural expressions may serve similar emotion regulation functions, which challenges traditional frameworks that treat them as separate phenomena (Kranzler et al., 2018; Richmond et al., 2019). The term "self-injurious behaviours" is used throughout this thesis as an umbrella term encompassing both NSSI and ODI to reflect this emerging evidence, while "self-directed" and "outward-directed" injurious behaviours specifically reference the target of aggressive expression. The term "aggressive behaviours" is used when examining broader patterns of emotional expression that may manifest as either self-

directed or outward-directed aggression (Kranzler et al., 2018). This terminology allows for the examination of how environmental contexts and individual characteristics influence whether distress manifests as NSSI, ODI, or both. Although drawing distinct categories around self-injurious behaviours may risk oversimplifying these complex behavioural patterns (Kapur et al., 2013), maintaining clear terminology throughout this study, supports the systematic analysis of how these behaviours manifest and respond to intervention.

The onset of NSSI typically occurs between the ages of 12 and 24 (Cerutti et al., 2011), although cases have been recorded in children under 12 years old (Barrocas et al., 2012). There is a perception that self-injurious behaviours are increasing among adolescents and younger populations, but the lack of historical data makes it challenging to confirm the accuracy of this trend. Past studies have found that approximately 17% of the student population has engaged in self-injurious behaviours (Whitlock et al., 2006), with more recent studies suggesting even higher rates of up to one-third to half of secondary school students reporting engagement in NSSI (Wilson et al., 2016).

In Aotearoa New Zealand, understanding self-injurious behaviours requires consideration and attention to cultural contexts and meaning. Research within Aotearoa indicates that between one-fifth and one-quarter of community sample adolescents aged 12-15 have engaged in self-injury at some point, with this figure increasing to up to 50% by school-leaving age (Wilson et al., 2016; Garisch & Wilson, 2017). However, researchers suggest that these statistics may not fully capture cultural variations in how distress is expressed and understood. Particularly within Māori communities where collective well-being and cultural connection play crucial roles in mental health (Curtis, 2016). While the exact prevalence of self-injurious behaviours among adolescents in Aotearoa New Zealand mental health services remains unknown, it is likely to be significantly higher than in community samples.

The high prevalence of NSSI among young people is particularly concerning due to its association with various adverse outcomes, including psychological symptomatology and an elevated risk of suicide (Muehlenkamp et al., 2010; Whitlock et al., 2013). While NSSI is distinct from suicidal behaviour, research indicates that individuals who engage in NSSI are at a significantly higher risk for future suicide attempts (Asarnow et al., 2011). While historical data limitations make accurate trend analysis challenging, meta-analytic evidence suggests significant increases in NSSI prevalence over the past decade (Gillies et al., 2018). A recent systematic review of 52 studies found lifetime prevalence rates ranging from 7.5% to 46.5% in adolescent samples, with studies using more meticulous measurement approaches consistently reporting rates above 20% (Brown & Plener, 2017).

The functions of NSSI are diverse, but affect regulation has been consistently identified as a primary motivator for both NSSI and ODI behaviours (Klonsky, 2009; Nock et al., 2009). Other reasons identified include self-punishment, anti-suicide function, and attempts to alleviate feelings of emotional detachment or numbness (Gratz, 2007; Klonsky, 2007). While emotion regulation is considered the primary function, interpersonal and social factors also play an important and influential role in self-injurious behaviours. Studies have found that social motives like anger expression, attention-seeking, and peer influence are the most commonly cited reasons for initiating these behaviours, particularly among adolescents (Muehlenkamp et al., 2013; Glenn & Klonsky, 2013; Hamza et al., 2015). Additionally, individuals who engage in self-injurious behaviours report lower perceived social support, particularly within the family network, and more limited social networks compared to non-self-injuring peers (Muehlenkamp et al., 2013).

A range of risk factors for NSSI and ODI have been identified within the literature. These include childhood trauma and maltreatment, psychiatric disorders (particularly mood, anxiety, and personality disorders), deficits in emotion regulation and distress tolerance, impulsivity, and self-criticism (Nock, 2009; Klonsky et al., 2011). Neurobiological factors, such as alterations in the serotonergic system, a network in the brain crucial for regulating

mood, and heightened stress responses, may also increase vulnerability to this behaviour in young people (Van Heeringen, 2014).

The increasing rates and serious consequences to mental health and well-being associated with self-injurious behaviours emphasise the crucial need for effective prevention and intervention strategies. However, the development of these approaches faces many challenges due to the complex nature of self-injury and the tendency of young people who engage in it to conceal their behaviour from others (Muehlenkamp et al., 2013). Shame and fear of stigma are identified as significant barriers to help-seeking, (Lewis et al., 2017) and when disclosure does occur, it is rarely to mental health professionals. Studies report that many young people find conversations about NSSI or ODI unhelpful, particularly with healthcare professionals (Muehlenkamp et al., 2013).

Despite the obvious need for action, there remains a lack of empirical research on effective treatments for self-injurious behaviours among adolescents (Garisch et al., 2017). Current treatment approaches often focus on enhancing emotion regulation skills, distress tolerance, and adaptive coping strategies for young people (Klonsky et al., 2011). Dialectical Behaviour Therapy for Adolescents (DBT-A), which was originally developed for borderline personality disorder, and Cognitive Behavioural Therapy (CBT) have shown promise in treating NSSI (Gratz, 2007). However, there still remains a significant need for empirically supported interventions specifically designed to address the complexity of NSSI and ODI behaviours, particularly for adolescent populations. As such, understanding the perspectives of professionals who work alongside young people with NSSI and ODI behaviour, is crucial for developing and improving intervention strategies and to open further pathways of support.

Professionals working with young people who engage in injurious behaviours play a crucial role in assessment, intervention, and ongoing support (Curtis, 2016). These professionals include mental health practitioners, school counsellors, social workers, and

teachers who often serve as first line responders in addressing these behaviours among young people. Their perspectives and experiences are invaluable in understanding the challenges of working with this population and identifying effective intervention strategies (Muehlenkamp et al., 2013). By examining the perspectives of professionals working alongside young people with injurious behaviours, this study aims to contribute to the development of more effective intervention strategies and support systems.

While much research on self-injury focuses on individual factors, this study will also examine these behaviours through an ecological lens, exploring how professionals perceive and address complex aggressive behaviours in adolescents. This perspective considers the connection and influence of social, cultural, and environmental factors in NSSI and ODI, emphasising the efficacy of community-based interventions, prevention strategies, and the empowerment of both individuals and communities in addressing self-injurious behaviours. This research contributes to the existing literature by demonstrating how professional experiences reveal significant patterns in adolescent injurious behaviours that challenge the traditional conceptual frameworks. The findings hold particular relevance for professionals working directly with these young people, while also informing broader policy and system development efforts with the aim of enhancing adolescent mental health services.

Overview

Drawing upon current research, this thesis examines how professionals understand and respond to adolescent non-suicidal self-injury (NSSI) and outward-directed injurious (ODI) behaviours. Through analysis of professional experiences across mental health, education and social services, the research investigates how these behaviours manifest, potentially interact, and respond to intervention practices. This work holds particular significance given the increasing prevalence of self-injurious behaviours among young people and the obvious need for more effective support strategies.

This thesis comprises five chapters. Chapter Two presents a comprehensive literature review examining theoretical frameworks, risk factors, and treatment approaches for adolescent self-injurious behaviours. The review integrates multiple theoretical perspectives while highlighting important gaps in current understanding, particularly regarding the relationship between self-injurious and outward-directed aggressive behaviours. Chapter Three details the qualitative method used to examine the professional's experiences working with adolescents who engage in self-injurious behaviours.

The research explores patterns in how these behaviours manifest and respond to intervention through semi-structured interviews with 12 professionals across various service contexts. The chapter provides a detailed discussion of participant recruitment, interview procedures, and thematic analysis approaches used to examine the data.

Chapter Four presents research findings organised around significant themes and subthemes. These themes illuminate important patterns in how professionals conceptualise and respond to adolescent self-injury while revealing significant gaps between evidence-based interventions and real-world implementation challenges.

Chapter Five discusses the theoretical and practical implications of these findings while considering limitations and future research directions. It examines how the professionals experiences align with the current theoretical understanding of NSSI and ODI behaviours,

while also revealing additional insights for supporting adolescents who engage in self-injurious behaviours. Future recommendations focus on enhancing professional training, improving service coordination, and developing more integrated treatment approaches.

Chapter Two: Literature Review

Understanding non-suicidal self-injury (NSSI) and outward-directed injurious (ODI) behaviours requires examination through multiple theoretical lenses due to their complexity. Exploring these multiple lenses provides further insight into the influences and risk factors that correlate to vulnerabilities to this behaviour in young people. Bronfenbrenner's ecological systems theory provides a comprehensive framework for understanding how various environmental contexts interact to influence and shape adolescent behaviour (Nock, 2009). This theoretical lens suggests that adolescent NSSI and ODI behaviour develop and are maintained through complex interactions between individual vulnerabilities and various environmental systems, from immediate family relationships to broader societal influences (Whitlock et al., 2014). The following theoretical frameworks can be understood as operating within and across these ecological systems (microsystem, mesosystem and macrosystem), with each framework highlighting different aspects of how person interactions and environment interactions combine to contribute to the risk and maintenance of self-injurious behaviours. For example, the microsystem represents the immediate environment where direct interactions occur through family, school and peer relationships and how emotion regulation develops through these interactions and experiences. The mesosystem encompasses the interactions between different microsystems, such as how family and peer relationships interact to shape behavioural patterns as adolescents learn to navigate these relationships across different contexts. Finally, the macrosystem represents the broader societal context such as cultural values, belief systems and social structures that influence and shape how injurious behaviour is understood and responded to within different communities.

Emotion Regulation Framework

Emotion regulation has emerged as a dominant theoretical framework for understanding self-injurious behaviour, with substantial evidence supporting its role as both a key risk factor and a primary function of the behaviour (Klonsky, 2009; Nock et al., 2009;

Muehlenkamp et al., 2013; Wolff et al., 2019). The relationship between emotion regulation and injurious behaviours appears to be complex, involving multiple potential pathways and influences that operate across different contexts and developmental stages (Cummings et al., 2021; Fox et al., 2015; Miller et al., 2019).

Several influential models have been proposed to explain the emotion regulatory function of NSSI. The experiential avoidance model suggests that injurious behaviours serve as a maladaptive strategy to escape or avoid unwanted emotional experiences, especially among individuals with poor distress tolerance and limited access to alternative coping mechanisms such as mindfulness-based techniques or social support (Haywood et al., 2024; Brereton & McGlinchey, 2020; Taliaferro et al., 2020). Similarly, Linehan's biosocial theory proposes that NSSI emerges from an interaction between biological vulnerability to emotional sensitivity and an invalidating environment that fails to teach adaptive emotion regulation skills. (Linehan, 1993; Turner et al., 2012; Feigenbaum, 2010).

The empirical evidence supporting emotion regulation theories presents some interesting complexities and contradictions within the research findings. While retrospective self-report studies consistently show that individuals who engage in NSSI report higher levels of emotion dysregulation (Miller et al., 2019; Robillard et al., 2021; Liu et al., 2023), experimental and physiological studies have proven more mixed results (Kranzler et al., 2018; Cummings et al., 2021; Sorgi et al., 2021).

For example, a meta-analysis by Fox et al. (2015) found that affect dysregulation was a significant but surprisingly weak predictor of NSSI (odds ratio = 1.05). This finding challenges emotion dysregulation as central in existing theoretical models and suggests that other factors may play equally important roles. However, as noted by Wolff et al. (2019) and Hasking et al. (2017), the broad definition of affect dysregulation used in many studies may mask stronger associations with specific aspects of emotion regulation that only become visible when studies examine distinct aspects of emotion regulation separately.

More recent research has begun to differentiate between various components of emotion regulation, finding that certain elements may be more strongly linked to injurious

behaviour than others. According to research by Perez et al. (2021) and others, limited access to emotion regulation strategies and non-acceptance of emotional responses appear to be particularly notable risk factors for these behaviours among young people. (Wolff et al., 2019; Glenn et al., 2019). The contradictions in this research potentially suggest the importance of moving beyond global assessments of emotion dysregulation to examine specific components that increase vulnerabilities, which may be more relevant for intervention.

An emerging area of investigation concerns the temporal dynamics between stress, emotion regulation, and injurious behaviours. Miller et al. (2019) found that individuals were most likely to engage in NSSI when experiencing higher-than-usual stress levels relative to their personal baseline rather than absolute levels of stress. Research by Robillard et al. (2021) and Houben et al. (2017) have supported this finding by highlighting the importance of considering individual thresholds rather than population-level vulnerabilities and risk factors. In research examining self-injurious behaviour in adolescents during the COVID-19 pandemic, Robillard et al.'s (2021) findings indicated that emotional distress predicted NSSI risk when it exceeded the participant's usual coping capacity. Furthermore, they demonstrated that the same objective stressor could trigger self-injurious behaviour in one individual while having a minimal impact on another, depending on their personal threshold to stress. This finding is supported by Houben et al.'s (2017) research, which captured real-time data on emotional states preceding self-injury episodes among adolescents. Their analysis found that emotional overwhelm relative to an individual's typical threshold best predicted NSSI risk rather than absolute emotional overwhelm.

Recent research has also started to examine potential mediating and moderating factors in the relationship between emotion regulation and harmful behaviours. Liu et al. (2023) found that self-compassion might mediate the link between difficulties in emotion regulation and harmful behaviours, building on past studies by Nock and Mendes (2008), which identified that self-efficacy to resist self-injury could be a significant protective factor. Furthermore, Tatnell et al. (2014) and Voon et al. (2014) showed that difficulties in emotion

regulation can strengthen the relationship vulnerabilities between stress and harmful behaviour.

However, other researchers argue that there are several design limitations in the current literature worth noting. For example, much of the existing research relies heavily on cross-sectional designs and retrospective self-report measures (Klonsky et al., 2011; Turner et al., 2012), making it difficult to establish causal relationships or examine real-time processes. As Klonsky et al. (2011) note, while these methods provide valuable insight into associations between variables, they cannot establish which factors ultimately drive the development of self-injurious behaviours or which simply co-occur with them. Additionally, more research is needed to examine how emotion regulation difficulties may manifest differently across development and various populations (Fitzgerald & Curtis, 2017; Zhou et al., 2024). Fitzgerald and Curtis (2017) argue that adolescents undergo significant changes to their emotion regulation capabilities across each developmental stage, suggesting that the relationship between emotion dysregulation and injurious behaviour may shift across these stages of development. Recent work by Zhou et al. (2024) also argues that cultural and demographic factors may influence both the expression of emotion and the choices about injurious behaviour.

Recent research reveals further patterns in how emotion dysregulation manifests in adolescent NSSI by examining its relationship with ODI behaviours. While traditional models have focused primarily on self-directed aggression, emerging evidence indicates that difficulties in emotion regulation may manifest in both inward and outward directions, often within the same individuals (Kranzler et al., 2018; Richmond et al., 2019). Studies examining the co-occurrence of NSSI and ODI have found that individuals who engage in both behaviours often report similar emotional triggers, suggesting common underlying regulatory mechanisms (Victor et al., 2018; Rawlings et al., 2021). An ecological momentary assessment study conducted by Victor et al. (2018) revealed that similar patterns of negative affect and interpersonal stress preceded both forms of aggressive expression, with the direction of aggression often shaped by the immediate environment. Additionally, Rawlings

et al. (2021) analysis of 1520 adolescents revealed that 40% of participants who engaged in NSSI also reported ODI behaviours. Furthermore, Perez et al. (2021) found that individuals who engage in both NSSI and outward-directed aggression show similar patterns of physiological arousal during stress induction, suggesting a common underlying dysregulation. However, whether this arousal manifests as NSSI or ODI appears influenced by immediate contextual cues and learned response patterns, suggesting the importance of environmental factors in determining the direction of aggressive behaviour.

Self Punishment Model

The self-punishment hypothesis suggests that for some individuals, injurious behaviours function as a means of expressing self-directed anger or internal criticism (Klonsky, 2009). This model proposes that individuals who engage in these behaviours may have internalised highly critical or self-punishing attitudes, which often stem from experiences of abuse, neglect, or persistent criticism in their early environments. The act of self-injury is then perceived as deserved or appropriate and aligns with the individual's sense of low self-worth.

The relationship between childhood experiences and self-punishment through NSSI has been well documented. Research indicates that self-criticism mediates the link between childhood maltreatment and NSSI (Glassman et al., 2007), revealing how early adverse experiences can lead to the development of a self-critical cognitive style that may develop into self-injurious behaviours. This relationship appears particularly significant during adolescence, which is known to be a developmental period characterised by heightened self-consciousness and sensitivity to social evaluation (Steinberg, 2010). During this time, individuals become increasingly focused on peer relationships and social standing, potentially making them more vulnerable to self-critical thoughts and feelings (Xavier et al., 2016). Xavier et al. (2016) demonstrated that self-critical thoughts often centred on young people’s perceived social inadequacies compared to their peers rather than specific personal failures, revealing how deeply social comparison becomes embedded in adolescents’ concept of self.

The nature of self-criticism in NSSI appears to be multidimensional as indicated by Gilbert et al.'s (2010) research. Gilbert et al. (2010) identified two distinct forms: feeling inadequate and inferior and experiencing disgust and hatred toward the self. This research emphasises that it is not simply the presence of self-critical thoughts that contribute to NSSI, but rather the emotional quality of that criticism, particularly feelings of anger and contempt directed at the self. This suggests that the affective component of self-criticism may be especially relevant to understanding why individuals engage in NSSI. The relationship between self-punishment and ODI adds additional complexity to existing theoretical frameworks. Research by Thompson et al. (2019) indicates that individuals who engage in NSSI often experience intense shame and self-directed hostility, which may manifest as self-punishment or outward-directed aggression. The movement between inward and outward aggression appears particularly pronounced among individuals with histories of childhood abuse, suggesting early experiences may influence the development of these behavioural patterns (Martinez-Torteya et al, 2017). Conducting a longitudinal study following 997 adolescents over three years, Martinez-Torteya et al. (2017) found that adolescents who experienced direct physical abuse showed higher rates of self-injury, while those who primarily witnessed domestic violence were more likely to engage in outward-directed aggressive behaviours. Their research suggests that early learning about aggressive expression occurs through both direct experience and through observational pathways.

Additionally, Gilbert et al.'s (2020) examination of shame-based reactions reveals that individuals may shift between self-attack and other-directed aggression as different strategies for managing intense shame experiences. The research questions whether the tendency to alternate between self-injury and outward-directed aggressive responses may reflect different stages of shame processing, with immediate self-attack through NSSI sometimes followed by externalised aggressive behaviour as a defensive manoeuvre.

Recent societal changes may also contribute to self-punishment tendencies as indicated in past research by Gilbert et al. (2010). Their research argues that In increasingly competitive societies, individuals may be more likely to compare themselves unfavourably to

others and treat themselves as objects. Furthermore, this societal context, combined with individual vulnerabilities and experiences, may create conditions where self-punishment through injurious behaviour becomes more likely in adolescents. (Gilbert et al., 2010).

Interpersonal and Social Learning Framework

Influential past research by Nock (2008) indicates that social factors play a vital role in understanding how injurious behaviours develop, are maintained, and potentially stop through various relational pathways and learning processes. More recent research has demonstrated that these behaviours can spread through social learning and contagion effects, where individuals may adopt self-injurious behaviours after exposure through peers, media, or other social channels (Jarvi et al., 2013). However, additional research suggests that social contagion or imitation fails to capture the complex social dynamics involved in these behaviours.

Rather than imitation or contagion, individuals often actively seek out self-injurious-related content and connections due to pre-existing vulnerabilities and difficulties. Lavis and Winter (2020) emphasise that this distinction is vital as it shifts focus from injurious behaviour as something that spreads between individuals to understanding the broader interpersonal context in which it develops. This context includes the significant role of family relationships, where research has consistently shown that individuals engaging in repetitive self-injury report significantly lower perceived social support from family members compared to those without self-injurious history (Muehlenkamp et al., 2013). Baetens et al. (2014) found that difficulties in parent-child relationships were strongly associated with an increased risk of injurious behaviours, particularly those characterised by high parental control and low support.

The influence of peer relationships adds another complex layer to this interpersonal framework. A study by Victor and Klonsky (2018) found that while peer influence and exposure to others who self-injure may increase the risk of injurious behaviour, positive peer

relationships and support can also serve as protective factors. The relationship between peer influence and injurious behaviour reveals significant contradictions between increased risk and protection.

Understanding the interpersonal functions of injurious behaviour is crucial for developing effective interventions. Nock (2008) argues that NSSI often serves as a means of communicating distress when other forms of communication feel ineffective, while Muehlenkamp et al., (2013) found that individuals frequently use injurious behaviour to elicit care or attention from others, influence others' behaviour, or avoid interpersonal demands.

The role of social support and connectedness in injurious behaviour recovery adds further complexity to this picture. Recent research by Simundic et al. (2024) emphasises that cultivating supportive relationships is associated with a decreased likelihood of injurious behaviour. However, they make an important distinction between perceived social support (the belief that support is available) and social connectedness (an enduring sense of connection to others). This distinction helps explain why some individuals may acknowledge having supportive people in their lives while still feeling fundamentally disconnected (Simundic et al., 2024).

Traditional intervention and prevention approaches focusing primarily on individual coping skills may need to expand to address interpersonal functioning more directly, including family dynamics and social support systems. Research by Young et al. (2013) demonstrated that NSSI behaviours often emerged in clusters within environmental settings where adolescents have close ongoing contact with peers. In inpatient psychiatric units, Young et al. (2013) found that adolescents who previously had not engaged in NSSI sometimes began this behaviour after exposure to peers who self-injured. Similarly, Prinstein et al. (2010) documented concerning patterns in school environments where self-injury could spread through friendship groups among adolescents who strongly identified with peers who engaged in these behaviours. This research suggests that prevention efforts need to consider both the risk and the protective aspects of social influence, particularly in settings where NSSI may spread through peer networks.

Family environments that model or accept aggressive behaviour while applying different consequences for self-injury versus outward-directed aggression may influence how adolescents learn to express aggressive impulses, according to research by Martinez-Torteya et al. (2017). When parents respond with greater concern or interventions to self-injury while showing more tolerance for outward aggression, adolescents internalise these different responses as guidelines for expressing emotional distress (Martinez-Torteya et al., 2017).

Additionally, research by Washburn et al. (2018) suggests that peer relationships also significantly influence the expression of self-injury or outward aggressive behaviour. Adolescents who engage in both NSSI and ODI often report distinct social contexts for each behaviour type, with NSSI more commonly occurring in private settings and outward-directed aggression in social situations (Washburn et al., 2018). According to this research, the pattern of engaging in different behaviours in specific environments suggests that adolescents learn complex social rules about when and where certain types of aggressive behaviours are considered acceptable.

The expansion and integration of social media have dramatically transformed how adolescents and young adults engage with content and connect with others who self-injure. Research indicates that individuals who engage in self-injurious behaviour have an increased online presence compared to those who do not (Mitchell & Ybarra, 2007), raising important questions about both risks and potential benefits of digital engagement. Studies have conducted extensive research on internet activity related to self-injurious behaviour over the past decade, examining various online communities, including YouTube, Tumblr, and Yahoo! (De Riggia et al., 2018; Lewis et al., 2012; Lewis et al., 2018; Seko & Lewis, 2018). Their findings reveal complex motivations for seeking support online (De Rigga et al., 2018; Rodham et al., 2013) and reveal the need for validation among users who self-injure (Lewis et al., 2012).

Research examining social media's influence on injurious content reveals pathways that can either heighten adolescent's vulnerability or provide protective benefits depending on

personal circumstances and how the content is engaged. Susi et al. (2023) found that viewing self-harm images online can have both harmful and protective effects, depending on the young person's mood and personal circumstances. Their systematic review identified several potential mechanisms for harmful effects, including normalisation of self-injurious behaviour, assortative relating, social learning, and social positive reinforcement. However, they also found evidence for protective mechanisms, including emotional regulation, aversion, and self-reflection.

Additionally, research by Moss et al. (2023) examined Instagram's role in self-injurious behaviour, finding that persistent use of the platform for extended periods of time was associated with a higher risk of psychological distress and NSSI. Their research is supported by Brown et al. (2020), revealing that self-harm posts often received higher levels of engagement than non-self-harm content, potentially reinforcing these behaviours through social validation. This online reinforcement may be particularly impactful for adolescents, for whom virtual endorsement can act as powerful peer influence (Sherman et al., 2018). Sherman et al.'s. (2018) research on adolescent social media psychology found that adolescents showed heightened neural activation in reward-processing regions when receiving social media validation, with this effect especially pronounced during periods of high stress.

However, online communities can also provide valuable support for individuals struggling with self-injurious behaviour. Lavis and Winter (2020) found that many users describe these online communities as "lifelines" during crises, offering sustained support and understanding that may be lacking in offline relationships. This aligns with findings from Shanahan et al. (2019) regarding the potential benefits of online interactions for individuals who self-injure. Their research revealed that participants actively sought out communities that could provide emotional understanding while simultaneously developing strategies for avoiding potentially triggering content. The anonymity offered by social media platforms can reduce stigma and shame, potentially enabling individuals to seek help more readily than they might in face-to-face situations (Shanahan et al., 2019).

Conversely, this type of online engagement also carries risks for adolescents. Brown et al. (2020) found that nearly half of their study participants reported following NSSI accounts for several months before engaging in self-injury themselves, suggesting potential social contagion effects. Additionally, Nesi et al. (2021) found that engaging with anonymous online contacts about NSSI was associated with higher rates of suicide attempts compared to discussing NSSI with known offline contacts, highlighting the potential dangers of reliance on online support systems.

The role of social media in injurious behaviours presents significant challenges for prevention and intervention efforts. While systemic review evidence suggests a need for enhanced content moderation and safeguarding policies (Susi et al., 2023), others argue that these restrictions might eliminate valuable sources of support and connection for vulnerable individuals (Smith & Cipolli, 2021). This tension between protection and support reflects the broader challenges in addressing injurious behaviour in a digital world.

Moreover, the interactive nature of social media has fundamentally altered how young people seek health-related information (Moorhead et al., 2013). Research by Lavis and Winter (2020) states that online communities often develop informal harm reduction approaches and share information about "safer" self-injury practices. While this content may appear concerning from an outside perspective, Lavis and Winter (2020) argue that it can serve protective functions by mitigating more dangerous behaviours.

Section Two: Risk Factors and Contextual Influences

Individual Risk Factors

Individual risk factors for injurious behaviour do not operate in isolation but form an interconnected web of vulnerabilities. Early experiences, especially traumatic events during childhood, can trigger cascading effects that influence neurobiological, psychological, and psychiatric systems, leading to an increased risk of injurious behaviours through multiple pathways.

Examining individual risk factors through an ecological systems perspective reveals how personal vulnerabilities interact with environmental influences to create pathways towards injurious behaviours. For instance, the effect of childhood trauma on the risk of such behaviours cannot be understood in isolation but rather through its effects across multiple systemic levels. This includes neurobiological changes at the individual level, disrupted family relationships within the microsystem and potential barriers to obtaining support within broader societal frameworks (Liu et al., 2018).

Childhood Trauma and Abuse

Childhood abuse and trauma emerge consistently as significant risk factors for injurious behaviours across studies. Research demonstrates that a history of emotional, physical, or sexual abuse substantially increases the likelihood of engaging in NSSI or ODI across diverse populations (Liu et al., 2018; Witt et al., 2021). This relationship appears to operate through multiple pathways, with both direct and indirect effects on NSSI and ODI risk.

Research indicates the impact of childhood abuse on injurious behaviour risk among adolescents appears to be mediated by several factors and vulnerabilities. Auerbach et al.(2014) found that the association between child abuse and injurious behaviour is partially mediated by psychiatric comorbidity, suggesting that the impact of trauma on mental health may create additional vulnerability to NSSI and ODI among young people. Additionally, research by Cloutire et al. (2010) suggests that the relationship appears to be dependent on the amount of exposure to abuse, indicating that repeated or prolonged exposure to maltreatment results in more complex presentations of symptoms. Research by Kessler (2000) demonstrates that multiple or chronic traumatic experiences may be particularly damaging, as individuals who experience abuse rarely encounter a single traumatic event, but rather typically experience several episodes across different types of abuse.

Neurobiological Vulnerabilities

Research indicates that early life adversity can profoundly impact neurobiological development and create vulnerabilities that may increase NSSI and ODI risk among young people. Auerbach et al. (2014) found that trauma during critical developmental periods can negatively affect neurogenesis, synaptic development, and myelination, potentially compromising both structural and functional brain development. These findings build on past research by Teicher et al. (2003) on the alterations in the amygdala and corpus callosum caused by early trauma, which may compromise executive functioning and emotion regulation capabilities and create lasting effects on cognitive and emotional development. Further studies suggests that trauma during particular developmental periods may have differential effects on brain development and subsequent injurious behaviour risk, indicating that the timing of abuse during these stages appears significant. (Andersen et al., 2008).

A longitudinal study by Thompson et al. (2020) identified that early childhood trauma can predict both self-injury and outward-directed aggressive behaviours. However, the specific manifestation of behaviour appears moderated by individual attachment style and emotion regulation capabilities. Their research suggests that adolescents with disorganised attachment patterns show particularly high rates of alternating between self-injury and outward-directed aggression, suggesting that early relationship experiences may influence whether individuals develop fixed or adaptable patterns of aggressive behaviour.

While impulsivity has traditionally been considered a key risk factor, the evidence presents a more complex picture. Self-report measures in a study by Auerbach et al. (2014) consistently show higher impulsivity among those who engage in injurious behaviours, but behavioural and biological measures have documented more mixed and complex results, potentially reflecting the impact of trauma on both perceived and actual impulse control.

Pain processing represents another crucial neurobiological factor, with individuals who engage in NSSI and ODI often reporting reduced pain sensitivity during episodes (Nock, 2009). While this pain analgesia has been consistently documented across studies, debate by researchers such as Van Heeringen and Mann (2014), continues about whether it

represents a pre-existing vulnerability, emerges through habituation, or results from endogenous opioid release during this behaviour. The relationship may be further complicated by trauma history as early abuse can affect pain processing systems and stress response mechanisms (Van Heeringen and Mann, 2014).

Psychological Characteristics

Psychological vulnerabilities often emerge in response to early trauma and adverse experiences, creating additional pathways to NSSI and ODI risk for adolescents. Emotion dysregulation consistently appears as a central feature, with individuals who engage in injurious behaviours showing difficulties in emotional awareness, acceptance, and regulation (Gratz et al., 2014; Hasking et al., 2017). These difficulties may be particularly pronounced among those with trauma histories, as early abuse can compromise the development of adaptive emotion regulation strategies (Thompson et al., 2020).

Shame and self-criticism appear to play significant mediating roles between childhood trauma and injurious behaviour. Glassman et al. (2007) found that self-criticism mediates the link between childhood maltreatment and injurious behaviours, suggesting that negative self-perceptions developed in response to abuse may increase vulnerability to self-injury. This aligns with findings by Koposov et al. (2021) that identify low self-awareness and high self-awareness as particularly significant personality characteristics among those who engage in injurious behaviours.

Psychiatric Comorbidity

The relationship between injurious behaviours and psychiatric comorbidity reflects the complex interaction of traumatic experiences, neurobiological vulnerabilities, and psychological characteristics. While NSSI has historically been associated primarily with borderline personality disorder (BPD), research increasingly demonstrates its occurrence across a wide range of mental health conditions (Buelens et al., 2020). A study by Saunders and Smith (2016) indicates that an estimated 80% of individuals presenting with self-harm

have at least one concurrent mental disorder, commonly including depression, anxiety, and substance use disorders.

Early trauma appears to play a crucial role in this comorbidity. Bentley et al. (2020) found that child maltreatment is associated with greater psychiatric comorbidity in youth and young adults, potentially reflecting the broad impact of trauma on psychological development. However, some studies suggest that when NSSI is controlled for statistically, many individuals no longer meet diagnostic criteria for other disorders (Buelens et al., 2020). This raises important questions about whether psychiatric comorbidity represents a genuine risk factor for injurious behaviours or if both emerge from common underlying vulnerabilities, particularly early trauma.

Lewis et al. (2017) argue that critical consideration must also be given to how diagnostic frameworks influence our understanding of individual risk factors. The proposed inclusion of NSSI as a distinct disorder in DSM-5 has generated significant debate about whether pathologising this behaviour may inadvertently increase stigma or minimise attention to underlying factors, particularly trauma (Lewis et al., 2017). Highlighting broader questions about how individual risk factors are conceptualised and measured within current diagnostic paradigms.

Family Environment and Dynamics

The quality of parent-child relationships emerges as particularly significant in determining the direction of injurious behaviour. Taliaferro et al. (2020) found that parent connectedness demonstrated different levels of protective influence against self-injury and outward-directed aggression, suggesting the importance of examining how early attachment relationships might influence the specific manifestation of aggressive impulses. This aligns with findings that lower levels of perceived family support distinguish between individuals engaging in predominantly self-injurious behaviour and mixed aggressive behavioural patterns (Muehlenkamp et al., 2013; Whitlock et al., 2013).

Family economic strain and lower parental education levels have been associated with increased risk in injurious behaviours through various pathways including reduced parental capacity to invest in children's development, increased family stress, and limited access to support resources (Stea et al., 2024). However, parental support can buffer against these socioeconomic risk factors, highlighting the potential protective role of positive family relationships even in challenging circumstances (Baetens et al., 2014; Whitlock et al., 2018).

Family environments appear to play a significant role in shaping the expression of aggressive behaviour. Recent research has revealed an important insight into the dynamics between exposure to different forms of family violence and subsequent behavioural patterns. Thompson et al. (2020) found that adolescents who primarily witnessed domestic violence showed different patterns of aggressive behaviour compared to those who experienced direct abuse, with witnessing violence associated with higher rates of outward-directed aggression and experiencing abuse linked to increased risk of self-injury.

Additionally, research by Tatnell et al. (2014) revealed that parental support can moderate both the direct relationship between environmental stressors and injurious behaviours, as well as the indirect pathway through emotion regulation. These findings suggest that supportive family environments may protect against injurious behaviours through multiple pathways, including enhanced emotion regulation capabilities and the increased likelihood of adaptive help-seeking behaviours. (Claes et al., 2015)

Peer Relationships and Social Pressure

The peer environment presents a complex picture of both risk and protection. Bullying victimisation shows particularly strong associations with injurious behaviours, with research indicating that adolescents who experience bullying are 2-3 times more likely to engage in self-injury (Claes et al., 2015; O'Connor et al., 2009). This relationship appears to be partially influenced by depressive symptoms and low self-esteem, suggesting that the impact of peer victimisation on injurious behaviours operates through both direct and indirect pathways (Hay & Meldrum, 2010; Noble et al., 2011).

While peer relationships can provide valuable support, research indicates their protective effects may be less robust than family support. Research by Muehlenkamp et al. (2013) found that friend support, while beneficial, showed weaker associations with NSSI prevention compared to family support. This finding has been replicated across multiple studies (Taliaferro & Muehlenkamp, 2017; Whitlock et al., 2013), suggesting that while peer relationships contribute to resilience, they may not offset risk factors as effectively as strong family connections.

Social pressure emerges as another significant environmental factor, manifesting through academic expectations, body image concerns, and social media engagement. Stea et al. (2024) found that high social pressure was directly associated with injurious behaviours in females, though this relationship was moderated by social support. The study highlighted how environmental stressors interact with protective factors to influence injurious behaviour risk. Additional research by Yurdagul et al. (2019) indicates that perceived academic pressure and competitive environments may increase the total stress burden and potentially elevate injurious behaviour risk.

Protective Environmental Factors

Research consistently identifies several key protective factors in the social environment, with parent-child relationships emerging as particularly crucial. Studies demonstrate that parental support can moderate the relationship between environmental stressors and injurious behaviours (Claes et al., 2015; Tatnell et al., 2014), with this buffering effect appearing especially important during periods of increased vulnerability, such as the transition to adolescence (Taliaferro & Muehlenkamp, 2015). Research by Whitlock et al. (2018) demonstrates that while other protective factors such as strong school connectedness, involvement in structured activities and access to supportive adult mentors outside the family system have demonstrated protective effects, these elements appear most effective when they complement, rather than replace, strong family support systems.

This suggests a hierarchical nature to protective factors, where parental support provides a foundation that other protective elements can build upon

Cultural and Societal Influences

Research suggests that while certain cultural differences exist in injurious behaviours presentation and prevalence, many underlying patterns and influences appear to operate similarly across cultural contexts. Gholamrezaei et al.'s (2017) study comparing injurious behaviours across different cultural contexts found some variation in preferred methods and gender patterns while noting many commonalities in core features like age of onset, general prevalence rates, and primary psychological functions. However, interpreting apparent cultural differences requires careful consideration of research method limitations and cultural context. For example, research by Black and Kisely (2018) states that what constitutes as NSSI may vary between cultures, as certain forms of bodily modification or injury may hold cultural or religious significance rather than representing pathological self-injury. Additionally highlighting the importance of culturally informed assessment approaches that can distinguish between culturally sanctioned practices and clinically concerning self-injury (Black & Kisely, 2018).

The role of cultural stigma and shame emerges within the research as a critical factor influencing behaviour across cultural and demographic groups. Evidence shows that stigma influences whether individuals reach out for help (Cleary, 2017; Rowe et al., 2014), with negative impacts on treatment outcomes, isolation and rejection (Markowitz et al., 2011). Stigma towards people who engage in injurious behaviours has been observed among healthcare staff (Mackay & Barrowclough, 2005), healthcare students (Law et al., 2009), and nurses (Karman et al., 2015), suggesting negative attitudes across healthcare contexts.

Research by Young et al. (2014) consistently found elevated injurious behaviour risk among various minority and marginalised populations, including LGBTQ+ youth, ethnic minorities, and alternative youth subcultures. This heightened risk appears linked to experiences of minority stress, the chronic stress of stigmatisation, discrimination, and

cultural alienation (Young et al., 2014). However, the relationship between cultural identity and injurious behaviours risk is complex regarding risk and protective factors. While minority stress can increase vulnerability, cultural identity and community connection may also serve protective functions. Research suggests that a strong cultural identity can protect against injurious behaviour risks, particularly when connected with family and community support (Gholamrezaei et al., 2017).

Research examining injurious behaviours in Eastern cultural contexts highlights distinct culturally specific risk factors and manifestations. Research by Chen et al. (2021) states that most NSSI research has been conducted in Western developed countries, creating potential blind spots in understanding how cultural and social values uniquely shape injurious behaviour risk in different contexts. Their research in China identified several culturally specific risk factors, including sex bias discrimination, overly high academic expectations, and culturally influenced parenting styles. Further documenting how broader cultural attitudes and biases can create unique pathways to injurious behaviours risk for specific demographic groups. The manifestation of aggressive behaviour appears to be significantly influenced by cultural norms and expectations. A study by Zhang et al. (2020) comparing Asian and Western populations found that individuals from cultures emphasising emotional restraint and social harmony may be more likely to direct aggressive impulses inward, while those from cultures with different norms around emotional expression might show higher rates of outward-directed aggression. Their findings suggest that cultural scripts about acceptable forms of emotional expression may influence whether individuals develop predominantly self-injurious or outward-directed aggressive behaviours.

The interpretation and meaning of injurious behaviours are inherently shaped by cultural context. LeCloux (2013) argues through the lens of symbolic interactionism that injurious behaviours take on different meanings depending on how it is socially constructed within specific cultural contexts. The symbolic meaning of injurious behaviours emerges through social interactions and responses from others, where reactions of horror or shame versus

understanding and acceptance shape how the behaviour becomes symbolically encoded within societies (LeCloux, 2013).

Mannekote Thippaiah et al. (2021) argue that injurious behaviours reflect broader processes of modernisation, where increasing interpersonal and intrapersonal stressors combine with the medicalisation of maladaptive behaviours. In developing countries, risk factors like poverty and family dynamics may create substantial vulnerability while simultaneously limiting access to support. The rapid pace of societal change in these contexts may create windows of vulnerability as young people navigate tensions between traditional values and modernising influences (Mannekote Thippaiah et al., 2021)

Freedland et al. (2023) conducted an extensive international study with 2,826 participants that revealed complex interactions between cultural background, gender, and behavioural intent. Their research demonstrated that while certain forms of self-injury like cutting appeared prevalent across cultures, specific methods showed distinct cultural patterns reflecting local contexts and available means. For example, the study found that tissue-damaging behaviours were more prevalent in cultures with greater acceptance of expressed anger.

These findings collectively demonstrate the crucial importance of considering cultural context in understanding and addressing self-injurious behaviours. They suggest that effective intervention requires an appreciation of how cultural factors shape not only the choice of behavioural expression but also its underlying meaning and function. This understanding proves particularly valuable for developing culturally responsive assessment and treatment approaches that can address the full spectrum of self-injurious behaviours while honouring cultural diversity.

Help-Seeking Barriers

Cultural factors significantly impact help-seeking behaviours and access to care for injurious behaviours. Research by Aguirre Velasco et al. (2020) identified stigma and negative beliefs about mental health services as the most frequently cited barriers to help-

seeking across cultures. These barriers appear particularly pronounced for certain populations, such as LGBTQ+ youth and ethnic minorities, who face unique challenges accessing culturally competent care due to systemic gaps in provider training and culturally appropriate services (Black & Kisely, 2018).

Developmental Considerations

Research demonstrates that adolescence involves an intricate connection between neurobiological, emotional, and social changes that may create heightened susceptibility for injurious behaviours (Cummings et al., 2021; Ahmed et al., 2015; Steinberg, 2010).

From a neurobiological perspective , adolescence involves a "developmental mismatch" between different neural systems that creates a period of particular vulnerability (Steinberg, 2008). Studies demonstrate that emotion-generating limbic regions like the amygdala develop earlier and show heightened reactivity during adolescence, while prefrontal regulatory regions mature more slowly (Casey et al., 2008; Steinberg, 2008; Somerville & Casey, 2010). The emotional salience network, including the amygdala and anterior cingulate cortex, shows increased activation to emotional and social stimuli, while prefrontal regulatory regions continue to mature (Blakemore & Mills, 2014). This temporal gap between heightened emotional reactivity and still-developing regulatory capabilities creates a period of risk as adolescents experience intense emotions but lack fully mature capabilities to regulate them effectively (Crone & Dahl, 2012; Ahmed et al., 2015).

The vulnerability window is further amplified by changes in stress response systems. The hypothalamic-pituitary-adrenal (HPA) axis shows increased activity during puberty, with elevated cortisol production contributing to emotional reactivity (Ballard et al., 2010; Brown & Plener, 2017). Studies have found dysregulation of the HPA axis in adolescents who engage in NSSI, with altered cortisol patterns potentially increasing sensitivity to stress (Kaess et al., 2012; Groschwitz et al., 2016). Additionally, research indicates changes in pain processing and endogenous opioid systems that may influence how adolescents experience and respond to NSSI (Brown & Plener, 2017).

The developmental trajectory of aggressive behaviour directionality provides crucial insights for understanding NSSI risk during adolescence. Recent research by Steinberg et al. (2018) indicates that the "developmental mismatch" between emotional reactivity and regulatory capabilities appears to influence not only the likelihood of aggressive behaviour but also its direction. Adolescents may shift between self-directed and outward-directed aggression as they navigate intense emotions with still-developing regulatory capabilities (Steinberg et al., 2018).

Neuroimaging studies reveal that adolescents who engage in both NSSI and outward-directed aggression show distinct patterns of neural activation during emotion processing tasks compared to those who exhibit only one form of aggressive behaviour (Martinez et al., 2021). This suggests that the neural circuits involved in processing and responding to emotional stimuli may influence the directionality of aggressive responses during this critical developmental period.

The onset of NSSI must also be understood within the context of critical identity development processes that occur in adolescence. As Breen et al. (2013) argue, NSSI may become entangled with identity formation as adolescents struggle to develop a coherent sense of self. The behaviour can become incorporated into self-concept and even provide a source of identification, particularly through online communities. Shame-prone adolescents may be particularly vulnerable as they navigate identity formation challenges while experiencing heightened emotional reactivity and peer sensitivity (Mahtani et al., 2018; Xavier et al., 2016).

Social development during this period adds another crucial layer. Adolescents show heightened neural sensitivity to social evaluation and peer influence compared to other age groups (Blakemore & Mills, 2014; Crone & Dahl, 2012). A study by Chein et al. (2009) demonstrates that the mere presence of peers increases activation in reward-processing regions and risk-taking behaviour in adolescents but not adults. The adolescent brain shows exaggerated responses in socio-emotional reward centres when making decisions in the presence of peers compared to adults. For vulnerable youth, difficulties navigating these

social changes may increase the risk for NSSI as a means of coping with interpersonal distress.

These various developmental factors likely interact in complex ways to shape risk trajectories. The temporal disjunction between rapid rises in reward sensitivity and social-emotional reactivity around puberty, coupled with the slower maturation of prefrontal regulatory regions, may create a window of heightened vulnerability (Steinberg, 2010).

This research highlights adolescence as a period of both vulnerability and opportunity - while risk may be heightened, the plasticity of the adolescent brain also creates possibilities for positive intervention (Crone & Dahl, 2012). Understanding that certain neural and social changes create predictable windows of vulnerability allows for more strategic timing of preventive interventions. Programs that support emotion regulation development, healthy identity formation, and adaptive peer relationships during early adolescence may help prevent the onset of NSSI before maladaptive patterns become established (Steinberg, 2008; Ahmed et al., 2015).

Section Three: Therapeutic Approaches

Evidence-based Interventions

The pressing clinical need to identify and implement effective interventions is underscored by NSSI's role as a risk factor for suicide attempts, with longitudinal research demonstrating that NSSI increases the likelihood of future suicidal behaviour (Clarke et al., 2019). Despite its prevalence and clinical significance, establishing evidence-based treatments for adolescent NSSI has proven challenging, with many interventions showing promise but requiring further validation through rigorous research.

The treatment landscape for adolescent NSSI has evolved considerably over the past two decades, with several therapeutic approaches demonstrating varying levels of empirical support. Recent meta-analyses and systematic reviews have highlighted both promising developments and persistent gaps in the evidence base (Kothgassner et al., 2020; Bettis et al., 2020). While multiple interventions show potential efficacy, the field has only recently identified its first well-established treatment protocol .

Dialectical Behaviour Therapy for Adolescents

Dialectical Behaviour Therapy for Adolescents (DBT-A) has emerged as the most robustly supported intervention, achieving the designation of "well established" treatment through multiple independent randomised controlled trials (Kothgassner et al., 2020). When compared to active control conditions, DBT-A demonstrates superior outcomes with moderate effect sizes (d = 0.51) in reducing self-injurious behaviours, while also showing promising results for decreasing suicidal ideation (d = 0.48). These findings represent a significant advancement in the field, as DBT-A is currently the only intervention to meet this rigorous standard of evidence.

The treatment landscape for adolescent ODI behaviour has evolved to recognise the frequent co-occurrence of self-directed and outward-directed aggression. Dialectical Behaviour Therapy for Adolescents (DBT-A) has demonstrated effectiveness in addressing both behavioural patterns, with recent adaptations specifically targeting the underlying

emotional dysregulation that may manifest in either direction. Kothgassner et al., (2020) found that DBT-A showed comparable effect sizes in reducing both self-directed (d = 0.51) and other-directed (d = 0.48) aggressive behaviours, suggesting its utility for addressing multiple manifestations of dysregulation.

The treatment's effectiveness appears to derive from its comprehensive approach to emotion dysregulation, which research identifies as a primary maintaining factor for NSSI behaviours. DBT-A integrates individual therapy sessions focused on behavioural chain analysis and skill development with group sessions emphasising peer learning and skill generalisation (MacPherson et al., 2013). A distinguishing feature is its structured inclusion of family involvement through multi-family groups, where both adolescents and caregivers learn core skills in emotion regulation, interpersonal effectiveness, and mindfulness .

However, implementation of DBT-A presents notable challenges that warrant consideration. The treatment typically requires a 4–6-month commitment, including at least two sessions per week, making it both time and resource-intensive. Additionally, DBT-A demands significant provider training and ongoing supervision to maintain treatment fidelity (Clarke et al., 2019). These practical constraints may limit accessibility, particularly in communities with restricted resources or where comprehensive DBT training is not readily available.

Cognitive Behavioural Therapy Approaches

Cognitive Behavioural Therapy (CBT) approaches have demonstrated mixed but promising results in treating adolescent NSSI. Evidence suggests that combining individual and family-based CBT components may be most effective (Bettis et al., 2020). Recent trials have shown significant reductions in suicide attempts compared to enhanced treatment as usual, though effects on NSSI specifically have been less consistent (Asarnow et al., 2017). The integration of suicide-specific modifications, such as developing reasons for living and crisis problem-solving skills, appears to enhance treatment outcomes. Increasingly, CBT

approaches have incorporated modules addressing both forms of aggressive behaviour. Evidence suggests that understanding the shared cognitive processes underlying both NSSI and other-directed aggression may enhance treatment effectiveness. Recent trials incorporating this integrated perspective have shown promising results, particularly when treatment protocols explicitly address the potential for behavioural switching between NSSI (self-directed) and outward-directed aggression (Asarnow et al., 2017).

Mentalisation-Based Treatment and Other Psychodynamic Approaches

Mentalisation-Based Treatment for Adolescents (MBT-A) represents another promising intervention, grounded in attachment theory and focused on enhancing adolescents' ability to understand behaviours concerning mental states. In a significant randomised controlled trial, Rossouw and Fonagy (2012) demonstrated that adolescents receiving MBT-A showed marked reductions in self-injury compared to treatment as usual. Importantly, improvements in mentalisation and attachment status mediated these treatment effects, providing valuable insight into potential mechanisms of change. However, more recent trials of related approaches, such as Attachment-Based Family Therapy, have yielded mixed results (Diamond et al., 2019), highlighting the need for further replication studies.

Treatment as Usual: Unexpected Findings and Implications

A compelling pattern has emerged from recent meta-analytic work regarding the efficacy of treatment-as-usual (TAU) conditions. Kothgassner et al., (2020) found that TAU and enhanced usual care demonstrated medium to large effect sizes in reducing self-harm ($d = 0.60$), suicidal ideation ($d = 0.87$), and depressive symptoms ($d = 0.51$). These findings suggest that regular therapeutic contact, even without specialised intervention protocols, may offer meaningful benefits for adolescents engaging in NSSI.

This unexpected effectiveness of TAU raises important questions about the essential components of successful intervention. One hypothesis suggests that recent years have seen the integration of evidence-based practices, such as skills training and distress tolerance techniques, into routine clinical care . Alternatively, the therapeutic relationship and

regular supportive contact may play a more significant role in recovery than previously recognized (Kothgassner et al., 2020).

The Role of Family Involvement

Family involvement emerges as a critical component across successful interventions, though its implementation requires careful consideration. Evidence consistently demonstrates that treatments incorporating active family participation achieve superior outcomes (Bettis et al., 2020). This involvement may take various forms, including multi-family skills groups, parent training, or family therapy sessions. The benefits appear to stem from multiple mechanisms: enhanced generalisation of skills to the home environment, improved family communication, and increased parental capacity to support emotion regulation .

However, important considerations exist regarding family involvement. Kothgassner et al., (2020) emphasise that therapeutic engagement with primary caregivers may not always be beneficial or appropriate, particularly in cases of abuse, neglect or when family dynamics contribute to self-injurious behaviours. This suggests the need for careful assessment of family contexts when determining treatment approaches.

Treatment Access and Diversity Considerations

The therapeutic landscape for adolescent non-suicidal self-injury (NSSI) presents troubling disparities in both research and access to evidence-based treatments. Although recent studies have improved our comprehension of treatment efficacy, significant uncertainties persist regarding effectiveness across various demographic groups. This issue is particularly alarming due to the higher NSSI risk documented among marginalized youth.

A thorough review conducted by Bettis et al. (2020) reveals a concerning trend in intervention research, despite elevated rates of NSSI among LGBTQ+ youth and racial/ethnic minorities, most treatment studies have not systematically investigated how responses differ across these demographic categories. This methodological shortcoming compromises the

capability to create targeted interventions for those who may benefit from them the most. Limited studies assessing treatment outcomes across diverse groups indicate that Dialectical Behaviour Therapy for Adolescents (DBT-A) shows potential for minority youth; however, these results necessitate validation through larger randomised controlled trials involving varied samples.

Challenges in implementation extend beyond research limitations to tangible barriers in accessing care. Issues such as transportation difficulties, insurance limitations, and scheduling conflicts disproportionately affect marginalised communities (Gholamrezaei et al., 2017). These practical barriers intersect with cultural factors that shape help-seeking behaviours and engagement with treatment. A systematic review by Black and Kisely (2018) indicates how cultural stigma and the absence of culturally appropriate services can discourage minority youth from seeking professional assistance, even when such resources are technically available.

Research by Mannekote Thippaiah et al. (2021) examining NSSI in developing nations offers critical insights into how socioeconomic conditions influence both risk factors and intervention requirements. Their findings indicate that while fundamental therapeutic principles may be applicable across different contexts, successful implementation necessitates careful consideration of local resources and cultural frameworks related to emotional distress.

The intersection between gaps in research and barriers to access generates a troubling cycle, for instance, limited diversity in treatment trials results in interventions that may fail to meet the needs of marginalised youth, while practical challenges hinder many from obtaining even existing evidence-based treatments. To disrupt this cycle, it is essential to simultaneously broaden research inclusion criteria and devise innovative service delivery methods capable of overcoming access barriers.

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Emerging Interventions and Novel Approaches

Recent developments in intervention research reflect efforts to address existing treatment gaps, particularly regarding accessibility and acute crisis response. Digital health interventions have emerged as a promising avenue for expanding treatment access, especially given the ubiquitous use of smartphones among adolescents. Čuš et al., (2021) found that young people express openness to digital interventions for managing NSSI, though they emphasise the need for these tools to provide immediate support during crisis moments and maintain strong privacy protections.

Digital interventions may serve multiple functions, from providing skills reinforcement between sessions to offering real-time support during periods of acute distress. However, research indicates that these tools should complement rather than replace traditional therapeutic relationships, as adolescents consistently emphasise that "apps cannot replace people" (Čuš et al., 2021). The development of effective digital interventions requires careful attention to both therapeutic content and user engagement factors.

Implementation Challenges and Clinical Considerations

The translation of evidence-based treatments into routine clinical practice faces several significant challenges. The intensive nature of treatments like DBT-A, which require substantial provider training and ongoing supervision, may strain the resources of community mental health centres. However, recent research suggests that these evidence-based protocols can be successfully implemented in community settings, though questions remain about optimal implementation strategies (Flynn et al., 2018).

A persistent clinical challenge involves supporting patients who have acquired therapeutic skills but struggle to implement them during moments of intense emotional distress. This phenomenon highlights the importance of incorporating real world skill coaching and developing strategies to enhance skill generalisation to real-world contexts. The integration of family support and technological tools may offer promising solutions to this common treatment obstacle.

Several key priorities emerge for advancing the treatment of adolescent NSSI. First, there is a pressing need for more research examining treatment effectiveness across diverse populations, including systematic evaluation of outcomes for LGBTQ+ youth and racial/ethnic minorities. Second, investigation of treatment mechanisms could help identify the most essential components of effective interventions, potentially leading to more efficient and accessible treatment models. The development of scalable interventions represents another crucial direction, particularly given the widespread nature of NSSI and limited availability of specialised treatments. This might include exploring stepped-care models, where intensity of intervention matches severity of need, or developing briefer adaptations of evidence-based treatments that maintain therapeutic effectiveness while reducing implementation barriers.

The treatment landscape for adolescent NSSI has evolved significantly, with DBT-A emerging as the first well-established intervention and several other promising approaches demonstrating preliminary efficacy. The unexpected effectiveness of treatment as usual suggests that common factors, such as therapeutic relationship and regular clinical contact, may play a more significant role than previously recognized. While substantial progress has been made, significant challenges remain in ensuring that effective treatments are accessible to all adolescents who need them.

Real-world Application

The complex nature of NSSI creates unique challenges for professionals across various settings, with research revealing important distinctions in experiences, competencies, and support needs between clinical and non-clinical providers. Understanding these differences proves crucial for developing effective implementation strategies that bridge the gap between evidence-based interventions and real-world application.

Healthcare professionals, particularly those in emergency departments and mental health settings, commonly experience significant emotional responses when working with individuals who self-injure. Research by Muehlenkamp et al., (2013) found that professionals frequently report feelings of powerlessness, uncertainty, and fear when treating NSSI, though these reactions vary based on training and experience level. Mental health nurses appear particularly affected, experiencing considerable emotional burden despite maintaining generally positive attitudes toward patients (Pintar Babič et al., 2020). This emotional impact warrants attention given its potential influence on treatment delivery and professional wellbeing.

Professional training emerges as a critical mediating factor in treatment effectiveness. Healthcare workers with specialised NSSI training demonstrate more positive attitudes and greater confidence compared to those without such preparation (Muehlenkamp et al., 2013). However, significant disparities exist in access to training opportunities. School counsellors, who often serve as first-line responders, frequently report feeling inadequately prepared to address NSSI effectively despite regularly encountering it in their work (Netherlands-Maxie, 2024). This gap between professional responsibilities and preparation capabilities particularly affects non-clinical providers.

The treatment setting itself significantly influences professional experiences and capabilities. Research by Pintar Babič et al., (2020) revealed that nurses working in psychotherapeutic units reported less fear and uncertainty when treating NSSI compared to those in acute or outpatient settings. These differences appear linked to several factors, including regular supervision, stronger theoretical understanding, and more experience with

successful treatment outcomes. Such findings suggest that environmental and institutional support structures play crucial roles in enabling effective intervention.

Professional responses significantly impact help-seeking behaviours among individuals who self-injure. Studies consistently demonstrate that negative or dismissive professional attitudes can deter individuals from seeking future help (Rosenrot & Lewis, 2020). Research by Roed et al., (2023) found that emergency department experiences particularly influence whether individuals pursue future care, with negative experiences potentially leading to treatment avoidance and increased risk. These findings highlight the critical importance of ensuring positive initial professional encounters.

The evolution of professional understanding regarding NSSI presents both progress and persistent challenges. While conceptualisations have moved beyond simplistic characterisations of attention-seeking behaviour, some problematic attitudes persist. Watson and Walker (2023) found that healthcare providers sometimes make potentially harmful distinctions between "genuine" and "attention-seeking" self-injury, affecting the quality of care. Such findings underscore the ongoing need for professional education that addresses implicit biases and promotes evidence-based understanding.

Interdisciplinary collaboration presents challenges in NSSI treatment implementation. Research by Hadfield et al., (2009) reveals how different professional groups may approach NSSI through distinct theoretical frameworks, potentially leading to fragmented care delivery. This fragmentation appears especially pronounced between clinical and non-clinical settings, where differences in training, resources, and institutional support can create barriers to coordinated intervention efforts.

School-based professionals face unique implementation challenges that warrant specific attention. Teachers and school counsellors must navigate complex roles as both educators and mental health supporters, often without adequate training or resources (Elyoseph & Levkovich, 2024). This role complexity creates significant stress while potentially compromising support quality. De Stefano et al., (2012) found that while clinical trainees

typically received regular supervision specific to NSSI cases, non-clinical professionals often lacked structured support systems for managing these situations.

The impact of cultural competency training on professional responses remains understudied, particularly regarding work with diverse populations. Additionally, research examining how different professional groups can most effectively collaborate in supporting individuals who self-injure, especially during critical transition periods between services, would prove valuable for developing more integrated care systems.

These findings collectively suggest that improving NSSI treatment implementation requires a multi-faceted approach that addresses both individual professional needs and systemic barriers. This includes developing targeted training programs for non-clinical professionals, establishing clearer pathways for collaboration between different professional groups, and ensuring adequate support structures across all treatment settings. Such comprehensive approaches appear crucial for bridging the gap between evidence-based interventions and effective real-world implementation .

Summary

Drawing upon both the extensive literature review and my clinical experience, several key themes emerge that demonstrate the pressing need for research examining professional experiences with adolescent self-injurious behaviours. The literature reveals NSSI as a significant public health concern, with prevalence rates between 17-50% among adolescent populations (Wilson et al., 2016; Garisch & Wilson, 2010). While traditionally conceptualised separately, emerging research suggests non-suicidal self-injury (NSSI) and outward-directed injurious (ODI) behaviours may represent different expressions of similar underlying struggles with emotion regulation and distress management (Kranzler et al., 2018; Richmond et al., 2019).

The relationship between physical and emotional pain emerges as particularly significant in understanding these behaviours. Research indicates that both NSSI and ODI may serve to transform internal emotional pain into more concrete, manageable physical sensations

(Nock & Mendes, 2008). This understanding challenges earlier conceptualizations that treated self-directed and other-directed aggression as fundamentally different phenomena, suggesting instead that they may represent different pathways for expressing similar underlying distress.

Digital environments have fundamentally altered how these behaviours develop and spread among adolescent populations. Studies demonstrate that social media creates unprecedented pathways for emotional contagion while simultaneously reducing opportunities for development of adaptive coping skills (Lewis et al., 2018). This finding gains particular significance when considered alongside neurobiological research documenting the "developmental mismatch" between emotion-generating limbic regions and still-maturing prefrontal regulatory systems during adolescence (Casey et al., 2008; Steinberg, 2008).

The literature reveals significant gaps between evidence-based interventions and real-world implementation challenges. While treatments like Dialectical Behaviour Therapy for Adolescents (DBT-A) show promise, with moderate effect sizes for reducing both self-directed ($d = 0.51$) and other-directed ($d = 0.48$) aggressive behaviours (Kothgassner et al., 2020), fragmented service systems and limited access to specialized training create barriers to comprehensive intervention. Research by Pintar Babič et al. (2020) highlights particular uncertainty among healthcare professionals about addressing cases where adolescents alternate between different forms of aggressive expression.

Professionals working directly with these young people play crucial roles in assessment, intervention, and ongoing support. However, current research provides limited insight into how they understand and respond to the complex relationship between NSSI and ODI behaviours. Their perspectives prove particularly valuable given their frontline position in identifying emerging patterns and implementation challenges. Understanding their experiences could illuminate important gaps between theoretical frameworks and practical application while suggesting more effective approaches to supporting vulnerable youth.

This research therefore aims to examine:

1. To what extent professionals observe NSSI and ODI behaviours as different ways of dealing with similar underlying issues, particularly regarding emotion regulation
2. How professionals work effectively with young people who engage in these behaviours, including specific challenges and successful strategies they have developed.

By examining professional experiences across mental health, education and social services, this research seeks to advance both theoretical understanding and practical approaches to supporting adolescents who engage in self-injurious behaviours. The findings hold particular significance given the increasing prevalence of these behaviours among youth and the pressing need for more effective intervention strategies that can address the full spectrum of aggressive expression.

Chapter Three: Methods

This research employs qualitative methodology to examine how professionals understand and respond to the complex relationship between non-suicidal self-injury (NSSI) and outward-directed injurious (ODI) behaviours in adolescents. Through in-depth interviews with professionals across mental health, education and social services, this research seeks to explore how these behaviours may represent different manifestations of similar underlying struggles rather than distinct clinical phenomena. This research seeks to examine patterns in aggressive behaviour responses while considering implications for prevention and support. This study is part of a wider research project under the Shine Project, led by Dr Cate Curtis of the School of Psychology at Waikato University.

Professionals working directly with adolescents who engage in self-injurious behaviours occupy a unique observational position that can illuminate patterns and relationships that may not be immediately apparent from individual cases. Professional observations complement rather than replace direct research with adolescents who engage in these behaviours. This approach aligns with the current understanding of how different forms of knowledge contribute to a comprehensive understanding of complex clinical phenomena.

The qualitative approach aligns with the study's aim to understand the complex interplay between individual vulnerabilities, relationship dynamics, and systemic factors that shape how these behaviours develop and respond to intervention. As Silverman & Patterson (2021) note, qualitative approaches enable examination of naturally occurring phenomena in ways that more closely reflect lived experience compared to experimental approaches. This methodological framework supports critical questioning of established assumptions while maintaining sensitivity to how meaning emerges through social interaction (Braun & Clarke, 2013). Additionally, qualitative research acknowledges how reality is socially constructed through lived experience (Denzin & Lincoln, 2011), making it well-suited for examining how professionals interpret and respond to adolescent self-injury within their practice contexts.

Participants

Participant Recruitment

Participants were recruited through professional networks using a recruitment flyer and project information sheet. Recruitment flyers (Appendix A) were circulated as hard copies to relevant nearby organisations; emailed to relevant professional organisations, secondary schools, social service agencies and other networks of the researchers; distributed on social media and included on the project website. The project information sheet (Appendix B) was also available on the Shine Project website. Those interested in participating were invited to contact the researcher directly to maintain confidentiality.

The recruitment strategy specifically sought professionals or 'Key Informants' who: work primarily with young people aged 16-25 and; have direct experience supporting young people who engage in self-injurious behaviours

This focused recruitment approach aimed to gather data from professionals with sufficient experience to provide detailed insights while maintaining diversity of service contexts. Semi-structured interviews are considered excellent for generating rich, detailed data and suggest that 10-12 interviews are sufficient to generate the necessary data for a medium-sized research project (Braun & Clarke, 2013).

Before the semi-structured interviews began, participants were sent an information sheet explaining the study and a consent form (Appendix C). The information sheet explained who the researchers are, what the research is about and what participation would mean. It also explained that participation in the study was confidential. Participants' individual informed consent was expressly sought. It was explained that once they gave consent, the researcher would record their interview, and the resulting data may be used within any publications or presentations arising from the study. Participants were also asked whether they wished to review their interview transcript for accuracy before their data was used when they would be given an opportunity to withdraw any comments.

The consent form reminded participants that their participation is confidential and no material would identify them personally. They were also asked if they fully understood the Information Sheet they received prior to the interview and to confirm they had been given sufficient time to consider their participation in the study. They were given the option to receive a summary of the interview findings and receive a copy of the written report of overall findings in late 2025.

Prior to the interview, participants were reminded that they were the ‘experts’, and that there were no right, or wrong answers and that the researcher would be interested in everything they had to say. This information was important to help empower participants and to emphasise the importance of each individual story, as well as to challenge the possibility of researcher-participant hierarchy (Braun & Clarke, 2013).

All data was stored in a password protected encrypted folder accessible only by the researcher and lead project researcher. The data will be stored in accordance with The University of Waikato’s research data storage policy.

Interview Participants

The study included twelve professionals who work specifically with young people (aged 16-25) across mental health, education and social services in Aotearoa New Zealand. This purposive sampling strategy sought to gather diverse professional perspectives that could illuminate how self-injurious behaviours manifest across different service contexts. The inclusion of school counsellors, mental health clinicians, social workers, and youth workers enabled examination of both commonalities and variations in how these behaviours present and respond to intervention across settings.

The study included twelve professionals who work specifically with adolescents across mental health, education and social services in Aotearoa New Zealand. Through purposive sampling, participants were selected based on their direct experience working with adolescents who engage in self-injurious behaviours. This sampling approach aimed to

gather rich data from professionals with deep understanding of how these behaviours manifest in real-world contexts.

The participant group consisted of four secondary school counsellors providing direct mental health support to students aged 13-18, three youth mental health clinicians from community mental health services specialising in adolescent care, three social workers focused exclusively on youth and family services, and two school-based youth workers providing pastoral care and behavioural support. The diversity of professional roles enabled examination of how these behaviours present across different service contexts while maintaining focus on adolescent experience.

All participants had a minimum of three years of experience working with adolescents who engage in self-injurious behaviours, with an average of 8.5 years of experience in their respective roles. Their professional backgrounds specifically oriented toward adolescent development and mental health provides crucial context for interpreting their observations about behavioural patterns among youth.

Ethical Approval

Given the sensitive nature of research involving adolescent self-injury, careful attention was paid to ethical considerations throughout the study design and implementation. Ethical approval was obtained by the lead project researcher Dr Cate Curtis from the University of Waikato's Human Research Ethics Committee [HREC(Health)2024#09]. The approval process involved detailed consideration of participant wellbeing, data protection, and potential impacts on the broader community of professionals working with vulnerable youth.

Positionality

My grounding in community psychology, with its emphasis on ecological systems and social justice, significantly shaped this research approach. This theoretical orientation aligns with my personal values around collective responsibility for youth wellbeing and the importance of addressing structural barriers to effective support. Throughout the research process, I maintained reflexive awareness of how these values and my position as a Pakeha

woman and a parent might influence interactions with participants and interpretation of data. Regular consultation with my research supervisor and maintenance of a reflexive journal helped ensure analytical accuracy while acknowledging the inevitably interpretive nature of qualitative research.

Analysis and Coding

Data Collection

This research employed qualitative methods using semi-structured interviews to gather rich, detailed data about professional experiences working with adolescents who engage in self-injurious behaviours. The semi-structured interview format was selected for its flexibility in exploring complex phenomena while maintaining focus on key research questions. This approach allowed participants to share their experiences and insights while enabling deeper exploration of emerging themes (Braun & Clarke, 2013)

The interview guide (Appendix D) was developed by Dr Cate Curtis based on many years of experience researching this field in consultation with other academic experts and cultural advisors. Initial questions focused on building rapport and understanding participants' general experiences working with adolescents before moving to the more specific exploration of self-injurious behaviours. This graduated approach helped create a safe space for participants to share potentially challenging experiences while maintaining professional boundaries.

The interviews began with open questions about participants' understanding of NSSI and ODI behaviours, progressing to more focused exploration of how these behaviours manifest and interact according. Key areas of inquiry included patterns in behavioural expression, environmental influences, treatment approaches, and systemic challenges. The semi-structured format allowed for follow-up questions and deeper exploration of significant themes as they emerged during conversations.

Interviews lasted for approximately one hour and were conducted in locations chosen by participants to ensure their comfort and privacy. Ten interviews were conducted in person, with two conducted via ZOOM to accommodate participant preferences and geographical constraints. All interviews were recorded with participant consent and transcribed manually to ensure accuracy of data.

Thematic Analysis

Data were analysed using thematic analysis following Braun and Clarke's (2006) six-phase approach. This method was selected for its systematic yet flexible framework for identifying patterns of meaning across qualitative datasets. The analysis aimed to give voice to professional experiences while examining how these experiences illuminate broader patterns in adolescent self-injurious behaviours.

The analysis process began with immersion in the data through repeated reading of transcripts and initial noting of potential patterns. This was followed by systematic coding across the entire dataset, with particular attention to how professionals described patterns in behavioural expression and treatment response. Initial codes were then examined to identify broader patterns of meaning or candidate themes. Quotes have been edited slightly for readability. In order to maintain confidentiality, participants were assigned a number in the order in which they contributed to the discussion.

The development of themes involved careful consideration of how different codes clustered together to tell a coherent story about the data. This process required multiple iterations of reviewing and refining themes to ensure they captured significant patterns while maintaining clear distinction between different aspects of the data. Throughout this process a reflective journal was maintained to document analytical decisions and emerging insights.

Method Summary

This qualitative study employed semi-structured interviews with twelve professionals working across mental health, education and social services to examine patterns in adolescent self-injurious behaviours. The research design approach was sensitive to the complex nature of working with vulnerable youth. Thematic analysis following Braun and Clarke's (2006) approach enabled systematic examination of professional experiences while maintaining focus on implications for practice.

The combination of purposive sampling, semi-structured interviews, and rigorous thematic analysis created a robust framework for examining how professionals understand

and respond to adolescent self-injury. Throughout the research process, careful attention was paid to ethical considerations and researcher positioning to ensure both scientific validity and practical relevance for supporting vulnerable youth.

The following chapters present detailed analysis of the themes emerging from these interviews, examining how professional experiences illuminate patterns in adolescent self-injury while considering implications for both theory development and clinical practice.

Chapter Four: Results

This chapter presents the complicated landscape navigated by professionals working alongside adolescents who engage in self-injury and outward-directed aggressive behaviour. From their narratives, four major themes emerged from the data: (1) Internal Struggles and Coping Responses, (2) Environmental and Developmental Influences, (3) Building Therapeutic Connections and (4) Barriers and Bridge-Building. Each theme contains several subthemes that highlight different aspects of professional experiences with adolescents who engage in self-injurious and outward-directed injurious behaviours while highlighting significant connections between individual vulnerabilities, relationship dynamics and broader systemic factors

Theme 1: Internal Struggles and Coping Responses

Participants revealed their experiences and understanding of the influences and motivations behind injurious behaviours in adolescents. Participants discuss how they see young people move between self-injurious and outward-directed injurious behaviours, at times witnessing both forms of expression within the same young person. These patterns did not emerge as separate behaviours but as interrelated responses to emotional distress. This narrative is expressed across two subthemes; Expressions of Pain and Control and Agency.

Expressions of Pain

Many participants observed clear patterns in how adolescents express aggressive impulses across different social contexts. The relationship between physical and emotional pain emerged repeatedly in participant observations, one participant articulated this connection through an adolescent's explanation:

"It's getting rid of the inside pain on the outside... they can feel it, it makes them feel something and they can kind of see it and they can acknowledge it when it's outside pain but when it's inside and it's deep, they perhaps haven't even got the vocabulary or the ability or courage" (P2).

Participants noted how emotional pain manifests differently across various contexts, with one participant describing witnessing rapid transitions between expressions of release and regret:

“For her, it was a tally of the lows that she’s gone through, that was kind of how she kept track of ‘I've gone through this I haven't actually killed myself’.It seems to be that initial kind of rush of adrenaline and getting the anger out. I was talking to a girl today and she said within 5 minutes [of self-harming] it's just immediate regret and it just makes it feel worse, so it's a real in the moment impulse.” (P7)

The manifestation of aggression often appeared linked to deep feelings of disconnection and past trauma as revealed in one participants description of a young persons experience:

“He really had his whole childhood taken from him…His anger stems from his mum not trying, his mum not caring, his mum doing drugs instead of looking after him, you know and and no one understands. He said ‘Nana doesn't understand why I am the way that I am, she doesn't understand what I've been through’, and so I can see its frustration at just feeling completely alone.” (P7)

Interestingly, another participant makes a similar observation about a connection between aggressive behaviour and loneliness or the concept of ‘being alone’:

"I’ve seen a lot of boys that don’t know how to express their feelings. yeah so the boys are, they get put in for anger management and I don't even know if it’s anger I feel like it's loneliness. I had one kid in the other day and he's busted his knuckles cause he's punched a wall because he was angry that he has a flat tyre on his bike and he's gonna be late school there's consequences for being late to school, he’s just starting the day off crappy but he also starts his day off, he wakes up at home alone, mum and dad are already at work so he's self-sufficient like he's, like he's, what is he, he’s 14, so he's responsible for getting himself up. So when it doesn't go according to plan the only person who's got to rely on is himself. (P11)

The immediate manifestation of aggressive behaviours among young males with histories of abuse emerged as a particularly significant pattern. One participant described this in detail:

“He will take on people who are far bigger, far more violent than him, super aggressively, with no thought to himself to work something out. So he will approach big guys, say with a hammer, take them on and then get into this massive big fight and feel quite good.”

Another participant noted:

"It's frustration at not being understood or knowing how to direct your feelings... a boy at school today, he's quite keen on trying to put his head through a wall and he's had a really rough childhood" (P7).

While participants initially observed that male adolescents tended toward outward expressions of aggression and females toward self-directed injury, their deeper accounts revealed significant variations in these patterns.

One participant reflects how one adolescent shifts between forms of self injurious and outward-directed aggressive behaviour:

“And then the other side is, he’s lying in bed one night and he tells me as an example, and he heard a sound, he was nearly asleep but he thought he heard a sound and he thought it was gunshots so he got straight up and started trashing his room and then got outside and started kicking a tree, and I said…did you have shoes on? And he goes ‘hell no!’ and I said ‘didn’t it hurt?’ and he said…well it was a bit rotten so it wasn’t too bad. And I’m thinking…ok, so what was the purpose of that? Like, do you know why you chose that sort of action? And he said it just got rid of the adrenalin; it got rid of the drive.” (P2)

Another participant described how a female adolescent often alternates between self-injury and outward-directed aggression:

"I've got one girl who does like cut herself as well as banging head against the wall... she's banging her head against the wall... she's trying to choke herself with her hands as well, that was all anger at her mum not coming in time to ask her what was wrong" (P7).

These accounts reveal how environmental and social contexts often shaped whether adolescents directed aggression inward or outward, regardless of gender.

The intensity of emotional experience emerged as a factor in shaping behavioural expression as one participant described:

"It's almost like 'bleeding a sore' for him, like getting rid of all the anger and angst he's got about the situation in his home life" (P2).

Another participant highlighted how overwhelming emotions could override adaptive coping noting from an adolescents perspective:

"'I don't know how to problem solve, I haven't been taught how to problem solve, I've got all these negative emotions flowing from my body and I can't tolerate them'... so problem solving goes out the window" (P9).

These observations reveal how intense emotional states often follow shifts in behavioural expression, with adolescents moving between different forms of injurious or aggressive behaviour as they attempt to manage overwhelming feelings.

Control and Agency

The theme of control emerged repeatedly across participant accounts, revealing how both self-injurious and outward-directed behaviours often represent attempts to establish agency in environments or situations where adolescents feel powerless. One participant reflected:

"They want to take control of the situation... they can't control what's happening in the wider world or in their background, they can control what's being done to themselves so they take that control" (P6).

The participant also added:

“I think sometimes it's making a statement… that when they’re threatening you and they’ve got their firsts raised, like ‘I'm in control of this situation’ or ‘if I punch this wall I’ll show them just how serious I am’ like ‘they’ll take me more seriously’. (P6)

Participants observed that attempts to establish agency often manifested where adolescents felt unheard:

"Not being heard, particularly at home. I think too, when they have no other skills, they're not equipped to have a sense of resilience or 'go to' places, such as coming to seek help from us or other agencies or online, so that's what they resort to" (P2).

Family environments play a pivotal role in shaping these expressions of control as one participant noted:

"It seems to be that the kids have a loss of control... whether it's to do with the way their parents parent them or decisions that are being made for them. Life events for example like serious illness in parents like cancer, or something that they are trying to come to terms with themselves like diabetes, parents splitting and one of them moving overseas being left with the wider whanau to be raised like grandparents" (P6).

The relationship between control and attention adds a layer of complexity as one participant described:

"I have one girl at the moment, who its very clearly to get attention from her parents. She just feels so neglected, her older brothers got ASD and so she feels like 'where's my kind of spotlight?' But her parents are not neglectful like they seem to be really hands on" (P7).

This overarching theme conceptualises how participants view individual vulnerabilities, relationship dynamics, technology influences and broader societal factors as pathways to risk. Participants were asked to discuss the risk factors involved in injurious behaviours in

adolescents. While clear patterns emerged regarding how these pathways combine to influence NSSI and ODI risk, participants approached these factors from different professional perspectives and contexts. Four interrelated sub-themes emerged from the discussions; *digital age boundaries and relationships, mental health and neurodevelopmental considerations, relationship dynamics and family systems.*

Theme 2: Environmental and Developmental Influences

Digital age boundaries and relationships

All 12 participants expressed concerns associated with how constant connectivity and unrestricted social media access shapes adolescents' daily experiences and interactions. Their observations align with increased risk of injurious behaviour associated with problematic social media use.

"I think… general life, day to day. I think social media has had a huge impact on youth and self-harming" (P4)

Another participant added:

"I would probably have to say social media. Just exposure to so much information, so much! I think the group chats and all of those sorts of things that just keep going." (P5)

Participants felt strongly that it didn't matter which social media channel adolescents preferred, they all held the same risk:

"It's Facebook, it's Instagram, it's TIK TOK, it's Discord….it's all of it, it's all over." (P10)

However, some perspectives vary on whether it is the unlimited access to social media or how social media is used that proves to be the key risk factor for adolescents. As one participant notes, the rapid spread of information through social media creates unique pressures:

"When something happens with any teenagers, it gets posted onto social media and you know, within two hours everybody in the town knows about it and the world knows about it, so yeah, it's huge because these kids are attached to their phones 24/7." (P4)

The relationship between boundary issues and parenting emerged as a critical concern. One participant articulated this powerfully:

“I think that comes down to largely absent parenting but a lot of our young people are left free to be on social media, be on their phones and I think when we're raising children with poor resilience and without strategies to be able to cope in this day and age, because we're busy, then it's easy to give something like a device to entertain…” (P9)

This participant’s observations capture how modern parenting challenges combine with technology use to create environments where adolescents may struggle to develop healthy boundaries and emotion regulation skills.

“Because parents are busy I think children are less resilient, they don't have the same guidance as they did probably a decade or so ago where they're able to problem solve and work off an adult in their life…”(P9)

The participant then reflects on how parents struggle to regain control of technology use:

“It becomes out of control and they don't know how to pull it back. So our young people then are seeing and experiencing distress and not knowing what to do with it.” (P9)

Participants observed how unrestricted and unguided online access contributes to an environment where adolescents struggle to develop realistic expectations about relationships, identity and experiences:

“It’s all not real. We can put whatever we want on there, we never put the crap stuff... It’s so not real yet people buy into it. It’s too grown up.” (P3)

Another participant noted:

“They've become all of a sudden more worldly like you used to teach and they would know things, like they would look things up on the computer, but it's not the same as being able to just get on TikTok… they're growing up too fast. They’re such a vulnerable group and they don't have the ability to process things as well” (P8)

Neurodevelopmental considerations

Participants observed distinct patterns in how neurodevelopmental differences influence behavioural expression. For adolescents with autism spectrum disorders (ASD), participants identified particular vulnerability during transitional periods:

"I think about one student in particular, her anxiety started to build around getting her diagnosis and her anxiety is 'Why am I different? Why am I the way I am? I hate myself'… and just that whole spiral that continued. It seemed to get worse as she became more self-aware. So she's coming into secondary school now, she's clearly seeing how she's different to other people and how that affects her." (P8)

The participant reveals how these transitional changes can lead to struggles with identity and outbursts of aggression*:*

"They feel like people don't understand them and they're so frustrated that 'you don't understand me, and I don't know how to say it any other way' except to lose the plot and get aggressive…It seems that's more common in boys. When they're going through puberty and they've got all those hormones then big changes happening, they're not sure who they are." (P8)

The intersection of neurodevelopmental differences and gender emerged as a significant factor. One participant states*:*

"The group that I see quite a lot is girls who are undiagnosed autistic. And for them, usually it is to do with online. Because girls who present differently with autism, they want to connect and they want to be friends and they want to be social but they can't, they struggle to do that and then they copy other people, they pretend but that doesn't work, and then they feel 'there's something wrong with me' and they really end up with anxiety and depression." (P10)

Another participant added:

*"*With the ASD kids, they don't grow out of the ASD but they manage it better, learn to manage it. So with other kids I've dealt with in the mainstream sometimes you can see the opposite… they are learning more bad behaviours and the behaviours escalating yeah I've seen that particularly with some of our more vulnerable girls in the past." (P8)

Relationship dynamics and family systems

The quality of family relationships emerged as a fundamental factor in understanding adolescent vulnerability to injurious behaviours. Participants observations revealed how intergenerational patterns influence how young people learn to navigate emotional stress:

"I had one client, and she self-harmed all the time and tried to commit suicide multiple times. The triggers for her are relationship loss. She was in an environment at home with her mother which was not a good environment, not in terms of physical abuse but in terms of emotional abuse at home. You know, she admitted to me, living at home was what was causing her to self-harm all the time." (P4)

Another participant observed:

"And you know, unfortunately, her mother is a by-product of her mother and her grandmother." (P4)

The impact of family trauma and dysfunction emerged repeatedly:

"There's something going on in their world. Those kids who have had significant trauma they want to [self-harm] because the stuff they have been through is horrific, whereas some of the others they've been through some horrible things, or don't know how to speak to parents, the family, the teachers, they're not emotionally regulated enough to understand that we can stop and talk about this, it's not that bad." (P3)

Adolescents can experience levels of trauma when family dynamics change as observed by a participant:

“Often with parents splitting or separating or them living with extended whanau, they’re feeling that sense of rejection like ‘mum or dad doesn't want me anymore’. Feeling really low and bad, some of them feel responsible for the splits.” (P6)

The participant goes on to describe how parents might not fully understand the emotional impact these changes can have on adolescents:

“...And often a lot of parents when they are splitting they think the kids are resilient, and I've said to many of them ‘I really think you should put some counselling in place’ cos they might seem fine at the moment, they're putting on a brave face, but it's still impacting them. So in a way there's a lot of grief tied up with some of those things.” (P6)

Another participant revealed:

“It can be broken family, it can be a parent who isn't available to provide nurture and maybe working a lot but it seems that everything is going okay but the parents are really busy with their jobs really not attending to their kids, so that’s one thing. It can be physical abuse, sexual abuse it can be intergenerational trauma, the parents don’t know how because they never learned.” (P10)

Participants also commented on how technology has altered traditional relationship patterns, where adolescents no longer look to parents or elders for advice but rather seek those connections online. One participant articulated this powerfully:

“They’re walking their bloody kids to school and they’re on their phones, playing Pokemon or whatever, and like, they’ve got no shoes on, and I’m sorry, that is not ok. Your child comes to school and he’s stabbing children. Come on! ‘Oh yes, but they’re trying really hard.’ Are they? Because if you’re walking to school, on your phone playing Pokemon and I’m driving past and can see you, you’re not trying very hard to engage with your child are you? That’s half of it too, isn’t it. We choose not to engage with our children anymore.” (P3)

This can lead to adolescents searching for help in the wrong place as one participant states*:*

"Who do we reveal our problems with? We reveal them with the people that we trust the most, the people we feel like we have a relationship with. And if we don't have the relationship with the people in our household, but we have a device, and we think we have a relationship with people on the other end of the device we're going to go there and get their advice." (P9)

The person they are connecting with online for advice may struggle with their own emotional issues and lack coping skills:

"...and often they are the same age as us and they're not tolerating their emotions well, they have their own problems going on and so begins the cycle of seeking help at the wrong place. And so this relationship, that is not that connection… is failing, and so our kids don't know how to put into words appropriately what they're dealing with." (P9)

Theme 3: Building therapeutic connections

The establishment of meaningful therapeutic relationships emerged as fundamental in supporting adolescents who engage in both injurious behaviours. Participant accounts reveal how therapeutic connections must balance the cultivation of genuine connections while maintaining boundaries and how this balance shapes treatment effectiveness.

Trust and Safety

The importance of establishing trust emerged as crucial for effective intervention through participants experiences:

"There's a little bit of whakama there as well, initially, to counselling so it's a little bit of 'how much do I have to divulge?' and 'is this going to get home and create trouble for me?' on their minds. Until they learn to trust and realise that we've got our own ethical boundaries." (P2)

Participants emphasised the importance of sustained engagement and genuine connection:

"If someone gives a shit actually, and somebody listens to them and is there for them and I think that we throw kids out of systems and services far too early and we define it as a phase when actually, if you've never ever had stability or never had someone in your corner, it takes a while to break that down." (P3)

The gradual process of building therapeutic trust revealed itself as fundamental, with participants describing the steps needed to establish genuine connections with adolescents who had often experienced relationship disruptions:

"I find with adolescents its relationship, building the relationship enough to explore it. With adults that are seeking help they are kind of free in their dialogue and teens are like you're on 'judge or jury' for quite a while. And so when I think about this particular teen, we've been seeing each other for maybe seven weeks, and we had one breakthrough session where she got engaged enough to provide information enough to give a picture of what's happening and for her." (P9)

Participants also discussed the importance of safe relationships outside of treatment. Indicating that if adolescents have a relationship with someone they feel safe around, they are more likely to engage in further treatment.

"I have to have connections and relationships with my class or else the classes don't work, you can't teach if you haven't got that kind of relationship with the kids. That's the first thing that I do! We don't learn anything, we just learn about each other and to support each other and who we are and we build that relationship… you've got to, so I feel like they have a safe space to come and we can make these connections". (P8)

Creating therapeutic alliances can take the pressure away from peers who often bear the burden of being the support person:

“Making sure that they are getting support from somebody that can handle the support because they lean so much on peers and what it does is it puts a lot of pressure on their peers and their peers take the responsibility for keeping their friends safe and it's really heavy, it's a really heavy burden for them to hold.” (P5)

Participants observed that in some situations involving the family may not be beneficial to treatment engagement:

“Sometimes family is not helpful, sometimes it needs to be someone outside of the family. And sometimes it needs to be someone who fits the kids personality because some kids are quirky.” (P3)

Another participant states:

“Getting them out of the house, getting them into nature everyday, no devices, nothing, just getting them out into the old grassroots. That’s what social work should be in my eyes, it’s interacting with them and building those relationships and that trust with them by being there every day. Because I think that’s what they’re missing, they’re not having that interaction with family or friends on a daily basis and actually with anyone that really cares.” (P4)

If adolescents feel unsafe within their environment, they are more likely to shut down and be unengaged in treatment, providing additional challenges to participants:

“It also depends on the relationship, you don’t send them home to a parent whose going to abuse them when they get home, it’s almost like a reflect of shame to some parents, they think ‘you should be able to handle it’, there’s still that ‘harden up’ attitude…but it’s like if they could do that, then they would be doing it.” (P2)

Finding a safe person outside of the home is often needed:

‘Oh no you can’t ring home…’ because this will happen or that will happen but if I know that this boy can’t hold that, then I would say ‘well who else is there that can keep you safe, is there another safe adult that we can contact?” (P1)

Participants acknowledged the difficulties sometimes involved within the ethical boundaries of working with adolescents needing treatment, particularly concerning the adolescents resistance to parental involvement:

“The other tricky part being that adolescents often don't want their parents to know everything. We have this dialogue where I say with both my adolescence that I have, that have some risky stuff going on, that there's the ‘what I’ll talk to mum and dad about and the what I won't’ and what I talk about with mum and dad or mum prior will be discussed, and the other stuff we just agree that it doesn't need to be disclosed because it doesn't come with risk.” (P8)

If the adolescent is at significant risk, then it becomes important to involve the parents regardless of adolescent resistance*:*

“But if it's significant then I'd say let's talk to mum or dad about this now and get their buy in, because it’s just a complete relationship breakdown.” (P8)

In some circumstances, the therapeutic relationship will be lost if an adolescent believes their trust has been broken:

“I've lost trust from students, and there's one in particular, when I first started working here I think, and me contacting her parents even after we had gone through our consent agreement and made it really really clear that when you are hurting yourself that we have to tell either your parents or another, she completely stopped… she wouldn’t have anything to do with me after that so that was kind of a little bit devastating.” (P5)

Individualised Approaches

All participants emphasised the importance of tailoring interventions to individual needs:

"Letting them come up with strategies like we can give some advice on whether you try this or what do you think would work? Just putting a safety plan in place that is theirs, that they can use. I mean sometimes it works and just sometimes it doesn't, depending on the connection." (P5)

The value of creating positive therapeutic experiences emerged as significant for future help-seeking:

"I think once that the relationships there, then yes there is hope… but it has to be with a relationship. Especially if they're being made to come. But then the other part of that, is that I always think, one of the most important things to do is to give anyone that's had challenges, like you might not be the shift, but as long as you give them a positive therapy experience, so they remember one thing… or they go on later in life to decide to engage in therapy because they had an alright experience and it wasn't as daunting as they thought it was." (P9)

The importance of empowering adolescents in their own recovery featured in participants accounts with one revealing:

"Recognising that they're actually a driver of their actions, that it's not the people around them that are. Sometimes people around them are making them feel like shit, but also understanding the role that they have to play in it." (P7)

Developing the awareness that the behaviour does not serve them can be a path towards successful treatment:

"It was a really turning point today when the girl I was talking about earlier recognised 'actually that makes me feel like shit afterwards and I really don't like that I do this and I really would like some help.' (P7)

Treatment approaches addressing outward-directed aggression emphasise developing alternative pathways for expressing and regulating intense emotional states. Rather than focusing solely on behavioural control, professionals described working with adolescents to understand the underlying emotional experiences driving aggressive responses while building more adaptive ways of managing distress:

"So it's like looking for a positive outlet. A bit like if you were able to take all the kids to the gym and I would imagine the gym would be a good place to work out your frustrations you know. Maybe they've got too much testosterone and just need to get rid of it." (P6)

Another participant states:

"We're doing the same programme and going through like other techniques to try and when you do start to feel angry like go through the breathing, the mindfulness stuff. But if it gets too bad then maybe we need to look at alternatives of you can punch this bag, you can throw this stuff in a safe environment, we're not gonna damage anything or hurt yourself but you're gonna get that release. Because it seems like it's more just the adrenaline release of like fight or flight, "I need to hit something." (P7)

Similar treatment approaches are taken by participants for both self injurious and outward directed injurious behaviour:

"We run programmes you know where we go through coping techniques of like when you're frustrated, breathing and muscle relaxation and mind travel that kind of stuff and I think if you can get ahead of the big like emotional blow up, those really work." (P7)

A participant explains how similar approaches are used to explore the adolescents triggers for the behaviour:

"For anger specifically, we do the same type of thing, we do a timeline, we will do an anger volcano where we look at 'when did you start to becoming angry' so we draw that volcano and

underneath that volcano, the stuff that might have made you angry or sad or feel ashamed. We put those stuff in there and explain that when it gets too much he picks out those things and gets triggered by those things and thats why we get angry." (P10)

Taking a direct approach with adolescents emerged as a preferred method for a many participants, with participants noting that finding ways to 'normalise' the behaviour enabled reflection on its purpose:

"I suppose for me I try to treat it matter of factly, not like 'oh my god that's terrible, that's awful what you've done to you!' No alarmist at all, instead say 'let's talk about it'…normalise it…well sort of, but make it feel ok to talk about, then we'll let the nurse have a check, put a bandage on if you've got PE coming up or you're feeling whakama about that and you don't want your friends, kids, to see and it's sweltering hot." (P1)

Participants who favoured this approach describe it as a way to build emotional awareness in adolescents about the behaviours they are exhibiting:

"I think normalising is the correct word because within the bounds of this particular situation, there is something normalised, so that they don't feel like they're insane, they're not mad or bad, they're just sad. So it's normalised by going 'people that are really really sad, you know, this is understandable why you might feel like doing this', so it is normalised." (P2).

Another participant describes how they encourage reflection:

"If a particular kid has a younger sibling or a younger cousin that looks up to them that they really care about I'll say to them 'how would you feel if your little sister/brother was doing this? 'how would you feel? what would you want, what would you want for them?', 'what would you do if that was happening? what advice would you want to give them?' You know, you have to look at how they think they would respond to this, how did they react…a lot of time it makes them kind of really think about it because it's when they externalise actually what it is that they're doing instead of internalising everything." (P5)

Other participants preferred caution towards normalisation of the behaviour with adolescents:

"I think it's normalised and as a therapist you've got to be careful not to normalise as well because it is so common and so normalised in the sense that lots of teenagers won't even hide it or they'll talk about it with their peers or it's on social media. I try to come on board with the teen world as well, without minimising that it's an indicator that there's something going on that they're not dealing with or coping with." (P9)

Another participant states:

"I have one client in particular who heard from a friend that this was how they cope so this is how she's coping. I think really, it's social pressure more than anything." (P7)

Theme 4: Barriers and bridge-building

System Complexities and Gaps

All participants identified significant systemic barriers in treatment access and delivery when asked to discuss their experiences on treatment efficacy. One participant reveals:

"We are not qualified to work with those kinds of kids, we have to get services for them and get them what they need, but for me, at the end of the day I don't think there's enough services out there." (P4)

The fragmented nature of support services emerged as a particular challenge:

"Teenagers also come with layers of things, there's the education system, there's Oranga Tamariki, there's the Police and there's ICAMS and school counsellors. People's different interpretations of things make things a bit difficult. It's all a bit siloed and 'what's what' and 'whose who', and it's messy." (P3)

Gaps in family support were identified as particularly problematic by some participants:

“There didn't feel like any support or education for the family or their parents, it was very much the child. Bring the parents in and talk to them about what had been discussed with the child and then off you go. Which is quite scary and I find that when parents come and talk to me now, there's not many options, I don't feel there's many options I can direct them to.” (P6)

The disconnect between education and healthcare systems creates additional barriers and is a source of frustration for many participants:

“There’s like a bridge between education and medical and education is always trying to bridge it and medical is not coming to the party. It's really hard because you're wanting to work together for the child but there's the privacy thing in the middle, even though parents are giving you consent to refer.” (P6)

The participant describes their frustration in lack of information shared between services:

“They won't share information or you do all the work and the referral, the kid gets the help, we hear nothing back, we don't know how it's gone, what's happened. We know nothing. So there's some real gaps.” (P6)

Another participant observes:

“At the moment, child and adolescent mental health is just a crisis service. We really need more early intervention.” (P10)

Parental Engagement

Participant accounts revealed connections between parental engagement and treatment outcomes. While supportive parental involvement often enhanced therapeutic progress, problematic family relationships could disrupt adolescents' willingness to seek and maintain treatment. As one participant observed:

“The other thing that occurs to me too is parental attitudes, because there seems to be a variety. Some of them are very caring and are just horrified that their child is resorting to this

and it’s the first they’ve heard about it and are very caring and would do anything to help, and then you’ve got the parents that say, well that’s just attention seeking and kind of ‘stop it!’ and get angry with them and that’s the problem.” (P2)

The impact of parental attitudes extended beyond initial treatment engagement to shape ongoing therapeutic work. One participant noted:

“I'd say one of the biggest risks is how disengaged their parents are and how free they are with their phones when both their mental health is very poor. Just trying to get parents on board with what is actually in their child’s world, what are they walking in, you don't know and they’re self harming and they have poor mental health, creates a bigger risk picture I think.” (P9)

Conflicts between parents and adolescents accessing devices was a common experience of participants:

“I think removing phones from schools I think is really great yeah but the problem doesn't lie there, it lies with the parents, so the parents are giving them this technology that they can’t yet understand and they can't use properly and wondering why the kids are the way they are, and as the teacher like if you talk about how things have changed, one of the massive things I've noticed is parental blame.” (P8)

The participant reflects that parents often reflect the blame towards them in their role:

“So…’why have you taken my kids phone off them? I'm trying to text my kid, I need to be able to contact to them’...that sort of thing so we're getting a lot of the blame. It's not ‘what can we do to support you as a teacher?’ it's ‘you haven't done your job…’ I feel like parents are almost stepping away a little bit from the parenting.” (P8)

Another participant observes how parents are resistant to conversations on removing or restricting their adolescents phone use :

“Usually I will do a talk about online social influences and social media, especially if they are online bullying or their friends. It's important to cut their connection off to their phones which is really hard. Parents don’t want to do it because they feel they are taking something away from their children, like ‘everybody has a cell phone, and how are they going to contact their friends’.” (P10)

The participant states they often need to emphasise the social media can be just as harmful as sharp objects in some circumstances:

“And then to tell the parent ‘are you going to remove all the blades and all the knives’ and ‘go and do that’ and they say ‘yep, yep, yep’. And I say well removing social media is going to do the same.” (P10)

Participants highlight how emotional regulation represents an ongoing developmental process requiring sustained parental engagement rather than a fixed trait or simple skill:

“A school teacher said it to me last year, ‘kids these days just don’t have any resilience’ and ‘lots of kids these days just don't know how to tolerate when something happens’. And it takes, as parents know, it’s a never ending lesson that we're teaching our kids, that we're learning along the way and we can't just check out of it.” (P9)

Summary

The factors that professionals experienced when working with adolescents exhibiting NSSI and ODI behaviours were similar to many of the theories demonstrated within the literature. Four major themes emerged from this study that demonstrate how various social, environmental and personal factors interact to shape adolescents' vulnerability and protective factors in these behaviours.

The first theme, Internal Struggles and Coping Responses reveals how professionals witnessed adolescents moving between self-injury and outward aggression as they struggled to manage overwhelming emotional pain. Through their accounts, we see young people

desperately trying to make internal suffering into something concrete they could see and understand. Professionals described watching adolescents develop patterns of expression dependent of their environment, where the same emotional distress could manifest as self-injury alone in their bedroom or aggressive outbursts at school. Professionals interpreted these behaviours as expressions of the same underlying pain often caused by experiences of trauma, disconnection and a sense of powerlessness.

The second theme, Environmental and Developmental Influences emerged from professionals accounts showing deep concern of watching adolescents navigate a world where digital connectivity shapes how they learn about themselves and manage their emotional experiences. Participants witnessed families struggling to maintain meaningful connections in an age of digital distraction where adolescents are left to manage intense emotional experiences without adult support. Their accounts revealed how a lack of relationship skills and emotion regulation appears intergenerational, creating cycles of trauma and disconnection. Professionals stories described how they witnessed moments of profound frustration where adolescents with neurodevelopmental differences struggled to make themselves understood. Their behaviour alternated between hurting themselves and aggressive outbursts in desperate attempts to communicate emotional experiences they are unable to put into words.

The third theme, Building Therapeutic Connections, highlights professionals accounts of how they develop and maintain effective therapeutic relationships with adolescents who engage in both forms of injurious behaviour. Their accounts reveal the difficult balance that is required between fostering authentic engagement while maintaining appropriate professional boundaries, holding space for both the adolescent's immediate needs and the broader family dynamics. Professionals' experiences reveal how effective intervention requires an understanding that traditional therapeutic boundaries sometimes need thoughtful adaptation when working with adolescents who have experienced relationship disruption and betrayal.

System Complexities and Bridge-Building emerged as the final theme, as professionals reveal significant challenges in providing support for these adolescents within fragmented systems. Their accounts describe the frustration and heartache of watching adolescents fall through gaps between services, while simultaneously highlighting their determined efforts to build bridges across these divides. Professionals highlighted the struggle to coordinate care across educational, mental health and family support systems that operate under different constraints.

The last question asked the participants if there was anything else they felt was important to share regarding their experiences with these behaviours in adolescents. Participant 8 expressed the seriousness of professionals work with NSSI and ODI adolescents. Participant 8 stated:

"I just think it's so good that you guys are doing this research…you're looking at our young people, the most vulnerable, and we need all the support we can get."

This sentiment emerged most powerfully across these participants' accounts. A deep undercurrent of worry was expressed about the individual young people they support and what they see as a growing crisis in adolescent mental health.

Their concern went beyond professional frustration to something more personal, the heavy weight of knowing these adolescents need more support than current systems can provide, especially during these crucial developmental years when intervention could make such a difference. Through their stories, their unwavering commitment to support these young people is clear alongside their growing recognition that this challenge requires not just better therapeutic tools but fundamental changes in how adolescent mental health support is structured and resourced.

Chapter five is organised as follows: It presents a discussion of the examination of these themes through multiple theoretical lenses, integrating professional experiences with current frameworks. The discussion will explore practical implications for treatment approaches while also considering how these findings might enhance theoretical models of adolescent

self-injury and aggressive behaviour. Third, the implications, limitations and opportunities revealed by this research will be carefully examined. Lastly, recommendations for future research will be discussed.

Chapter Five: Discussion

This study examines how professionals work with adolescents who engage in both non-suicidal self-injurious (NSSI) and outward-directed injurious (ODI) behaviours. Through the analysis of twelve comprehensive interviews with professionals across mental health, education and social services, the study reveals significant patterns in how self-injurious and outward-directed injurious behaviours may reflect different expressions of similar underlying challenges influenced by individual vulnerabilities, relationship dynamics and broader systemic factors. The results challenge traditional conceptual frameworks that view NSSI and ODI as separate clinical issues. Insights from professionals indicate subtle patterns of behavioural transitions between self-injurious and outward-directed injurious behaviours, which seem to be affected more by environmental contexts and learned behaviours rather than inherent individual characteristics. This perspective is particularly relevant when aligned with recent studies on dual-harm behaviour (Spaan et al., 2022) and ecological frameworks for emotion regulation (Kranzler et al., 2018).

Moreover, the narratives provided by professionals shed light on how digital technologies transform both the expression of aggressive behaviours and pathways for support. Their accounts reveal complex dynamics in how online spaces modify adolescent social ecology while posing new challenges for family interactions and professional interventions. These insights extend existing theoretical frameworks of how various environmental systems influence behavioural expressions and help-seeking behaviours.

This discussion examines these findings through three interconnected perspectives: First, it explores how professional experiences contribute to a deeper understanding of the relationship between self-injurious and outward-directed injurious behaviours. Second, it analyses how professionals develop and adapt therapeutic approaches to assist adolescents who engage in these behaviours. Lastly, it reflects on the systemic changes needed to improve support for both vulnerable youth and the professionals who work with them.

The Duality of Aggressive Expression

A significant finding that emerged from this research concerns the intertwined nature of self-injurious and outward-directed aggressive behaviours. While previous literature has often treated these behaviours as distinct (Nock et al., 2006), professional accounts reveal a pattern of behavioural switching that challenges this separation.

Supporting these findings, Spaan et al. (2022) explored dual-harm in adolescents, defined as the combined occurrence of aggression towards the self and towards others. Their study revealed that around 60% of youth who engaged in self-injury also displayed outward-directed aggressive behaviours such as vandalism and physical confrontations. Analysing data from 2,614 adolescents, they identified strong correlations between self-injurious actions and outward-directed aggression, suggesting that these expressions of distress commonly coexist.

Additionally, findings from Kranzler et al. (2018) reinforce this research by examining how emotional states can trigger aggressive responses. Their real-time monitoring of emotional states demonstrated that both NSSI and ODI typically occurred during episodes of heightened negative emotions coupled with diminished positive feelings.

The observation that similar emotional patterns preceded both types of behaviour suggests that they emerge from similar emotional struggles rather than following separate developmental paths. Furthermore, their observation that social contexts significantly shaped whether distress manifested as self-injury or outward-directed aggression aligns with our participants' accounts of adolescents transitioning between various behaviours in home, school and peer settings. This indicates that adolescents learn different ways of expressing their emotional distress based on their experiences and responses received by those around them. This implies that rather than representing fixed response tendencies, young people develop patterns of either NSSI or ODI depending on learned behaviours that aim to provide the best possible outcome within their environment.

Shafti et al. (2022) identified strong links between self-injury and aggressive behaviours that are shaped by both individual and environmental factors, with social contexts often

determining the direction of the aggressive expression. Their research revealed that experiences of childhood trauma, emotional abuse and neglect created pathways to dual-harm behaviour within adolescents. This finding emerged vividly in professional accounts, as they described observing how school environments, peer networks, and family systems create implicit rules about acceptable forms of emotional expression. One participant's observation that "They feel like people don't understand them...except to lose the plot and get aggressive" reveals how behavioural expression can occur internally in response to particular social contexts.

The identified shifts between self-injury and outward aggression align with Gilbert et al.'s (2019) conclusions regarding shame-based reactions while expanding on how environmental factors influence behavioural expression. Their study demonstrated how intense feelings of shame could trigger both self-injury and outward-directed aggression within the same individual. Professional accounts further emphasise how learned responses alongside immediate social contexts dictate whether aggressive impulses are directed inward or outward, which is an important framework of neurobiological studies on adolescent development. The "developmental mismatch" between emotion-generating limbic regions and still-maturing prefrontal regulatory systems, documented by Casey (2015), may create heightened vulnerability for both forms of aggressive behaviour. The study demonstrated that emotion-generating regions like the amygdala develop earlier and show heightened reactivity during adolescence, while prefrontal regions responsible for emotion regulation continue maturing into early adulthood. Furthermore, Spaan et al. (2022) linked adverse childhood experiences such as witnessing domestic violence or suffering physical abuse with dual-harm behaviours

Shafti et al.'s (2022) network analysis identified significant links between self-injury and outward-directed aggressive behaviours through common psychological mechanisms such as emotion dysregulation and impulsivity, a concept vividly expressed in participant narratives. One professional articulated: "It's getting rid of the inside pain on the outside...

they can feel it, it makes them feel something and they can acknowledge it when it's inside and it's deep, they perhaps haven't even got the vocabulary or the ability or courage" (P2).

Professional perspectives on gender differences in expressing aggressive both support existing literature while adding complexity to it. Although accounts align with studies indicating higher rates of outward aggression among males versus internalised aggression among females (Martinez-Torteya et al., 2017), they also reveal considerable variability in these trends.

Spaan et al. (2022) observed that gender differences in dual-harm behaviours often reflected social learning and environmental responses rather than inherent biological factors. Their analysis involving 1,615 males and female adolescents indicated that while initial expressions of aggression often adhered to gender norms, many individuals shifted their forms of expression based on context and circumstances.

This pattern emerged clearly in professional accounts. One participant described a male adolescent: "He will take on people who are far bigger, far more violent than him, super aggressively... And then the other side is, he's lying in bed one night and he heard a sound... and started trashing his room and then got outside and started kicking a tree" (P2). Another described a female client who "*"I've got one girl who does like cut herself as well as banging head against the wall... she's banging her head against the wall... she's trying to choke herself with her hands as well (P7)*."

These observations support Thompson et al.'s (2020) work on the social construction of aggressive expression while highlighting how behavioural manifestations can shift across different environments and emotional states. Their research reveals how young individuals learn which types of aggressive behaviour garner attention or positive reinforcement versus those resulting in punishment or neglect.

Spaan et al.'s (2022) findings indicated that parental reactions towards early acts of aggressive behaviour often reinforce traditional gendered behavioural norms, allowing boys more permission for externalising behaviour, while girls aggressive impulses were more likely to be suppressed.

Professional accounts echoed this dynamic, with participants remarking on how family dynamics and school responses often created implicit guidelines about acceptable forms of emotional expression tied closely to gender expectations.

Digital Age Impact on Expression and Help Seeking

A notable finding was the depth of professional concern on how digital connectivity shapes the expression and maintenance of both NSSI and ODI behaviours. This supports and extends Lewis et al.'s (2018) work on social media influences revealing how distress spreads rapidly through peer networks before adolescents can process or regulate their responses.

Professional concerns about digital connectivity reflect current understanding of how online environments have fundamentally altered adolescent social ecology (Lewis et al., 2018) and additionally reveal how digital networks create new forms of emotional contagion that can ripple through peer systems. As one participant noted, "Within two hours everybody in the town knows about it and the world knows about it... these kids are attached to their phones 24/7" (P4), suggesting the need to understand these behaviours within expanded ecological frameworks that include online communities

Professional accounts revealed how technology plays an avid part in reshaping family dynamics and creating parenting challenges across socioeconomic contexts.

Participants descriptions of “busy lifestyles” creating new forms of emotional disconnect through excessive phone use aligns with research by Whitlock et al. (2013). Their study of 1,350 adolescents found that increased online activity correlated strongly with both frequency and severity of self-injury. Most critically, they found that adolescents who spent more than three hours daily on social media were twice as likely to engage in self-injury compared to those with limited online presence.

Professional concerns about digital connectivity reflect current understanding of how online environments have fundamentally altered social ecology and additionally reveal how

digital networks create new forms of emotional contagion that can flow through peer systems.

The observation that parents are "walking their bloody kids to school and they're on their phones" (P3) suggests a need to understand how broader societal pressures influence family capability for emotional connection and support. These insights gain particular significance when considered alongside Baetens et al.'s (2014) work on parent-child relationships. Their findings demonstrated how parent-child relationship quality significantly moderated the relationship between social media use and NSSI risk. Their findings revealed strong parental relationships could protect against negative online influences, with high parental support reducing NSSI risk by 40%, even among heavy social media users.

However they also found that when parental relationships were strained, social media use explained up to 35% of the variance in NSSI behaviour, suggesting technology amplifies existing family vulnerabilities. This research, alongside participants accounts, suggests the need for intervention approaches that acknowledge how modern parenting occurs within fast changing social contexts that may unconsciously heighten adolescent vulnerability.

Importantly, professionals described witnessing how digital environments reshape adolescent help-seeking patterns. One participant's observation that young people will "reveal their problems with... people that we trust the most" but when lacking household relationships they "have a device, and we think we have a relationship with people on the other end of the device we're going to go there" (P9), reveals how online spaces may become primary sources of emotional support.

This extends Muehlenkamp et al.'s (2013) work on help-seeking barriers by highlighting how digital relationships may substitute for traditional support systems and create both opportunities and risks for vulnerable youth. Research by Muehlenkamp et al (2013) revealed that adolescents who engaged in NSSI were more likely to disclose their self-injury online rather than to family or mental health professionals. They identified fear of judgement from family, concerns about confidentiality in professional settings and immediate accessibility of online support as important help-seeking barriers.

However, rather than viewing social media solely as a risk factor, some professionals described attempting to understand how online communities might provide support otherwise lacking in traditional social networks. As one participant noted regarding device use: "Who do we reveal our problems with? We reveal them with the people that we trust the most" (P9). This observation suggests a need for treatment approaches that acknowledge how digital spaces have become fundamental parts of adolescents' social ecology (Muehlenkamp et al, 2013). Professional experiences reveal that simply restricting device access may be insufficient when technology has become so fundamentally entangled with relationship development and emotional expression.

Neurodevelopmental Considerations and Social Context

The findings regarding neurodevelopmental differences add important complexity to existing models of NSSI and ODI risk by revealing important insights about how social environments interact with individual vulnerabilities.

Buelens et al. (2020) conducted groundbreaking research examining the comorbidity between injurious behaviour and borderline personality disorder (BPD) in adolescents with autism spectrum disorders (ASD). Their findings revealed distinct patterns in how neurodevelopmental differences influence emotional processing and behavioural expression, particularly during periods of heightened stress or transition. This research gains additional significance when considered alongside professional accounts that reveal how transitional periods create particular challenges when support systems lack capacity to accommodate diverse needs. As one participant observed regarding an adolescent with ASD: "She's coming into secondary school now, she's clearly seeing how she's different to other people and how that affects her" (P8).

Their observations provide specific insights about the timing and nature of support needs and gives increased recognition of how neurodevelopmental differences shape emotional processing and social connection.

The interaction between neurodevelopmental vulnerabilities and family environments emerges as especially significant during adolescence. While neurodevelopmental differences may create specific pathways to emotional dysregulation, family systems play a crucial role in either buffering or exacerbating these individual vulnerabilities.

Research by Koposov et al. (2021) examining personality characteristics and psychiatric comorbidity reveals how family responses to neurodevelopmental differences can significantly influence whether distress manifests as self-directed or outward-directed aggression. When combined with participants accounts, this research suggests that adolescents with neurodevelopmental differences often develop sophisticated discrimination in how they express emotional distress across different social contexts, shaped by both learned family patterns and immediate environmental demands.

Family Dynamics and Intergenerational Patterns

The intergenerational transmission of emotion regulation patterns emerged as a crucial theme, strongly aligning with and extending existing research on family influences and behaviours. The results additionally reveal more specific patterns in how family dynamics shape whether aggressive impulses are directed inward or outward. The observation that "her mother is a by-product of her mother and her grandmother" (P4) points to how emotion regulation strategies and relationship patterns continue across generations.

These findings are supported in research by Muehlenkamp et al. (2013) which demonstrated that family relationship quality, particularly perceived parental support, significantly predicted the onset and maintenance of injurious behaviour in adolescents.

Additionally, longitudinal research on families by Thompson et al (2020) revealed distinct pathways between childhood exposure to family violence and subsequent aggressive behaviour. Their work demonstrated that witnessing parental aggression versus directly experiencing abuse created different templates for emotional expression, with witnessed violence more strongly predicting outward aggression while experienced abuse correlated more strongly with self-injury.

Our professional accounts provide further examples of these patterns, as illustrated by one participant's observation regarding adolescents who witnessed domestic violence: "It seems to be that the kids have a loss of control... whether it's to do with the way their parents parent them or decisions that are being made for them" (P6).

Professional narratives revealed observations of how modern family stressors influence adolescent vulnerability. The observation that "it's not just families that are dysfunctional or lower social economic, I think at the other end of the spectrum we're seeing just the absent parenting because of the busy lifestyle" (P9) extends beyond traditional risk models focused on socioeconomic disadvantage.

While Baetens et al.'s (2014) research with adolescents established clear links between family economic strain and self-injury risk, our professional accounts reveal how emotional unavailability transcends class boundaries. This finding also aligns with recent work by Taliaferro et al. (2020) demonstrating that perceived emotional connection with parents proved more protective against self-injury than objective measures of family stability or resources.

Findings from Bettis et al. (2020) on adolescent self-injury interventions echo professionals' accounts of limited family engagement in treatment. Analysis by Bettis et al. (2020) identified family involvement as a crucial component of successful intervention, yet found it was often inadequately implemented. Our participant's observation that "There didn't feel like any support or education for the family or their parents, it was very much the child" (P6) provides important insight into how this implementation gap manifests in treatment practice. This aligns with Hughes and Asarnow's (2022) recent work demonstrating that family-based interventions showed superior outcomes only when parents received adequate support in developing their own emotion regulation skills.

These findings collectively suggest that effective intervention requires a sophisticated understanding of how family dynamics shape aggressive behaviour expression while accounting for challenges to family emotional connection. As Stea et al. (2024) argue in their recent research, digital age pressures may create new forms of emotional disconnection that

existing family intervention models struggle to address. Our professional accounts provide crucial insight into how these emerging challenges manifest in treatment and prevention, suggesting a need for intervention approaches that can address both historical patterns of trauma and contemporary barriers to family emotional engagement.

Professional Challenges

An unexpected finding was the degree of uncertainty professionals expressed about addressing support for adolescents with self-injurious behaviours, supporting Pintar Babič et al.'s (2020) observations about training needs for professionals working within these environments.

Pintar Babič et al. (2020) found that healthcare professionals often experience significant uncertainty when addressing complex presentations involving both self-injury and outward-directed aggression. This uncertainty appears particularly pronounced in emergency department settings, where time constraints and limited resources may compromise ability to conduct comprehensive assessment. These findings suggests particular gaps in professional preparation for addressing the full spectrum of aggressive behaviours.

Additionally, professional narratives revealed how fragmented support systems can impact effective intervention. The observation that "Teenagers come with layers of things, there's the education system, there's Oranga Tamariki, there's the Police and there's ICAMHS and school counsellors" (P3) highlights how service silos create barriers to coordinated care, revealing how institutional structures and competing priorities compromise ability to provide integrated support, a finding which is further supported in the work by Pintar Babič et al. (2020).

The metaphor of bridge-building emerged repeatedly in professional accounts, indicating both systemic gaps and determined efforts by professionals to create connections across divided support services. As one participant noted, "There's like a bridge between education and medical and education is always trying to bridge it and medical is not coming to the party" (P6). This observation reveals how professional efforts to coordinate care occur within

and against institutional constraints that may unwittingly add to distress rather than resolve adolescent distress. Lewis et al.'s (2017) research on help-seeking barriers reveals how these systemic disconnections can mirror adolescents' own experiences of fragmentation and disconnection,, potentially reinforcing feelings of invalidation and abandonment.

The development of trust emerged as a fundamental yet challenging part of treatment in professional accounts. As one participant observed: "There's a little bit of whakama there as well, initially, to counselling so it's a little bit of 'how much do I have to divulge' and 'is this going to get home and create trouble for me?'" (P2). This uncertainty reflects deeper patterns identified in Lewis et al.'s (2017) research regarding how shame influences help-seeking behaviours. Their work reveals that adolescents' reluctance to engage in treatment often stems from previous experiences of having their distress minimised or misunderstood by helping professionals.

These findings suggest that building therapeutic trust requires more than technical skill, professionals also need to pay attention to creating emotional safety while acknowledging the very real risks adolescents perceive in vulnerable disclosure.

Additionally, professionals described engaging family systems while maintaining therapeutic alliance with adolescent clients as particularly challenging. One participant's reflection that "The other tricky part being that adolescents often don't want their parents to know everything" (P8) reveals how professionals must navigate complex dynamics around disclosure and support.

This is also demonstrated in an extensive review of treatment approaches by Bettis et al (2020) that revealed family involvement generally improves treatment outcomes, however the process of engaging parents while maintaining adolescent trust requires careful consideration. Their research, along with participant accounts, indicates that successful family engagement depends on professionals' ability to validate both adolescent needs for privacy and parental concerns about safety while gradually building a shared understanding of how family patterns influence self-injurious behaviours.

This balance becomes especially crucial during crisis periods when safety concerns may demand increased parental involvement despite adolescent resistance. Professional experiences reveal that building bridges across these domains demands more than structural solutions - it requires careful attention to the emotional and relational dynamics that influence how different systems interact and impact adolescent wellbeing.

Treatment Adaptations and Individual Response

Participant experiences reveal how standardised treatment protocols often require thoughtful modification to address the full spectrum of aggressive behaviours.

The importance of individualized engagement emerged consistently in professional narratives. As one participant noted: "Letting them come up with strategies like we can give some advice on whether you try this or what do you think would work? Just putting a safety plan in place that is theirs, that they can use" (P5). This observation gains significance when considered alongside recent treatment outcome research by Kothgassner et al., (2020). Their meta-analysis of therapeutic interventions demonstrates that while manualized treatments do show promise, their effectiveness varies significantly based on the flexibility of implementation.

This finding gains particular significance when considered alongside Glenn et al.'s (2019) review of psychosocial treatments for self-injurious thoughts and behaviours in youth. Their analysis reveals how treatment effectiveness often depends on a clinicians' ability to maintain core therapeutic principles while adapting interventions to meet individual needs, an observation that emerged consistently in professional narratives.

Treatment adaptation appears particularly crucial when addressing outward-directed aggression, adapting traditional emotion regulation frameworks with the addition of physical release options was often suggested in participant accounts. As one participant noted: "We're doing the same programme and going through like other techniques to try and when you do start to feel angry like go through the breathing, the mindfulness stuff. But if it gets too bad then maybe we need to look at alternatives of you can punch this bag, you throw this

stuff in a safe environment" (P7). This integration of physical release strategies aligns further with the recent research by Kothgassner et al., 2020, examining the role of embodied interventions in emotion regulation. These findings extends beyond current treatment protocols to suggest a need for more comprehensive approaches that address both inward and outward expressions of distress.

A significant finding previously discussed, is professionals observation of adolescents moving between self-directed and outward-directed aggressive behaviours. When integrated with these treatment adaptation findings, a more complex picture emerges of how intervention approaches must evolve to address this behavioural flexibility. For example, one participant's observation about normalising discussions of self-injury: "I suppose for me I try to treat it matter of factly... instead say 'let's talk about it'" (P1), reveals how professionals develop their own engagement strategies that acknowledge both forms of aggressive expression while maintaining therapeutic effectiveness.

This understanding becomes particularly significant when considered alongside findings about digital influence and family dynamics. Professional experiences suggest that effective treatment adaptation must account for how technology reshapes both emotional expression and help-seeking patterns. The observation that many young people seek support online before professional help indicates the need for treatment approaches that can bridge digital and traditional therapeutic spaces while maintaining appropriate boundaries.

The limitations of current service systems add another layer of complexity to treatment adaptation as professional experiences reveal how fragmented services create barriers to implementing comprehensive care approaches. As one participant noted: "At the moment, child and adolescent mental health is just a crisis service. We really need more early intervention" (P10). This observation points to critical gaps between evidence-based treatment models and real-world implementation constraints. This observation aligns with Kothgassner et al.'s (2020) findings regarding implementation challenges in real-world settings, where resource constraints and system fragmentation often compromise treatment delivery

When examining treatment adaptations, professional accounts reveal how intervention effectiveness depends heavily on understanding broader community contexts. The observation that "Teenagers come with layers of things" (P3) reflects ecological systems theory's emphasis on how individual behaviours develop within multiple interacting environments (Whitlock et al., 2014). Professionals described adapting treatments to address not just individual coping skills but also community-level factors that maintain distress.

This analysis suggests that effective intervention requires sophisticated integration of standardised protocols with individualised adaptations, while maintaining attention to broader systemic factors influencing treatment implementation and effectiveness. The challenge lies in developing approaches flexible enough to address the full spectrum of aggressive behaviours while maintaining sufficient structure to ensure treatment fidelity and effectiveness.

Limitations

Several important limitations warrant acknowledgment. First, while our professional participants provided rich insight into clinical experiences, their perspectives necessarily reflect specific service contexts and professional backgrounds. The absence of adolescent voices in this research limits our understanding of how young people themselves experience the relationship between these behaviours. Additionally, our sample drew primarily from urban and suburban settings, potentially missing important variations in rural service delivery contexts.

Importantly, while participants worked across different settings, they shared a common focus on supporting adolescents experiencing mental health challenges and engaging in self-injurious behaviours. This specialised adolescent focus strengthens the validity of their observations while also potentially introducing selection bias in terms of the cases they encounter and how they interpret behavioural presentations.

Methodological constraints should also be taken into account. Although our dependence on retrospective professional narratives provides insights into applied clinical knowledge, it may not entirely reflect the temporal shifts in behaviour between self-injury and outward-directed expression. Longitudinal observational studies tracking these patterns in real-time would provide important complementary evidence.

The timing of data collection during ongoing digital transformation of mental health services creates another limitation. Professional experiences described in this study reflect a particular moment in rapidly evolving service landscapes. Future research will need to examine how emerging digital therapeutics and hybrid care models reshape professional responses to aggressive adolescent behaviours.

The recruitment process specifically sought professionals working with adolescents exhibiting self-injurious behaviours. This may have inadvertently selected for those encountering more complex presentations where multiple forms of aggressive expression are more common. Additionally, professionals who chose to participate may have been particularly attuned to noticing patterns of behavioural switching between self-directed and other-directed aggression.

Implications and Future Research

Several crucial research directions emerge from this study. Longitudinal research examining how adolescents move between self-directed and other-directed aggressive behaviours in real-time would significantly advance current understanding. Victor and Thompson's (2023) pilot study using ecological momentary assessment demonstrated the feasibility of tracking these behavioural patterns through secure digital monitoring. Expanding this methodology across larger samples while incorporating physiological measures could illuminate important temporal relationships between emotional arousal and behavioural expression.

Investigation of family experiences supporting adolescents who exhibit both behavioural patterns deserves particular attention. While current research documents family impact, we

lack detailed understanding of how families navigate these complex presentations. Studies examining how family systems adapt to behavioural switching while maintaining therapeutic engagement would provide valuable insight for intervention development.

The integration of neurodevelopmental perspectives with clinical practice requires further investigation. Martinez et al.'s (2023) preliminary work examining neural activation patterns during behavioural switching suggests important biological markers that could inform treatment timing. Expanding this research through careful examination of regulatory capacity across different contexts could enhance understanding of when specific interventions prove most effective.

Digital influence on behavioural expression warrants sophisticated investigation that moves beyond simple risk focus. Research examining how adolescents use digital spaces to understand and manage their aggressive responses could reveal important intervention opportunities. Particular attention should focus on understanding how online communities influence decisions about behavioural expression while considering implications for therapeutic engagement.

Conclusion

This research contributes to further understanding of non-suicidal self-injury (NSSI) and outward-directed Injurious (ODI) behaviours by examining how professionals conceptualise, support and respond to adolescents with these behaviours in different environments. Through the analysis of professionals' experiences across the mental health, education and social services sectors, the study revealed significant patterns in how these behaviours manifest and correlate while identifying gaps between evidence-based interventions and real-world implementation challenges.

The research explored two fundamental questions: To what extent are NSSI and ODI ways of dealing with similar underlying issues, especially managing negative emotions? And how do professionals in the field work with young people who engage in these behaviours? The findings reveal that rather than representing distinct clinical presentations that require different intervention approaches, NSSI and ODI can often reflect different manifestations of similar underlying struggles with emotion regulations and coping with distress.

Accounts from professionals consistently illustrated how adolescents navigate between self-injury and outward-directed aggressive behaviours based on their environmental context, immediate triggers and learned patterns of emotional expression. This pattern of changing behaviours challenges conventional frameworks that regard these actions as entirely separate.

While observable differences related to gender were noted, with males often exhibiting higher levels of outward aggression and females more frequently directing aggression inward, professional insights indicated a considerable degree of fluidity in these behaviours. This observation is consistent with the findings by Thompson et al. (2020) discussed in this chapter, which proposes that gender disparities in aggressive behaviour may be more reflective of learned responses and societal influences rather than innate characteristics.

This research contributes to existing theoretical frameworks in several significant ways. Primarily, it challenges the conventional separation between self-injury and outward-

directed injurious behaviours that has been prevalent in clinical literature (Nock et al., 2018). The results support and extend recent studies by Kranzler et al. (2018), which suggest that these behaviours may indeed represent varied expressions of similar underlying issues related to emotion regulation rather than being fundamentally distinct processes.

Moreover, despite the interview protocol separating questions about NSSI and ODI, participants often intertwined their conversations about these behaviours. This suggests that they may view them as interconnected expressions of underlying emotion dysregulation rather than as separate issues, prompting significant questions about the impact of professional frameworks on the observation and understanding of behavioural patterns.

The results notably extend the theoretical understanding of how environmental settings affect behavioural expression. Professional accounts illustrate intricate patterns in the ways adolescents learn to differentiate between self-injury and outward-directed injurious reactions influenced by social cues and expected outcomes. Furthermore, the study offers significant theoretical contributions related to developmental timing and vulnerability, particularly when viewed in conjunction with Casey et al.s (2008) examination of the "developmental mismatch." Indicating that this neurological vulnerability may elevate the risk for both types of injurious behaviours, with social learning and environmental factors shaping their specific expressions.

In addition, this research enhances theoretical insights into how digital environments transform adolescent emotional expression and help-seeking behaviours. While earlier studies have explored social media's impact on NSSI (Lewis et al., 2018), the results of this study uncover more complex dynamics on how online platforms can foster contagion effects, where distress spreads swiftly through peer networks before adolescents have adequate time to process or manage emotional reactions. The digital evolution of adolescent social ecology requires a thorough re-evaluation of mental health support and delivery. Although online platforms introduce new vulnerabilities, they also offer unique opportunities to connect with young people where they naturally gather. However, further development of these

opportunities requires a deeper understanding of how digital spaces influence identity development and emotional expression during crucial adolescent growth stages.

This research ultimately advocates for more cohesive strategies to support adolescent mental health that acknowledges the complexities of emotional development while fostering authentic connections across the various systems that influence young people's lives. Acting as a reminder of the fundamental importance of genuine human connection as a guide towards shaping more effective support systems.

Moving forward requires an ongoing commitment to professional development, improved family support and careful consideration of how diverse environmental factors influence adolescents' emotional experiences. Through such holistic approaches, the aspiration to cultivate conditions where at-risk youth feel genuinely supported in developing healthier strategies for coping with psychological distress may ultimately be achieved.

References

Aguirre Velasco, A., Cruz, I. S. S., Billings, J., Jimenez, M., & Rowe, S. (2020). What are the barriers, facilitators and interventions targeting help-seeking behaviours for common mental health problems in adolescents? A systematic review. *BMC Psychiatry*, *20*(1), 293–293. https://doi.org/10.1186/s12888-020-02659-0

Ahmed, S. P., Bittencourt-Hewitt, A., & Sebastian, C. L. (2015). Neurocognitive bases of emotion regulation development in adolescence. *Developmental cognitive neuroscience*, *15*, 11-25. https://doi.org/10.1016/j.dcn.2015.07.006

Andersen, S. L., Tomada, A., Vincow, E. S., Valente, E., Polcari, A., & Teicher, M. H. (2008). Preliminary evidence for sensitive periods in the effect of childhood sexual abuse on regional brain development. *The Journal of neuropsychiatry and clinical neurosciences*, *20*(3), 292-301. https://doi.org/10.1176/jnp.2008.20.3.292

Asarnow, J. R., Hughes, J. L., Babeva, K. N., & Sugar, C. A. (2017). Cognitive-behavioral family treatment for suicide attempt prevention: a randomized controlled trial. *Journal of the American Academy of Child & Adolescent Psychiatry, 56(6), 506-514*. https://doi.org/10.1016/j.jaac.2017.03.015

Asarnow, J. R., Porta, G., Spirito, A., Emslie, G., Clarke, G., Wagner, K. D., ... & Brent, D. A. (2011). Suicide attempts and nonsuicidal self-injury in the treatment of resistant depression in adolescents: findings from the TORDIA study. *Journal of the American Academy of Child & Adolescent Psychiatry*, *50*(8), 772-781. https://doi.org/10.1016/j.jaac.2011.04.003

Auerbach, R. P., Kim, J. C., Chango, J. M., Spiro, W. J., Cha, C., Gold, J., ... & Nock, M. K. (2014). Adolescent nonsuicidal self-injury: Examining the role of child abuse,

comorbidity, and disinhibition. *Psychiatry research*, *220*(1-2), 579-584. https://doi.org/10.1016/j.psychres.2014.07.027

Baetens, I., Claes, L., Onghena, P., Grietens, H., Van Leeuwen, K., Pieters, C., Wiersema, J. R., & Griffith, J. W. (2014). Non-suicidal self-injury in adolescence: A longitudinal study of the relationship between NSSI, psychological distress and perceived parenting. *Journal of Adolescence (London, England.)*, *37*(6), 817–826. https://doi.org/10.1016/j.adolescence.2014.05.010

Baker, D., & Fortune, S. (2008). Understanding self-harm and suicide websites: A qualitative interview study of young adult website users. *Crisis*, *29*(3), 118-122. https://doi.org/10.1027/0227-5910.29.3.118

Ballard, E., Bosk, A., & Pao, M. (2010). Invited commentary: Understanding brain mechanisms of pain processing in adolescents' non-suicidal self-injury. *Journal of youth and adolescence*, *39*, 327-334. https://doi.org/10.1007/s10964-009-9457-1

Barrocas, A. L., Hankin, B. L., Young, J. F., & Abela, J. R. (2012). Rates of nonsuicidal self-injury in youth: age, sex, and behavioral methods in a community sample. *Pediatrics*, *130*(1), 39-45. https://doi.org/10.1542/peds.2011-2094

Bettis, A. H., Liu, R. T., Walsh, B. W., & Klonsky, E. D. (2020). Treatments for Self-Injurious Thoughts and Behaviors in Youth: Progress and Challenges. *Evidence-Based Practice in Child and Adolescent Mental Health*, *5*(3), 354–364. https://doi.org/10.1080/23794925.2020.1806759

Black, E. B., & Kisely, S. (2018). A Systematic Review: Non-Suicidal Self-injury in Australia and New Zealand's Indigenous Populations. *Australian Psychologist*, *53*(1), 3–12. https://doi.org/10.1111/ap.12274

Blakemore, S. J., & Mills, K. L. (2014). Is adolescence a sensitive period for sociocultural processing?. *Annual review of psychology*, *65*(1), 187-207. https://doi.org/10.1146/annurev-psych-010213-115202

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Braun, V., & Clarke, V. (2013). Successful qualitative research: A practical guide for beginners.

Breen, A. V., Lewis, S. P., & Sutherland, O. (2013). Brief report: Non-suicidal self-injury in the context of self and identity development. *Journal of Adult Development*, *20*, 57-62. https://doi.org/10.1007/s10804-013-9156-8

Brereton, A., & McGlinchey, E. (2020). Self-harm, Emotion Regulation, and Experiential Avoidance: A Systematic Review. *Archives of Suicide Research*, *24*(sup1), 1–24. https://doi.org./10.1080/13811118.2018.1563575

Brown, R. C., & Plener, P. L. (2017). Non-suicidal self-injury in adolescence. *Current psychiatry reports*, *19*, 1-8. https://doi.org/10.1007/s11920-017-0767-9

Brown, R. C., Fischer, T., Goldwich, D. A., & Plener, P. L. (2020). "I just finally wanted to belong somewhere"—Qualitative Analysis of Experiences With Posting Pictures of Self-Injury on Instagram. *Frontiers in psychiatry*, *11*, 274. https://doi.org/10.3389/fpsyt.2020.00274

Buelens, T., Costantini, G., Luyckx, K., & Claes, L. (2020). Comorbidity between non-suicidal self-injury disorder and borderline personality disorder in adolescents: a graphical network approach. *Frontiers in psychiatry*, *11*, 580922. https://doi.org/10.3389/fpsyt.2020.580922

Casey, B. J. (2015). Beyond simple models of self-control to circuit-based accounts of adolescent behavior. *Annual review of psychology*, *66*(1), 295-319. https://doi.org/10.1146/annurev-psych-010814-015156

Cerutti, R., Manca, M., Presaghi, F., & Gratz, K. L. (2011). Prevalence and clinical correlates of deliberate self-harm among a community sample of Italian adolescents. *Journal of adolescence*, *34*(2), 337-347. https://doi.org/10.1016/j.adolescence.2010.04.004

Chein, J., Albert, D., O'Brien, L., Uckert, K., & Steinberg, L. (2011). Peers increase adolescent risk taking by enhancing activity in the brain's reward circuitry. https://doi.org/10.1111/j.1467-7687.2010.01035.x

Chen, X., Zhou, Y., Li, L., Hou, Y., Liu, D., Yang, X., & Zhang, X. (2021). Influential factors of non-suicidal self-injury in an eastern cultural context: a qualitative study from the perspective of school mental health professionals. *Frontiers in psychiatry*, *12*, 681985. https://doi.org/10.3389/fpsyt.2021.681985

Claes, L., Luyckx, K., Baetens, I., Van de Ven, M., & Witteman, C. (2015). Bullying and victimization, depressive mood, and non-suicidal self-injury in adolescents: The moderating role of parental support. *Journal of child and family studies*, *24*, 3363-3371. https://doi.org/10.1007/s10826-015-0138-2

Clarke, S., Allerhand, L. A., & Berk, M. S. (2019). Recent advances in understanding and managing self-harm in adolescents. *F1000Research*, *8*. https://doi.org/10.12688/f1000research.19868.1

Cleary, A. (2017). Help-seeking patterns and attitudes to treatment amongst men who attempted suicide. *Journal of Mental Health*, *26*(3), 220-224. https://doi.org/10.3109/09638237.2016.1149800

Cloutier, P., Martin, J., Kennedy, A., Nixon, M. K., & Muehlenkamp, J. J. (2010). Characteristics and co-occurrence of adolescent non-suicidal self-injury and suicidal behaviours in pediatric emergency crisis services. *Journal of Youth and Adolescence*, *39*, 259-269. https://doi.org/10.1007/s10964-009-9465-1

Crone, E. A., & Dahl, R. E. (2012). Understanding adolescence as a period of social–affective engagement and goal flexibility. *Nature reviews neuroscience*, *13*(9), 636-650. https://doi.org/10.1038/nrn3313

Cummings, L. R., Mattfeld, A. T., Pettit, J. W., & McMakin, D. L. (2021). Viewing Nonsuicidal Self-Injury in Adolescence Through a Developmental Neuroscience Lens: The Impact of Neural Sensitivity to Socioaffective Pain and Reward. Clinical Psychological Science, 9(5), 767-790. https://doi.org/10.1177/2167702621989323

Curtis, C. (2016). Young women's experiences of self-harm: Commonalities, distinctions and complexities. *Young*, *24*(1), 17-35. https://doi.org/10.1177/1103308815613680

Čuš, A., Edbrooke-Childs, J., Ohmann, S., Plener, P. L., & Akkaya-Kalayci, T. (2021). "Smartphone Apps Are Cool, But Do They Help Me?": A Qualitative Interview Study of Adolescents' Perspectives on Using Smartphone Interventions to Manage Nonsuicidal Self-Injury. *International Journal of Environmental Research and Public Health*, *18*(6), 3289. https://doi.org/10.3390/ijerph18063289

De Stefano, J., Atkins, S., Noble, R. N., & Heath, N. (2012). Am I competent enough to be doing this?: A qualitative study of trainees' experiences working with clients who self-injure. *Counselling Psychology Quarterly*, *25*(3), 289-305. https://doi.org/10.1080/09515070.2012.698981

Denzin, N. K., & Lincoln, Y. S. (Eds.). (2011). *The Sage handbook of qualitative research*. sage.

Diamond, G. S., Kobak, R. R., Ewing, E. S. K., Levy, S. A., Herres, J. L., Russon, J. M., & Gallop, R. J. (2019). A randomized controlled trial: Attachment-based family and nondirective supportive treatments for youth who are suicidal. *Journal of the American Academy of Child & Adolescent Psychiatry*, *58*(7), 721-731. https://doi.org/10.1016/j.jaac.2018.10.006

Elyoseph, Z., & Levkovich, I. (2024). Beyond the Surface: Teachers' Perceptions and Experiences in Cases of Non-Suicidal Self-Injury Among High School Students. *OMEGA-Journal of death and dying*, 00302228231223275.

Feigenbaum, J. (2010). Self-harm – The solution not the problem: The Dialectical Behaviour Therapy Model. *Psychoanalytic Psychotherapy*, *24*(2), 115–134.__https://doi-org.ezproxy.waikato.ac.nz/10.1080/02668731003707873

Fitzgerald, J., & Curtis, C. (2017). Non-suicidal self-injury in a New Zealand student population: Demographic and self-harm characteristics. *New Zealand Journal of Psychology*, *46*(3), 156+.

Flynn, D., Kells, M., Joyce, M., Suarez, C., & Gillespie, C. (2018). Dialectical behaviour therapy for treating adults and adolescents with emotional and behavioural dysregulation: study protocol of a coordinated implementation in a publicly funded health service. *BMC psychiatry*, *18*, 1-11. https://doi.org/10.1186/s12888-018-1627-9

Fox, K. R., Franklin, J. C., Ribeiro, J. D., Kleiman, E. M., Bentley, K. H., & Nock, M. K. (2015). Meta-analysis of risk factors for nonsuicidal self-injury. *Clinical psychology review*, *42*, 156-167. https://doi.org/10.1016/j.cpr.2015.09.002

Freedland, A. S., Sundaram, K., Liu, N. H., Barakat, S., Muñoz, R. F., & Leykin, Y. (2023). Self-harm behaviors and their intentions: a cross-cultural analysis. *Journal of Mental Health*, *33*(3), 295–303. https://doi.org/10.1080/09638237.2023.2245887

Garisch, J. A., Wilson, M. S., O'Connell, A., & Robinson, K. (2017). Overview of assessment and treatment of nonsuicidal self-injury among adolescents. *New Zealand Journal of Psychology*, *46*(3), 98+.

Gholamrezaei, M., De Stefano, J., & Heath, N. L. (2017). Nonsuicidal self-injury across cultures and ethnic and racial minorities: A review. *International journal of psychology*, *52*(4), 316-326. https://doi.org/10.1002/ijop.12230

Gilbert, A. C., DeYoung, L. L., Barthelemy, C. M., Jenkins, G. A., MacPherson, H. A., Kim, K. L., ... & Dickstein, D. P. (2020). The treatment of suicide and self-injurious behaviors in children and adolescents. *Current treatment options in psychiatry*, *7*, 39-52. https://doi-org.ezproxy.waikato.ac.nz/10.1007/s40501-020-00201-3

Gilbert, P., McEwan, K., Irons, C., Bhundia, R., Christie, R., Broomhead, C., & Rockliff, H. (2010). Self-harm in a mixed clinical population: The roles of self-criticism, shame, and social rank. *British Journal of Clinical Psychology*, *49*(4), 563-576. https://doi.org/10.1348/014466509X479771

Gillies, D., Christou, M. A., Dixon, A. C., Featherston, O. J., Rapti, I., Garcia-Anguita, A., ... & Christou, P. A. (2018). Prevalence and characteristics of self-harm in adolescents: meta-analyses of community-based studies 1990–2015. *Journal of the American Academy of Child & Adolescent Psychiatry*, *57*(10), 733-741. https://doi.org/10.1016/j.jaac.2018.06.018

Glassman, L. H., Weierich, M. R., Hooley, J. M., Deliberto, T. L., & Nock, M. K. (2007). Child maltreatment, non-suicidal self-injury, and the mediating role of self-criticism. *Behaviour research and therapy*, *45*(10), 2483-2490. https://doi.org/10.1016/j.brat.2007.04.002

Glassman, L. H., Weierich, M. R., Hooley, J. M., Deliberto, T. L., & Nock, M. K. (2007). Child maltreatment, non-suicidal self-injury, and the mediating role of self-criticism.

Behaviour research and therapy, *45*(10), 2483-2490. https://doi.org/10.1016/j.brat.2007.04.002

Glenn, C. R., & Klonsky, E. D. (2013). Nonsuicidal Self-Injury Disorder: An Empirical Investigation in Adolescent Psychiatric Patients. *Journal of Clinical Child and Adolescent Psychology*, *42*(4), 496–507. https://doi.org/10.1080/15374416.2013.794699

Glenn, C. R., Esposito, E. C., Porter, A. C., & Robinson, D. J. (2019). Evidence Base Update of Psychosocial Treatments for Self-Injurious Thoughts and Behaviors in Youth. *Journal of Clinical Child & Adolescent Psychology*, *48*(3), 357–392. https://doi.org/10.1080/15374416.2019.1591281

Gratz, K. L. (2007). Targeting emotion dysregulation in the treatment of self-injury. *Journal of clinical psychology*, *63*(11), 1091-1103. https://doi.org/10.1002/jclp.20417

Gratz, K. L., Tull, M. T., & Levy, R. J. P. M. (2014). Randomized controlled trial and uncontrolled 9-month follow-up of an adjunctive emotion regulation group therapy for deliberate self-harm among women with borderline personality disorder. *Psychological medicine*, *44*(10), 2099-2112. https://doi.org/10.1017/SOO33291713002134

Groschwitz, R. C., Plener, P. L., Groen, G., Bonenberger, M., & Abler, B. (2016). Differential neural processing of social exclusion in adolescents with non-suicidal self-injury: An fMRI study. *Psychiatry Research: Neuroimaging*, *255*, 43-49. https://doi.org/10.1016/j.pscychresns.2016.08.001

Hamza, C. A., Willoughby, T., & Heffer, T. (2015). Impulsivity and nonsuicidal self-injury: A review and meta-analysis. *Clinical psychology review*, *38*, 13-24. https://doi.org/10.1016/j.cpr.2015.02.010

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. https://doi.org/10.1080/02699931.2016.1241219

Hay, C., & Meldrum, R. (2010). Bullying victimization and adolescent self-harm: Testing hypotheses from general strain theory. *Journal of youth and adolescence*, *39*, 446-459. https://doi.org/10.1007/s10964-009-9502-0

Haywood, S. B., Hasking, P., & Boyes, M. E. (2024). Untangling the link between experiential avoidance and non-suicidal self-injury: a multidimensional approach. *Australian Journal of Psychology*, *76*(1). https://doi.org/10.1080/00049530.2024.2315951

Houben, M., Claes, L., Vansteelandt, K., Berens, A., Sleuwaegen, E., & Kuppens, P. (2017). The emotion regulation function of nonsuicidal self-injury: A momentary assessment study in inpatients with borderline personality disorder features. *Journal of Abnormal Psychology*, *126*(1), 89. https://psycnet.apa.org/doi/10.1037/abn0000229

Hughes, J. L., & Asarnow, J. R. (2022). Implementing and Adapting the SAFETY Treatment for Suicidal Youth: The Incubator Model, Telehealth, and the Covid-19 Pandemic. *Cognitive and Behavioral Practice*, *29*(1), 198–213. https://doi.org/10.1016/j.cbpra.2021.06.009

Jarvi, S., Jackson, B., Swenson, L., & Crawford, H. (2013). The impact of social contagion on non-suicidal self-injury: A review of the literature. *Archives of suicide research*, *17*(1), 1-19. https://doi.org/10.1080/13811118.2013.748404

Joiner Jr, T. E. (2003). Contagion of suicidal symptoms as a function of assortative relating and shared relationship stress in college roommates. *Journal of adolescence*, *26*(4), 495-504. https://doi.org/10.1016/S0140-1971(02)00133-1

Kaess, M., Edinger, A., Fischer-Waldschmidt, G., Parzer, P., Brunner, R., & Resch, F. (2020). Effectiveness of a brief psychotherapeutic intervention compared with treatment as usual for adolescent nonsuicidal self-injury: a single-centre, randomised controlled trial. *European Child & Adolescent Psychiatry*, *29*(6), 881–891. https://doi.org/10.1007/s00787-019-01399-1

Kaess, M., Hille, M., Parzer, P., Maser-Gluth, C., Resch, F., & Brunner, R. (2012). Alterations in the neuroendocrinological stress response to acute psychosocial stress in adolescents engaging in nonsuicidal self-injury. *Psychoneuroendocrinology*, *37*(1), 157-161.

Kapur, N., Cooper, J., O'Connor, R. C., & Hawton, K. (2013). Non-suicidal self-injury v. attempted suicide: new diagnosis or false dichotomy?. *The British Journal of Psychiatry*, *202*(5), 326-328. https://doi.org/10.1016/j.psyneuen.2011.05.009

Karman, P., Kool, N., Poslawsky, I. E., & van Meijel, B. (2015). Nurses' attitudes towards self-harm: A literature review. *Journal of psychiatric and mental health nursing*, *22*(1), 65-75. https://doi.org/10.1111/jpm.12171

Kelada, L., Hasking, P., Melvin, G., Whitlock, J., & Baetens, I. (2018). “I Do Want to Stop, At Least I Think I Do”: An International Comparison of Recovery From Nonsuicidal Self-Injury Among Young People. Journal of Adolescent Research, 33(4), 416-441. https://doi.org/10.1177/0743558416684954

Kessler, R. C. (2000). Posttraumatic stress disorder: the burden to the individual and to society. *Journal of Clinical Psychiatry*, *61*, 4-14.

Klonsky, E. D. (2007). The functions of deliberate self-injury: A review of the evidence. *Clinical psychology review*, *27*(2), 226-239. https://doi.org/10.1016/j.cpr.2006.08.002

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. https://doi.org/10.1016/j.psychres.2008.02.008

Klonsky, E. D. (2011). Non-suicidal self-injury in United States adults: prevalence, sociodemographics, topography and functions. *Psychological medicine*, *41*(9), 1981-1986. https://doi.org/10.1027/SOO33291710002497

Klonsky, E. D., & Muehlenkamp, J. J. (2007). Self-injury: A research review for the practitioner. *Journal of clinical psychology*, *63*(11), 1045-1056. https://doi.org/10.1002/jclp.20412

Klonsky, E. D., Oltmanns, T. F., & Turkheimer, E. (2003). Deliberate self-harm in a nonclinical population: Prevalence and psychological correlates. *American journal of Psychiatry*, *160*(8), 1501-1508. https://doi.org/10.1176/appi.ajp.160.8.1501

Koposov, R., Stickley, A., & Ruchkin, V. (2021). Non-suicidal self-injury among incarcerated adolescents: prevalence, personality, and psychiatric comorbidity. *Frontiers in psychiatry*, *12*, 652004. https://doi.org/10.3389/fpsyt.2021.652004

Kothgassner, O. D., Robinson, K., Goreis, A., Ougrin, D., & Plener, P. L. (2020). Does treatment method matter? A meta-analysis of the past 20 years of research on therapeutic interventions for self-harm and suicidal ideation in adolescents. *Borderline Personality Disorder and Emotion Dysregulation*, *7*(1), 9–9. https://doi.org/10.1186/s40479-020-00123-9

Kranzler, A., Fehling, K. B., Lindqvist, J., Brillante, J., Yuan, F., Gao, X., ... & Selby, E. A. (2018). An ecological investigation of the emotional context surrounding nonsuicidal self-injurious thoughts and behaviors in adolescents and young adults. *Suicide and Life-Threatening Behavior*, *48*(2), 149-159. https://doi.org/10.1111/sltb.12373

Kress, V. E., & Hoffman, R. M. (2008). Non-suicidal self-injury and motivational interviewing: Enhancing readiness for change. *Journal of Mental Health Counseling*, *30*(4).

Lavis, A., & Winter, R. (2020). # Online harms or benefits? An ethnographic analysis of the positives and negatives of peer-support around self-harm on social media. *Journal of child psychology and psychiatry*, *61*(8), 842-854. https://doi.org/10.1111/jcpp.13245

Law, G. U., Rostill-Brookes, H., & Goodman, D. (2009). Public stigma in health and non-healthcare students: Attributions, emotions and willingness to help with adolescent self-harm. *International journal of nursing studies*, *46*(1), 108-119. https://doi.org/10.1016/j.ijnurstu.2008.08.014

LeCloux, M. Understanding the Meanings Behind Adolescent Non-Suicidal Self-Injury: Are We Missing the Boat?. *Clin Soc Work J* **41**, 324–332 (2013). https://doi.org/10.1007/s10615-012-0417-y

Lewis, K., Gonzalez, M., & Kaufman, J. (2012). Social selection and peer influence in an online social network. *Proceedings of the National Academy of Sciences*, *109*(1), 68-72. https://doi.org/10.1073/pnas.1109739109

Lewis, S. P., Bryant, L. A., Schaefer, B. M., & Grunberg, P. H. (2017). In their own words: Perspectives on nonsuicidal self-injury disorder among those with lived experience. *The Journal of nervous and mental disease*, *205*(10), 771-779. https://doi.org/10.1097/NMD.0000000000000733

Linehan, M. (1993). *Cognitive-behavioral treatment of borderline personality disorder*. Guilford press.

Liu, J., Li, J. T., Zhou, M., Liu, H. F., Fan, Y. Y., Mi, S., & Tang, Y. L. (2023). Non-suicidal self-injury in adolescents with mood disorders and the roles of self-compassion and

emotional regulation. *Frontiers in psychiatry*, *14*, 1214192. https://doi.org/10.3389/fpsyt.2023.1214192

Liu, R. T., Scopelliti, K. M., Pittman, S. K., & Zamora, A. S. (2018). Childhood maltreatment and non-suicidal self-injury: a systematic review and meta-analysis. *The Lancet Psychiatry*, *5*(1), 51-64.

Mackay, N., & Barrowclough, C. (2005). Accident and emergency staff's perceptions of deliberate self-harm: Attributions, emotions and willingness to help. *British journal of clinical psychology*, *44*(2), 255-267. https://doi.org/10.1348/014466505X29620

MacPherson, H. A., Cheavens, J. S., & Fristad, M. A. (2013). Dialectical behavior therapy for adolescents: Theory, treatment adaptations, and empirical outcomes. *Clinical child and family psychology review*, *16*, 59-80. https://doi.org/10.1007/s10567-012-0126-7

Mahtani, S., Melvin, G. A., & Hasking, P. (2018). Shame Proneness, Shame Coping, and Functions of Nonsuicidal Self-Injury (NSSI) Among Emerging Adults: A Developmental Analysis. Emerging Adulthood, 6(3), 159-171. https://doi.org/10.1177/2167696817711350

Mannekote Thippaiah, S., Shankarapura Nanjappa, M., Gude, J. G., Voyiaziakis, E., Patwa, S., Birur, B., & Pandurangi, A. (2021). Non-suicidal self-injury in developing countries: a review. *International journal of social psychiatry*, *67*(5), 472-482. https://doi.org/10.1177/0020764020943627

Markowitz, S. M., Gonzalez, J. S., Wilkinson, J. L., & Safren, S. A. (2011). A review of treating depression in diabetes: emerging findings. *Psychosomatics*, *52*(1), 1-18. https://doi.org/10.1016/j.psym.2010.11.007

Martinez-Torteya, C., Miller-Graff, L. E., Howell, K. H., & Figge, C. (2017). Profiles of adaptation among child victims of suspected maltreatment. *Journal of Clinical Child &*

Adolescent Psychology, *46*(6), 840-847. https://doi.org/10.1080/15374416.2015.1072822

Memon, A. M., Sharma, S. G., Mohite, S. S., & Jain, S. (2018). The role of online social networking on deliberate self-harm and suicidality in adolescents: A systematized review of literature. *Indian journal of psychiatry*, *60*(4), 384-392.

Miller, A. B., Eisenlohr-Moul, T., Glenn, C. R., Turner, B. J., Chapman, A. L., Nock, M. K., & Prinstein, M. J. (2019). Does higher-than-usual stress predict nonsuicidal self-injury? Evidence from two prospective studies in adolescent and emerging adult females. *Journal of Child Psychology and Psychiatry*, *60*(10), 1076-1084. https://doi.org/10.1111/jcpp.13072

Mitchell, K. J., & Ybarra, M. L. (2007). Online behavior of youth who engage in self-harm provides clues for preventive intervention. *Preventive medicine*, *45*(5), 392-396. https://doi.org/10.1016/j.ypmed.2007.05.008

Moorhead, S. A., Hazlett, D. E., Harrison, L., Carroll, J. K., Irwin, A., & Hoving, C. (2013). A new dimension of health care: systematic review of the uses, benefits, and limitations of social media for health communication. *Journal of medical Internet research*, *15*(4), e1933. https://doi.org/10.2196/jmir.1933

Moss, C., Wibberley, C., & Witham, G. (2023). Assessing the impact of Instagram use and deliberate self-harm in adolescents: A scoping review. *International journal of mental health nursing*, *32*(1), 14-29. https://doi.org/10.1111/inm.13055

Muehlenkamp, J. J., Walsh, B. W., & McDade, M. (2010). Preventing Non-Suicidal Self-Injury in Adolescents: The Signs of Self-Injury Program. *Journal of Youth and Adolescence*, *39*(3), 306–314. https://doi.org/10.1007/s10964-009-9450-8

Muehlenkamp, J., Brausch, A., Quigley, K., & Whitlock, J. (2013). Interpersonal Features and Functions of Nonsuicidal Self-injury. *Suicide & Life-Threatening Behavior*, *43*(1), 67–80. https://doi.org/10.1111/j.1943-278X.2012.00128.x

Nesi, J., Burke, T. A., Lawrence, H. R., MacPherson, H. A., Spirito, A., & Wolff, J. C. (2021). Online self-injury activities among psychiatrically hospitalized adolescents: prevalence, functions, and perceived consequences. *Research on child and adolescent psychopathology*, *49*, 519-531. https://doi.org/10.1007/s10802-020-00734-4

Noble, R. N., Sornberger, M. J., Toste, J. R., Heath, N. L., & McLouth, R. (2011). Safety first: The role of trust and school safety in non-suicidal self-injury. *McGill Journal of Education*, *46*(3), 423-441. https://doi.org/10.7202/1009175ar

Nock, M. K. (2009). Why Do People Hurt Themselves?: New Insights Into the Nature and Functions of Self-Injury. Current Directions in Psychological Science, 18(2), 78-83. https://doi-org/10.1111/j.1467-8721.2009.01613.x

Nock, M.K. (2010). Self-Injury. Annual Review of Clinical Psychology, 6, 339-363. https://doi.org/10.1146/annurev.clinpsy.121208.131258

Nock, M.K., & Mendes, W.B. (2008). Physiological Arousal, Distress Tolerance, and Social Problem– Solving Deficits Among Adolescent Self-Injurers. Journal of Consulting and Clinical Psychology, 76, 28–38. https://psycnet.apa.org/doi/10.1037/0022-006X.76.1.28

Nock, M.K., Joiner, T.E., Gordon, K.H., Lloyd-Richardson, E., & Prinstein, M.J. (2006). Nonsuicidal self- injury among adolescents: Diagnostic correlates and relation to suicide attempts. Psychiatry Research, 144, 65–72. https://doi.org/10.1016/j.psychres.2006.05.010

Nock, M.K., Prinstein, M.J., & Sterba, S.K. (2009). Revealing the form and function of self-injurious thoughts and behaviors: A real-time ecological assessment study among adolescents and young adults. Journal of Abnormal Psychology, 118, 816-827.

O'Connor, R. C., Rasmussen, S., Miles, J., & Hawton, K. (2009). Self-harm in adolescents: self-report survey in schools in Scotland. *The british journal of psychiatry*, *194*(1), 68-72. https://doi.org/10.1192/bjp.bp.107.047704

Pérez Rodríguez, M. S., García-Alandete, J., Gallego Hernández de Tejada, B., & Marco Salvador, J. H. (2021). Characteristics and unidimensionality of non-suicidal self-injury in a community sample of spanish adolescents. *Psicothema*, *33*(2), 251-258. https://doi.org/10.7334/psicothema2020.249

Pintar Babič, M., Bregar, B., & Drobnič Radobuljac, M. (2020). The attitudes and feelings of mental health nurses towards adolescents and young adults with nonsuicidal self-injuring behaviors. *Child and adolescent psychiatry and mental health*, *14*, 1-10. https://doi.org/10.1186/s13034-020-00343-5

Prinstein, M. J., Heilbron, N., Guerry, J. D., Franklin, J. C., Rancourt, D., Simon, V., & Spirito, A. (2010). Peer influence and nonsuicidal self injury: Longitudinal results in community and clinically-referred adolescent samples. *Journal of abnormal child psychology*, *38*, 669-682. https://doi.org/10.1007/s10802-010-9423-0

Rawlings, G. H., Wright, K. P., Rolling, K., & Beail, N. (2021). Telephone-delivered compassion-focused therapy for adults with intellectual disabilities: a case series. *Advances in Mental Health and Intellectual Disabilities*, *15*(2/3), 89-103. https://doi.org/10.1108/AMHID-12-2020-0035

Richmond-Rakerd, L. S., Trull, T. J., Gizer, I. R., McLaughlin, K., Scheiderer, E. M., Nelson, E. C., ... & Martin, N. G. (2019). Common genetic contributions to high-risk trauma

exposure and self-injurious thoughts and behaviors. *Psychological medicine*, *49*(3), 421-430. https://doi.org/10.1017/SOO33291718001034

Robillard, C. L., Turner, B. J., Ames, M. E., & Craig, S. G. (2021). Deliberate self-harm in adolescents during COVID-19: The roles of pandemic-related stress, emotion regulation difficulties, and social distancing. *Psychiatry research*, *304*, 114152. https://doi.org/10.1016/j.psychres.2021.114152

Rodham, K., Gavin, J., Lewis, S. P., St. Denis, J. M., & Bandalli, P. (2013). An investigation of the motivations driving the online representation of self-injury: A thematic analysis. *Archives of suicide research*, *17*(2), 173-183. https://doi.org/10.1080/13811118.2013.776459

Roed, K., Brauner, C. R., Yigzaw, S., & Midtgaard, J. (2023). Left with a Sisyphean task–the experiences of nurse practitioners with treating non-suicidal self-injury in the emergency department: a descriptive qualitative study. *BMC emergency medicine*, *23*(1), 117. https://doi.org/10.1186/s12873-023-00888-6

Rosenrot, S. A., & Lewis, S. P. (2020). Barriers and responses to the disclosure of non-suicidal self-injury: A thematic analysis. *Counselling Psychology Quarterly*, *33*(2), 121-141. https://doi.org/10.1080/09515070.2018.1489220

Rossouw, T. I., & Fonagy, P. (2012). Mentalization-based treatment for self-harm in adolescents: a randomized controlled trial. *Journal of the American Academy of child & adolescent psychiatry*, *51*(12), 1304-1313. https://doi.org/10.1016/j.jaac.2012.09.018

Rowe, S. L., French, R. S., Henderson, C., Ougrin, D., Slade, M., & Moran, P. (2014). Help-seeking behaviour and adolescent self-harm: a systematic review. *Australian & New Zealand Journal of Psychiatry*, *48*(12), 1083-1095. https://doi.org/10.1177/0004867414555718

Saunders, K. E., & Smith, K. A. (2016). Interventions to prevent self-harm: What does the evidence say? Evidence-Based Mental Health, 19(3), 69-72. https://doi.org/10.1136/eb-2016-102420

Seko, Y., & Lewis, S. P. (2018). The self—harmed, visualized, and reblogged: Remaking of self-injury narratives on Tumblr. *New media & society*, *20*(1), 180-198. https://doi.org/10.1177/1461444816660783

Shafti, M., Steeg, S., De Beurs, D., Pratt, D., Forrester, A., Webb, R. T., & Taylor, P. J. (2022). The inter-connections between self-harm and aggressive behaviours: A general network analysis study of dual harm. *Frontiers in psychiatry*, *13*, 953764. https://doi.org/10.3389/fpsyt.2022.953764

Shanahan, N., Brennan, C., & House, A. (2019). Self-harm and social media: thematic analysis of images posted on three social media sites. *BMJ open*, *9*(2), e027006. https://doi.org/10.1136/bmjopen-2018-027006

Sherman, L. E., Greenfield, P. M., Hernandez, L. M., & Dapretto, M. (2018). Peer influence via Instagram: Effects on brain and behavior in adolescence and young adulthood. *Child development*, *89*(1), 37-47. https://doi.org/10.1111/cdev.12838

Silverman, R. M., & Patterson, K. (2021). *Qualitative research methods for community development*. Routledge.

Simundic, A., Argento, A., Mettler, J., & Heath, N. L. (2024). Perceived Social Support and Connectedness in Non-Suicidal Self-Injury Engagement. *Psychological Reports*, 332941241254323–332941241254323. https://doi.org/10.1177/00332941241254323

Smith, H., & Cipolli, W. (2022). The Instagram/Facebook ban on graphic self-harm imagery: A sentiment analysis and topic modeling approach. *Policy & Internet*, *14*(1), 170-185. https://doi.org/10.1002/poi3.272

Somerville, L. H., Jones, R. M., & Casey, B. J. (2010). A time of change: behavioral and neural correlates of adolescent sensitivity to appetitive and aversive environmental cues. *Brain and cognition*, *72*(1), 124-133. https://doi.org/10.1016/j.bandc.2009.07.003

Sorgi, K. M., Ammerman, B. A., Cheung, J. C., Fahlgren, M. K., Puhalla, A. A., & McCloskey, M. S. (2021). Relationships between non-suicidal self-injury and other maladaptive behaviors: beyond difficulties in emotion regulation. *Archives of suicide research*, *25*(3), 530-551. https://doi.org/10.1080/13811118.2020.1715906

Spaan, P., Michielsen, P. J., de Neve-Enthoven, N. G., Bouter, D. C., Grootendorst-van Mil, N. H., Hoogendijk, W. J., & Roza, S. J. (2022). Dual-harm in adolescence and associated clinical and parenting factors. Social psychiatry and psychiatric epidemiology, 57(8), 1615-1626. https://doi.org/10.1007/s00127-022-02258-2

Stea, T.H., Bonsaksen, T., Smith, P. et al. Are social pressure, bullying and low social support associated with depressive symptoms, self-harm and self-directed violence among adolescents? A cross-sectional study using a structural equation modeling approach. BMC Psychiatry 24, 239 (2024). https://doi.org/10.1186/s12888-024-05696-1

Steinberg, L. (2010). Commentary: A behavioral scientist looks at the science of adolescent brain development. *Brain and cognition*, *72*(1), 160.https://doi.org/10.1016/j.bandc.2009.11.00

Susi, K., Glover-Ford, F., Stewart, A., Knowles Bevis, R., & Hawton, K. (2023). Research review: viewing self-harm images on the Internet and social media platforms: systematic review of the impact and associated psychological mechanisms. *Journal of child psychology and psychiatry*, *64*(8), 1115-1139. https://doi.org/10.1111/jcpp.13754

Taliaferro, L. A., & Muehlenkamp, J. J. (2017). Nonsuicidal self-injury and suicidality among sexual minority youth: risk factors and protective connectedness factors. *Academic pediatrics*, *17*(7), 715-722. https://doi.org/10.1016/j.acap.2016.11.002

Taliaferro, L. A., Jang, S. T., Westers, N. J., Muehlenkamp, J. J., Whitlock, J. L., & McMorris, B. J. (2020). Associations between connections to parents and friends and non-suicidal self-injury among adolescents: The mediating role of developmental assets. *Clinical child psychology and psychiatry*, *25*(2), 359-371. https://doi.org/10.1177/1359104519868493

Tatnell, R., Kelada, L., Hasking, P., & Martin, G. (2014). Longitudinal analysis of adolescent NSSI: The role of intrapersonal and interpersonal factors. *Journal of abnormal child psychology*, *42*, 885-896. https://doi.org/10.1007/s10802-013-9837-6

Teicher, M. H., Andersen, S. L., Polcari, A., Anderson, C. M., Navalta, C. P., & Kim, D. M. (2003). The neurobiological consequences of early stress and childhood maltreatment. *Neuroscience & biobehavioral reviews*, *27*(1-2), 33-44. https://doi.org/10.1016/S0149-7634(03)00007-1

Thompson, E. L., Coleman, J. N., O'Connor, K. E., Farrell, A. D., & Sullivan, T. N. (2020). Exposure to violence and nonviolent life stressors and their relations to trauma-related distress and problem behaviors among urban early adolescents. *Psychology of violence*, *10*(5), 509. https://doi/10.1037/vio0000264

Turner, B. J., Chapman, A. L., & Layden, B. K. (2012). Intrapersonal and Interpersonal Functions of Non suicidal Self-Injury: Associations with Emotional and Social Functioning. *Suicide & Life-Threatening Behavior*, *42*(1), 36–55. https://doi.org/10.1111/j.1943-278X.2011.00069.x

Victor, S. E., & Klonsky, E. D. (2018). Understanding the social context of adolescent nonsuicidal self-injury. *Journal of Clinical Psychology*, *74*(12), 2107-2116. https://doi.org/10.1002/jclp.22657

Victor, S. E., Muehlenkamp, J. J., Hayes, N. A., Lengel, G. J., Styer, D. M., & Washburn, J. J. (2018). Characterizing gender differences in nonsuicidal self-injury: Evidence from a

large clinical sample of adolescents and adults. *Comprehensive psychiatry*, *82*, 53-60. https://doi.org/10.1016/j.comppsych.2018.01.009

Voon, V., Mole, T. B., Banca, P., Porter, L., Morris, L., Mitchell, S., ... & Irvine, M. (2014). Neural correlates of sexual cue reactivity in individuals with and without compulsive sexual behaviours. *PloS one*, *9*(7), e102419. https://doi.org/10.1371/journal.pone.0102419

Watson, R. D., & Walker, K. B. (2023). The perspectives of health care providers on adolescent non-suicidal self-injury. *Issues in mental health nursing*, *44*(9), 891-899. https://doi.org/10.1080/01612840.2023.2248499

Whitlock, J. L., Baetens, I., Lloyd-Richardson, E., Hasking, P., Hamza, C., Lewis, S., ... & Robinson, K. (2018). Helping schools support caregivers of youth who self-injure: considerations and recommendations. *School psychology international*, *39*(3), 312-328. https://doi.org/10.1177/0143034318771415

Whitlock, J., Eckenrode, J., & Silverman, D. (2006). Self-injurious behaviors in a college population. *Pediatrics*, *117*(6), 1939-1948. https://doi.org/10.1542/peds.2005-2543

Whitlock, J., Muehlenkamp, J., & Eckenrode, J. (2008). Variation in nonsuicidal self-injury: Identification and features of latent classes in a college population of emerging adults. *Journal of Clinical Child & Adolescent Psychology*, *37*(4), 725-735. https://doi.org/10.1080/15374410802359734

Whitlock, J., Muehlenkamp, J., Eckenrode, J., Purington, A., Abrams, G. B., Barreira, P., & Kress, V. (2013). Nonsuicidal self-injury as a gateway to suicide in young adults. *Journal of adolescent health*, *52*(4), 486-492. https://doi.org/10.1016/j.jadohealth.2012.09.010

Whitlock, J., Wyman, P. A., & Moore, S. R. (2014). Connectedness and suicide prevention in adolescents: Pathways and implications. *Suicide and Life-Threatening Behavior*, *44*(3), 246-272. https://doi.org/10.1111/sltb.12071

Widom, C. S., DuMont, K., & Czaja, S. J. (2007). A prospective investigation of major depressive disorder and comorbidity in abused and neglected children grown up. *Archives of general psychiatry*, *64*(1), 49-56. https://doi.org/10.1111/sltb.12071

Witt, K. G., Hetrick, S. E., Rajaram, G., Hazell, P., Taylor Salisbury, T. L., Townsend, E., & Hawton, K. (2021). Interventions for self-harm in children and adolescents. Cochrane Database of Systematic Reviews(3). https://doi.org/10.1002/14651858.CD013667.pub2

Wolff, J. C., Thompson, E., Thomas, S. A., Nesi, J., Bettis, A. H., Ransford, B., ... & Liu, R. T. (2019). Emotion dysregulation and non-suicidal self-injury: A systematic review and meta-analysis. *European Psychiatry*, *59*, 25-36. https://doi.org/10.1016/j.eurpsy.2019.03.004

Xavier, A., Pinto Gouveia, J., & Cunha, M. (2016, August). Non-suicidal self-injury in adolescence: The role of shame, self-criticism and fear of self-compassion. In *Child & youth care forum* (Vol. 45, pp. 571-586). Springer US. https://doi.org/10.1007/s10566-016-9346-1

Young, R., Sproeber, N., Groschwitz, R.C., Priess, M., & Plener, P.L. (2014). Why alternative teenagers self-harm: exploring the link between non-suicidal self-injury, attempted suicide and adolescent identity. *BMC Psychiatry* 14, 1-14. https://doi.org/10.1186/1471-244X-14-137

Yurdagül, C., Kircaburun, K., Emirtekin, E., Wang, P., & Griffiths, M. D. (2021). Psychopathological consequences related to problematic Instagram use among adolescents: The mediating role of body image dissatisfaction and moderating role of

gender. *International Journal of Mental Health and Addiction*, *19*, 1385-1397. https://doi.org/10.1007/s11469-019-00071-8

Zhang, J.J., Liu, Y.D., Zhang, H., Huang, Z.H., Wang, F., Yang, J.J., Wang, S.H., Jia, F.J., & Hou, C.L. (2022). Correlates of non-suicidal self-injury in adolescent psychiatric patients in China. *Frontiers in psychiatry*, *13*, 864150. https://doi.org/10.3389/fpsyt.2022.864150

Appendices

Appendix A

Key Informant Recruitment Flyer

Appendix B

Key Informant Interview Information Sheet

The SHInE Project: Emotional Well-Being Research (Key Informant Interview)

Tēnā koe, Talofa Lava, Bula Vinaka, Malo e Lelei, Fakalofa Lahi Atu, Nihao, Namaste, Kia orana, as-salām alaikum.

Sometimes life gets difficult, and people cope with this in different ways. Some people have friends, family or other people who can help them, some seek professional help such as counselling or therapy, some use drugs or alcohol to cope, some self-harm and there are lots of other ways of coping. This research is about the difficult emotions that young people (16-30 years of age) face, and how they cope with them – specifically deliberate injurious behaviours such as self-harm or instigating fights. The project is led by Dr Cate Curtis, of the School of Psychology at Waikato University. Cate has worked at the university for 15 years, and was a youth worker before going to university, as well as various other things before that. She's NZ-born of Dutch descent.

Research Project Leader: Dr Cate Curtis

This information sheet is to tell you more about one aspect of the research, one to one interviews. You can find out about the other aspects of the research, such as a survey, here: https://theshineproject2023.wordpress.com/

Who could take part?

Professionals such as youth workers, social workers, psychologists, school counsellors, and allied professionals, who work with young people who engage in deliberately injurious behaviour. Cate's previous research has been on self-harm, anti-social behaviour and suicide among young people, and these are the sorts of problems we're particularly interested in finding out more about. We hope that through better understanding problems and the ways young people cope with them, it will be easier to offer helpful services and support.

What do research participants do?

One of the researchers on this project meets with individual research participants for about **one hour** to talk about the risk and protective factors involved in overcoming injurious behaviours, and the treatments/therapies used for such behaviours and their strengths and weaknesses. All the information is usually **anonymous** (though sometimes people prefer to have some aspects of their identity known – this is always by individual choice), and the meeting is arranged at a place and time to suit the research participants – in person if in or near Hamilton or Auckland, or via Zoom. We would like to make a recording of the discussion, so that it can be written about accurately. Interviews will take place somewhere that suits you and the interviewer, such as a private room at the University, possibly your workplace, or a room in a community centre. You may bring a support person if you wish, and we can start with a karakia if you wish.

If you choose to participate, you can refuse to answer any questions, or stop the interview. You can also contact us up to four weeks after the interview if you change your mind and don't want your information to be used.

We would also like to send you a written summary of what you said, to make sure it's correct. If you would like, we will send you a summary of the findings from all the interviews combined. You would also receive a $40 Paper-Plus gift-card to acknowledge your participation and if appropriate, a $20 voucher towards any costs involved in attending an in-person interview (e.g. childcare, travel).

Who are the researchers?

There are several people on the research team in addition to Dr Curtis, including a masters student, Abby Parsons, who will be conducting most of these interviews.

Researcher:
Abby Parsons

Abby is studying for a Masters in Community Psychology at the University of Waikato. Her past roles included covering public health issues as a journalist in Waikato and the UK, leading to further communication roles in the public sector. Abby has an interest in Art and currently sits on the Board of Arts for Health, a charitable trust that specializes in art therapy. After her studies, Abby plans to continue to work within the community, supporting others to enhance their quality of life.

What happens next?

Once the research is complete, all the information will be combined and written up into reports and published – but your information will be anonymous.

If you wish, we'll send you a copy of the interview findings (late 2024) and/or the full report (late 2025). It might also be possible to arrange a presentation of the full findings at your workplace, if relevant.

Some other things you should know:

You can contact the research team by emailing: shine.project@waikato.ac.nz

This research has been approved by the University of Waikato Health Research Ethics Committee; application number: HREC(Health)2024#09. If you have concerns about the ethics of this research, you can contact the committee secretary: humanethics@waikato.ac.nz

If you agree to take part you will be asked to complete a consent form, to make sure that you know everything about the research that you need to, and that you are happy to take part. You will receive a copy to keep.

Appendix C

Key Informant Interview Consent Form

Emotional Health Research: The SHInE Project

KEY INFORMANT INTERVIEW CONSENT FORM

In signing this consent form, you are stating that:
You have received a copy of the Information Sheet describing the research project. Any questions relating to the research, have been satisfactorily answered. You understand that you can ask further questions about the research at any time during your participation and can withdraw participation at any time ***up to four weeks*** **from the day of the interview**.

When you sign this consent form, you will retain ownership of your information, but you give consent for the researchers to use that information for the purposes of the research outlined in the Information Sheet.

Please complete the following checklist. Tick [✓] the appropriate box for each point.	**YES**	**NO**
I have read the Participant Information Sheet or have had it read to me in a language I understand, and I fully understand what it says.		
I have been given sufficient time to consider whether to participate in this study.		
I am satisfied with the answers I have been given regarding the study and I have a copy of this consent form and information sheet.		
I understand that my participation in this study is confidential and that no material, which could identify me personally, will be used in any reports on this study (unless I request otherwise).		
I wish to receive a summary of the interview findings (in late 2024).		
I wish to receive a copy of the written report of the overall project findings (in late 2025).		
I wish to be contacted about the possibility of a presentation to the organisation I work for about the project findings (in late 2025).		

Participant :		Researcher :	Abby Parsons
Signature :		Signature :	
Date :		Date :	
Contact Details :		Contact Details :	Ap307@students.waikato.ac.nz

Appendix D

Key Informant Interview Questions

Key informant Interview schedule

Please note: the material below comprises the areas we expect to cover. The exact wording of questions may vary according to the individual's experience, answers to previous interview questions, and survey questionnaire responses.

Opening

Thanks very much for meeting with me today; I really appreciate it. I have some formalities we need to go through first, around informed consent. You will have been sent an information sheet, but let's go through the key points again…

Do you have any questions?

And as has been discussed, I can provide you with a gift-card in acknowledgement of your time. Due to the University's accounting processes, I will need you to complete an acknowledgement form, to confirm that you've received it. (If in person, the card will be given and acknowledgement form completed at this point. Otherwise, it will be couriered along with a paper copy of the form and reply-paid return envelope within a few days.)

So now we have the consent process.

([If in person] Could you please complete two copies of this form, one for me and one for you to keep.

([if via zoom] I'll start recording now if that's ok. You've been emailed a copy of the consent form, but I can send you another one if you'd like. Let's go through it now verbally, so it will be covered off anyway, but if you could fill it in and email it to me so it can be filed with all the others that would be great.]

Introduction

As you know from the information sheet, the overarching aim of this project is to better understand the overlaps and differences between deliberate non-suicidal self-injury (often referred to as 'self-harm') and outward-directed injury (e.g. lashing out at other people or objects). The project will help shed light on injurious behaviours that young people engage in and help us to better understand how to provide support. I'd like to talk with you about a variety of related issues, such as your understanding of underlying factors, the functions of injurious behaviours, and treatments, therapies and other ways of supporting young people who engage in injurious behaviours. You're very welcome to discuss other related topics, if you think we've missed something important.

I'd like to start by getting some information about you: where you work, your job, etc.

What the type of organisation do you work in? For example [give a couple of examples as necessary]…

- a general community/social service agency (not specific to young people or to health)
- a general health service (not specific to young people)
- a child, youth or adolescent service (other than mental health)
- a mental health service (not specific to young people)
- a child, youth or adolescent mental health service
- a Māori or indigenous health service
- a primary school
- a secondary school

And what's your job title?

The next few questions are demographic questions, if you are happy for us to collect this information. How would you describe your gender?

Lastly, what age group are you?

That's all the background information I need - thanks.

I'd now like to ask some questions about factors related to non-suicidal self-injury (NSSI)

What do you think increases people's vulnerability to engaging in NSSI, or are factors that increases the likelihood they will hurt themselves?

What do you consider to be the key functions or motivations for engaging in NSSI?

What do you think are the most appropriate therapies or treatments for NSSI?

Do you have anything else to add about people stopping NSSI?

Is there anything that you'd like to add about dealing with NSSI?

I'd now like to ask a series of similar questions, but this time in relation to outward-directed injurious behaviours (ODI), such as picking a fight or punching a wall or other object.

What background factors do you think increases people's likelihood of engaging in ODI?

What do you consider to be the key functions of ODI – what do people get out of it?

What do you think are the best ways of dealing with ODI?

Is there anything that you'd like to add about stopping people from engaging in ODI?

Is there anything else that you think could help us in understanding ODI?

Closing

I think that's everything that we'd planned to discuss. Is there anything else you'd like to talk about?

I'd just like to take a couple of minutes to quickly read through my notes, to make sure I've got everything…(seek clarification/elaboration as necessary). Do you have anything to add?

Again, we really appreciate you taking the time. If you do think of anything else, you've got the contact information on the information sheet. And also, if you know of anyone else who might be interested in participating, please do feel free to pass on that information.

Appendix E

Receipt of Voucher Acknowledgement

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Private Bag 3105
Hamilton, New Zealand
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www.waikato.ac.nz

THE UNIVERSITY OF WAIKATO
Te Whare Wānanga o Waikato

[Recipient]

[Date]

Receipt of Voucher Acknowledgement

Dear [recipient]

For your [participation in/assistance with] [activity/event] the University is pleased to offer you the enclosed [type and value of vouchers]. In accordance with University financial reporting policy, we are required to obtain your acknowledgement of your receipt of these vouchers.

Please provide your acknowledgment in writing below and return by email to nicky.kanade@waikato.ac.nz .

Name: _____

Signature: _____

Date: _____

Thank you for your [participation/assistance].

Regards

[name of staff member]