
**“ASSOCIATION BETWEEN COPING SKILLS
AND TEMPERAMENT IN CHILDREN AND
ADOLESCENTS WITH SUICIDAL BEHAVIOUR
OR NON-SUICIDAL SELF-INJURY – AN
OBSERVATIONAL STUDY IN A TERTIARY CARE
CENTRE”**

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ABBREVIATIONS

SMB	-	Self-mutilating behavior
DSH	-	Deliberate self-harm
NSSI	-	Non-suicidal self-injury
PAQ	-	Parental Authority Questionnaire
A-COPE	-	Adolescent Coping Orientation for Problem Experiences
EAT-Q	-	Early Adolescent Temperament Questionnaire
MINI Kid	-	Mini-International Neuropsychiatric Interview for Children and Adolescents MINI Kid
DSM-5-TR	-	Diagnostic and Statistical Manual of Mental Disorders Text Revised
IDD	-	Intellectual Disability Disorder
ADHD	-	Attention Deficit Hyperactivity Disorder

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ABSTRACT

Background: Suicidal behavior and non-suicidal self-injury (NSSI) are significant public health concerns among children and adolescents. Self-injury, often a precursor to suicidal behavior, can be influenced by psychological, social, and developmental factors. This study investigates the association between temperament, coping skills, and self-injurious behavior in children and adolescents.

Objective: The primary objective of this study is to determine the relationship between coping skills and temperament in children and adolescents with suicidal behavior or NSSI. The secondary objective is to assess the socio-demographic and clinical profile of these individuals.

Methods: This cross-sectional observational study included 40 children and adolescents diagnosed with suicidal behavior or NSSI as per DSM-5-TR criteria. Participants were assessed using standardized tools such as the Thomas and Chess Temperament Questionnaire, the A-COPE, and the MINI-Kid, alongside demographic and clinical data collection. Statistical analyses were performed to explore correlations between coping strategies, temperament, and self-harm behaviours.

Results: The study found that a significant proportion of participants exhibited maladaptive coping strategies, particularly avoidance and emotional venting, which correlated with self-injurious behavior. Negative emotionality and emotional dysregulation were identified as key temperament traits associated with NSSI. Family conflicts and academic stress were the most common stressors reported. Maladaptive coping mechanisms were significantly associated with higher numbers of self-harm attempts, particularly in individuals using more violent methods such as hanging or poisoning.

Conclusion: This study highlights the critical role of temperament and coping skills in self-harm behaviours among children and adolescents. Interventions focused on enhancing adaptive coping strategies and emotional regulation could be effective in reducing NSSI and preventing future suicidal behavior. Early identification of at-risk individuals based on temperament traits and coping styles may facilitate timely interventions and improve mental health outcomes in this vulnerable population.

INTRODUCTION

Suicidal behaviour is defined in individuals who have engaged in potentially self-injurious behaviour with at least some intent to die as a result of the act. Non-suicidal self-injury is defined in individuals who have engaged in intentional self-inflicted damage to the body of a sort likely to induce bleeding, bruising, or pain (e.g., cutting, burning, stabbing, hitting, excessive rubbing) in the absence of suicidal intent.¹ It is one of the strongest antecedents of suicide in youth.² The psychiatric morbidity is found in limited number of adolescents who self-harm. There could be other factors related to psycho-social development of child such as temperament and poor coping skills which may contribute to self-harm in children and adolescents. Coping specifically refers to the cognitive and behavioural activities used by a person in an attempt to manage specific stressful situations and the emotions that these situations generate.³ Temperament refers to such innate, deeply rooted building blocks of personality, which, by definition, are the stable, biologically determined core of personality, manifested from a relatively early age and remaining quite stable throughout the life span, and determining its emotional domain and activity level and related cognitions.⁴

Studies suggest that about one-fourth to three-fourths of deaths in the young population in India could be due to suicides. In terms of suicide attempt 8% of children and adolescents report life time suicide attempt and 3.5% report suicide attempt in last 1 year.^{5,6,7} With regards to psychiatric morbidity studies suggest that only one third to half (30-52%) of the adolescents who present with attempted suicide or deliberate self-harm have psychiatric morbidity.^{8,9} This indicates the possibility of other contributing factors for self-injury in children and adolescents. Hence, by correlating coping skills and temperament to non-suicidal self-injury in children and

adolescents, it is possible to evaluate other possible causes for self-injury, as well as better coping skills can be taught to such individuals to help reduce the instances of self-injury.

Although suicidal behaviour and non-suicidal self-injury is quite prevalent in India, the availability of literature of children and adolescents is limited. This observational study is being undertaken in our population as there are not many which have investigated various aspects like coping skills, temperament, and stressors, for suicidal behaviour and non-suicidal self-injury. This would help in understanding suicidal behaviour and non-suicidal self-injury in the general population, which can further refine treatment protocols and management.

OBJECTIVES

Primary objective:

To determine association between coping skills and temperament in children and adolescents with suicidal behaviour or non-suicidal self-injury.

Secondary objective:

To assess the socio-demographic and clinical profile of children and adolescents with suicidal behaviour or non-suicidal self-injury.

REVIEW OF LITERATURE

Review of literature is described under the following headings.

1. Defining Self-harm
2. Etiology of Self-harm
3. Self-harm, temperament, and coping skills
4. Self-harm- Prevalence and epidemiology
5. Functions of Self-harm
6. Defining Temperament
7. Theories of Temperament
8. Biological Basis of Temperament
9. Temperament and Psychiatric Disorders
10. Temperamental Risk Factors for Self-harm
11. Defining Coping skills
12. Coping mechanisms
13. Adaptive vs Maladaptive coping
14. Coping skills and self-harm

Defining Self-harm

Self-harm is described under different terms such as self-harm behaviour, self-injurious behaviour, deliberate self-harm (DSH), self-mutilatory behaviour (SMB) and suicidal behaviour. However, based on intent to die, it can broadly be divided into suicidal behaviour and non-suicidal self-injury (NSSI).

Suicidal behaviour is defined by individuals engaging in actions that may lead to self-inflicted harm with a clear intention of ending their own life as a result of these actions.² While non-suicidal self-injury is defined by individuals who intentionally

inflict harm upon their own bodies in a manner that is likely to result in bleeding, bruising, or pain (such as cutting, burning, stabbing, striking, or excessive abrasion) without any suicidal intent.²

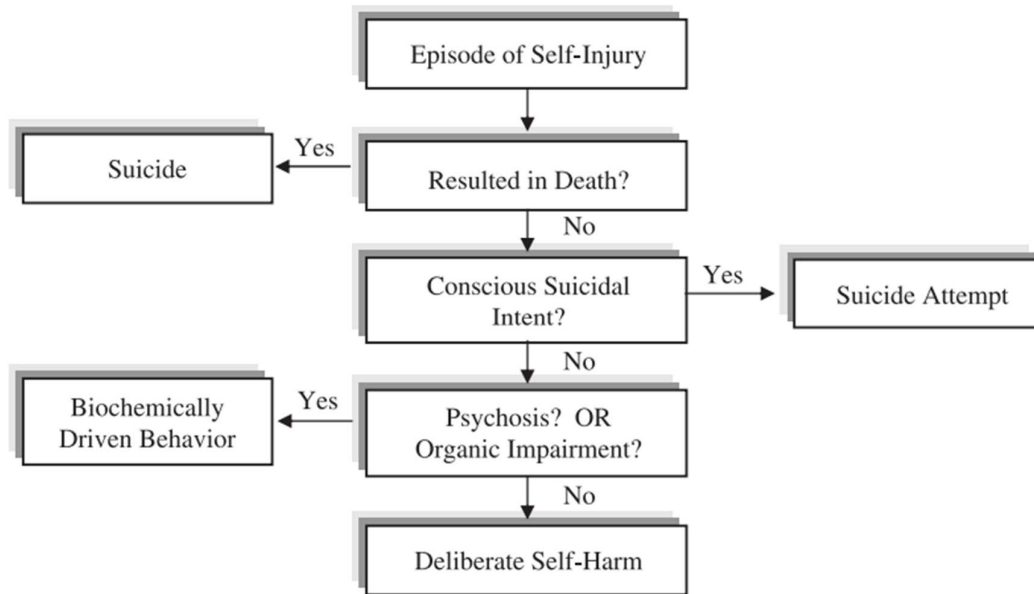


Figure 1: What is Deliberate self-harm?

Etiology of Self-harm

Although not consistently associated with suicidal thoughts, self-injurious behaviour exhibits a strong link to psychological instability and has been recognized as a predictor of subsequent suicide attempts.¹⁰ The adolescent phase is a significant developmental period noted for its extensive biological, cognitive, and social alterations, which create unique challenges in emotional regulation and the formation of identity. Throughout this developmental phase, a significant number of individuals face profound emotional turmoil and social obstacles, which may lead some to engage in self-harming behaviours as a maladaptive means of coping.¹¹ Grasping the elements that contribute to self-harming behaviours among adolescents is crucial for

prompt intervention. Two constructs—coping strategies and temperament—have been increasingly recognized as significant in influencing self-harm vulnerability.

Self-harm, temperament, and coping skills

Temperament, a fundamentally biological component of personality, includes variations in emotional reactivity, self-regulation, and behavioural inclinations.¹² It is believed to remain fairly stable throughout an individual's lifetime and is evident from the early years of childhood. Temperamental traits such as increased negative affectivity (i.e., frequent feelings of anxiety, irritability, or sadness), reduced effortful control (i.e., difficulties in inhibiting impulses), and heightened emotional sensitivity have been associated with a higher risk of engaging in self-injurious behaviours.¹³ Young individuals exhibiting these temperamental characteristics may face greater challenges in managing distressing emotions or adapting to stressful circumstances, making them more likely to turn to maladaptive coping mechanisms like self-harm.

Coping mechanisms refer to the cognitive and behavioural strategies employed to manage both internal and external stressors. These strategies are typically divided into adaptive approaches, such as problem-solving and seeking social support, and maladaptive approaches, including avoidance, denial, and self-injury.¹⁴ Research shows that adolescents engaged in non-suicidal self-injury (NSSI) are more likely to use maladaptive coping mechanisms and demonstrate a limited ability to access adaptive emotional regulation strategies.¹⁵ The ability to effectively manage emotional distress is a crucial developmental milestone during adolescence, and deficiencies in coping skills can increase the likelihood of self-injurious behaviours. Adolescents lacking in these skills may turn to NSSI as a way to express or cope with difficult emotions when more constructive options are unavailable or underdeveloped.¹⁶

Moreover, temperament and coping mechanisms are closely intertwined. The characteristics linked to temperament not only influence a child's reaction to stressful situations but also shape the coping strategies they are likely to adopt. For instance, teenagers displaying increased emotional reactivity may prefer avoidance or emotion-focused coping techniques rather than problem-solving methods.¹⁷ Similarly, individuals with lower effortful control may struggle to utilize more adaptive responses in emotionally intense situations, thus increasing the chances of impulsive or harmful behaviours, such as non-suicidal self-injury (NSSI).¹⁸ These connections highlight the complex interactions between innate dispositional traits and learned behaviours that influence psychological outcomes throughout development.

The role of temperament and coping strategies in the development of self-harming behaviours holds significant consequences for early intervention and preventive approaches. Notably, certain temperament traits may act as markers for identifying at-risk youth before self-injurious behaviours become apparent. In these contexts, interventions focused on improving emotional regulation, cultivating self-awareness, and advancing adaptive coping strategies could act as protective mechanisms. Efforts targeted at enhancing coping mechanisms in school settings, for instance, have proven effective in alleviating emotional dysregulation and associated behaviours.¹⁹ Moreover, interventions tailored to fit an individual's temperament are likely to be more effective in promoting lasting behavioural and emotional changes.

Despite the growing body of academic research, a significant gap remains in understanding how temperament and coping strategies interact to influence self-harming behaviours in children and adolescents. A significant portion of available studies largely address coping strategies or temperament independently, or it emphasizes older adolescents and young adults. This restricted perspective hinders

our ability to fully explain the developmental course of non-suicidal self-injury (NSSI) and to comprehend the relationship between personal predispositions and environmental stressors in younger age groups. Furthermore, a substantial share of the research completed so far has mainly concentrated on Western populations, neglecting the cultural, familial, or contextual elements that might impact the development of temperament and coping strategies.

Considering the profound developmental consequences of emotional and behavioural regulation during the crucial stages of childhood and adolescence, it is crucial to examine these factors concurrently in relation to self-harm. This study seeks to examine the relationship between self-harming behaviours, coping strategies, and temperament in children and adolescents. Specifically, it aims to identify which temperamental traits and coping styles show the most robust correlation with self-injurious behaviour, and how these connections may inform the development of targeted interventions. Through a comprehensive approach, this research has the capacity to deepen the understanding of the psychological mechanisms that underlie self-harm and support the development of preventive strategies tailored to individual differences.

Self-harm- Prevalence and epidemiology:

Self-harm behaviour is prevalent across various demographic and socio-economic divisions within society, but it is particularly notable among adolescents. The root causes and prevalence of self-harm in adolescents exhibit significant differences both within a country and among different nations, influenced by a variety of socio-economic factors. Numerous studies have indicated that the rate of self-harm behaviours falls within the range of 3.2% to 4.5% over the past year. The incidence of

self-harm differs based on gender, socio-economic status, and environmental influences.²⁰

Risk factors:

- Psychological: Difficulty in expressing feelings, loneliness, aggression, low self-esteem, academic disturbances, substance abuse, depression, anxiety.^{19,20}
- Social: Negative peer influence, self-harming behaviour in peers, bullying/violence at school, lack of close friends/social support, relationship problems, social conflict.^{19,20}
- Familial: History of suicide in family, violence at home, parental neglect, marital discord between parents, authoritarian parenting style.^{19,20}

Functions of Self-Harm:

The functions associated with self-harm can be categorized into two primary groups: intrapersonal–self-focused (such as emotional regulation and self-punishment) and interpersonal–other-focused (for instance, changing how others perceive them). The principal aim is to provide transient relief from severe negative emotional states. Prior to committing acts of self-harm, people commonly find themselves overwhelmed by intensified negative emotions, and self-injury generally serves to alleviate these painful feelings, while also instilling a sense of calm and relief. Additionally, individuals have reported that they resort to self-harm as a way to express self-directed anger or as a form of self-punishment, indicating a link between self-criticism and self-harming behaviours [Nock et al., Glassman et al., and Hooley and St Germain]. Furthermore, non-self-harm may serve other functions, such as a desire to influence others or to produce a physical representation of emotional distress; however, these objectives pertain solely to a small fraction of those who exhibit self-injurious behaviours.²¹

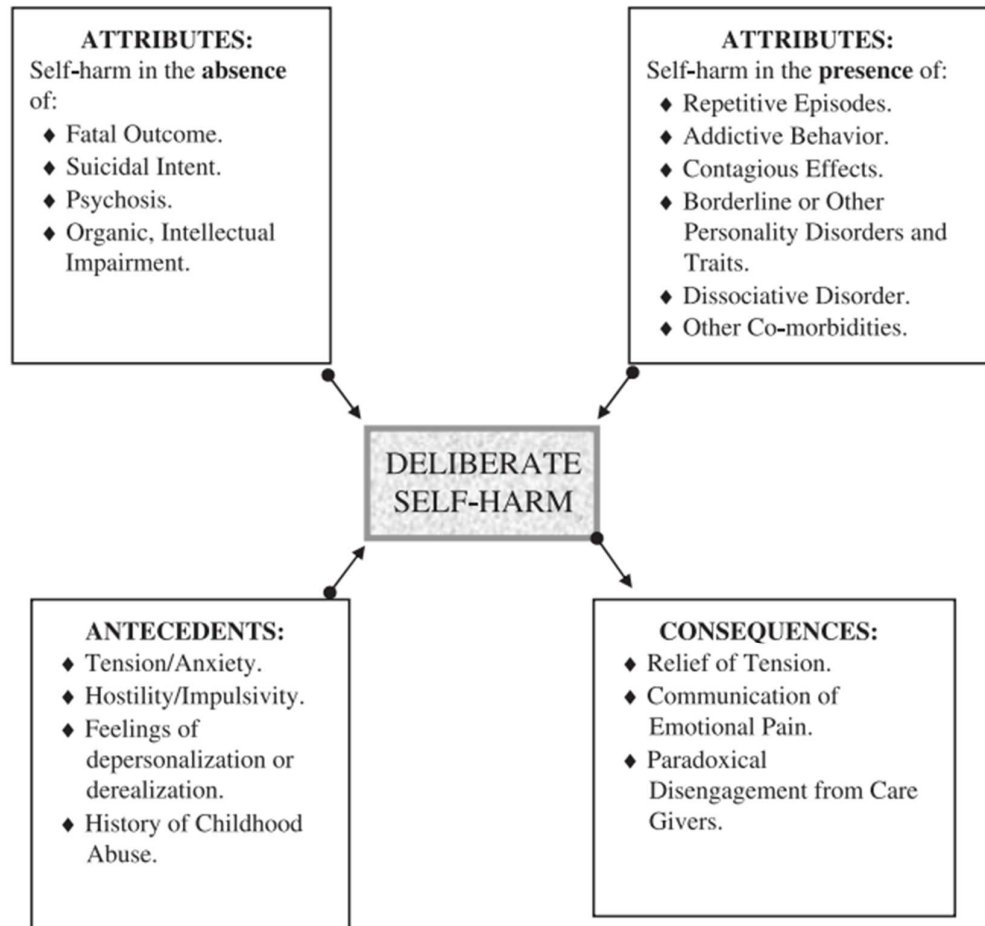


Figure 2: Attributes, antecedents and consequences of self-harm

Defining Temperament

Temperament comprises of relatively stable and fundamental tendencies inherent to the individual, which shape and modulate the expressions of activity, reactivity, emotionality, and social interactions. Key aspects of temperament emerge early in life, and these aspects are likely significantly shaped by biological factors. As development advances, the expression of temperament becomes progressively more influenced by experiential factors and contextual circumstances.²²

Theories of Temperament

Multiple theories have been proposed for describing temperament over time, the key ones being (1) The Thomas and Chess Approach (2) The Buss and Plomin Approach (3) The Rothbart Approach (4) The Goldsmith Approach

The Thomas and Chess Approach:²²

In 1987, Chess and Thomas pioneered naturalistic studies on childhood temperament and its applications. They focused on behavioural styles characterized by nine distinct dimensions: activity level, regularity, approach-withdrawal, adaptability, threshold of responsiveness, intensity of reaction, quality of mood, attention span/persistence, and distractibility.²³ They categorized children into three types: easy, difficult, and slow to warm. Their research influenced the understanding that children exhibit biological variations affecting social interaction and adjustment.

²² Furthermore, Chess and Thomas proposed the concept of ‘goodness of fit,’ indicating that favourable developmental outcomes are more likely when the child’s temperament aligns closely with the requirements, anticipations, and opportunities presented by the environment (a good fit). In contrast, a misalignment between temperament and environmental characteristics is more likely to result in maladaptive outcomes.²²

The Buss and Plomin Approach:²²

Buss and Plomin (1975) developed a theoretical model aimed at behavioural genetics, suggesting that temperament features appear early in life, are inherited, confer evolutionary advantages, can be seen in nonhuman species, maintain a level of stability throughout development, and predict behaviours that follow.²² They identified three principal dimensions: emotionality (E), activity (A), and sociability (S), each of which is quantified using the EAS Temperament Survey (Buss and

Plomin, 1984).²² The methodology implemented twin studies to analyse the genetic contributions to individual variability in temperament traits (Buss and Plomin, 1984). Pairs of monozygotic twins exhibited markedly higher correlations within all three EAS dimensions relative to dizygotic twins. Considering that monozygotic twins share twice the genetic similarity of dizygotic twins, the pronounced phenotypic resemblance seen in monozygotic twins implies significant genetic influences on variability of traits.²²

The Rothbart Approach:²²

The Rothbart model (Rothbart and Derryberry, 1981) offers a comprehensive framework for understanding temperament, characterizing it as biologically grounded individual variations in reactivity and self-regulation within emotional, activational, and attentional domains.²³ Reactivity signifies the degree of biological arousal provoked by variations in internal and external stimuli, expressed as dimensions of negative affect and surgency. Self-regulation includes the mechanisms that regulate reactivity and is demonstrated through the temperament dimension of effortful control. As effortful control progresses during the toddlerhood, it has a regulatory influence on unchecked negative emotionality and motor behaviours (Rothbart and Derryberry, 2002), enhancing children's abilities to adapt to environmental challenges. Longitudinal studies indicate that increased emotional clarity is linked to a reduction in negative emotional arousal.²² As described in Rothbart and colleagues' age-specific instruments, the general dimensions maintain a level of stability; however, the traits that characterize each dimension adapt over different age cohorts. The assessment of emotional competence during early infancy occurs via involuntary attention orienting. With the incorporation of external regulatory mechanisms, markers of emotional competence begin to integrate attention shifting and focusing.²²

The Rothbart model is distinctive in its emphasis on self-regulation as an integral aspect of temperament. Findings derived from computerized cognitive assessments indicate that effortful control, such as error detection and conflict resolution, first emerge by the end of the first year of life and continue to develop throughout late childhood and into the adolescent years. The ongoing dynamic and reciprocal interactions between temperamental reactivity and regulation contribute to the differences in the expression of temperament across dimensions. At the neural level, the capacity for regulating reactivity is improved through the interaction of prefrontal cortex (regulation) and amygdala, and striatum (reactivity). Neuroimaging investigations indicate that the evolution of effortful control is supported by the executive attention network, a neural system primarily associated with the prefrontal cortex.²²

The Goldsmith Approach:²²

Goldsmith and Campos (1982) described temperament as the individual variations in the predisposition to demonstrate and experience fundamental emotions (such as joy, anger, and fear). Individual differences in temperament are illustrated by variations in the intensive and temporal characteristics of behaviour, incorporating facial expressions, gestures, along with vocal and motor activities. The definition is narrowed to infant temperament in order to realize a comparatively 'pure' conceptualization of temperament expressions that are devoid of socialization impacts and cognitive processes.²² Current revisions of the model include emotion regulation as a fundamental aspect, given that the display and management of emotions may not be clearly differentiated, even in infancy (Campos et al., 2004). Goldsmith and his associates created the Toddler Behaviour Assessment Questionnaire (Goldsmith, 1996), as well as the age-appropriate Laboratory Temperament Assessment Battery

(Lab TAB; Goldsmith and Rothbart, 1993). The Lab-TAB offers a collection of standardized behavioural tasks and coding frameworks that evaluate temperament dimensions during emotion-eliciting scenarios in both laboratory and home settings. It highlights the critical need for contextualizing behavior in the assessment of temperament, considering that the eliciting contexts play a pivotal role in the expression of temperament dimensions (Goldsmith and Gagne, 2012).²²

Expanding upon their foundational conceptualization, Goldsmith and colleagues concentrated on the psychobiological mechanisms that underlie emotional reactivity and regulation. Buss et al. (2004) integrated both Lab-TAB and physiological assessments, revealing that increased fearfulness in a moderately threatening context correlated with elevated baseline sympathetic reactivity one week later. This suggests a potential link between fearful temperament and diminished physiological regulation.²²

Biological Basis of Temperament

Research involving twin studies, in early childhood, provides compelling evidence supporting the role of genetic factors in temperament. These studies consistently demonstrate that monozygotic twins exhibit a higher degree of similarity compared to dizygotic twins across an extensive range of temperament traits, such as emotional reactivity, activity levels, introversion, sociability, attentional persistence, approach behaviour, adaptability, distress tolerance, positive emotionality, and negative emotionality. Although heritability estimates may vary, they typically range from .20 to .60, indicating that genetic variances among individuals contribute to approximately 20% to 60% of the observed temperament variability within a given population. With few notable exceptions (soothability and rhythmicity, which exhibit

minimal genetic influence), there remains no consistent pattern regarding heritability across different temperament dimensions.²³

Research findings from adoption studies reveal genetic contributions to temperament, indicating that nonadoptive siblings share similarities in their temperamental profiles, in contrast to adoptive siblings. The heritability estimates obtained from adoption and twin studies that assess temperament objectively are similar.²³

The environment also plays a crucial role in shaping temperament; however, findings from behavioural genetics research indicate that the environmental factors typically thought to affect child behaviour may not function as presumed. Studies involving twins and adoption consistently reveal that the shared family environment contributes only a minor fraction of the variability in most dimensions of temperament. The environmental influences that significantly impact temperament are those that are specific to individual family members (i.e., nonshared environmental influences). Research implies that rather than concentrating on environmental elements that vary between families, it may be more beneficial to investigate environmental factors that differ within families (e.g., differential parenting practices).²³

Temperament and Psychiatric Disorders

A variety of potential mechanisms have been suggested to explain the relationship between temperament and psychopathology, the most frequently cited being the risk model, spectrum model, and scar effect.²⁴

The risk model suggests that temperament and psychopathology are fundamentally different constructs, and that specific dimensions of temperament, either independently or in combination, increase the probability of developing a

particular psychiatric disorder. Further support for this hypothesis has been provided by research identifying significant mediating and moderating factors linking a temperament dimension to an associated psychiatric disorder.²⁴

In children characterized by substantial negative emotionality and a craving for novelty, alongside weakened effortful control, there is a likely trajectory leading to the onset of substance abuse and externalizing behaviours, supported by lower competence, a stronger association with peers who possess similar views, and increased tensions within parent-child relationships. In the context of anxiety disorders, a tendency towards increased focus on possible threats may act as a mediator between anxiety symptoms and temperament traits like negative affectivity and effortful control. These mechanisms may contribute to an individual's difficulty in emotion regulation, a characteristic likely associated with temperamental tendencies and various forms of psychopathology.²⁴

Temperamental Risk Factors for Self-harm

Emotional Dysregulation and Negative Affect:

Components of emotional dysregulation consist of a tendency for emotions to intensify uncontrollably, alter rapidly, express in intense and unfiltered ways, and/or overwhelm both coping strategies and cognitive reasoning.²⁵ Developmental research suggests that these impairments in self-regulation emerge from an interplay of temperamental and biological factors, along with external disruptions resulting from stressful childhood experiences, particularly maltreatment and maladaptive attachments with caregivers. This framework suggests that children with a predisposition to negative affectivity and/or increased emotional reactivity are at a higher risk for emotional dysregulation in chaotic, disruptive environments and in case of various adverse childhood experiences. The association between adverse

childhood experiences and a diverse range of adult mental illnesses (e.g., depression, suicidal ideation, substance misuse) may, to some extent, be explained by the predisposition to inadequate emotional regulation in children who have faced multiple adverse childhood experiences.²⁵

Impulsivity and Emotional Modulation:

Impulsivity, commonly considered a symptom associated with numerous psychiatric and neurological conditions, additionally represents a feature present in the personalities of mentally healthy individuals. It denotes a tendency for immediate, unplanned actions prompted by both external and internal stimuli, typically occurring without assessment of the possible adverse effects linked to such behaviours.²⁶ Dickman differentiated between 'functional impulsivity,' which reflects the advantages of spontaneous actions, and 'dysfunctional impulsivity,' which is a maladaptive trait. He emphasized that making hasty decisions regarding trivial matters (for instance, 'what should I eat for dinner tonight?') can be helpful. Spontaneous behaviours allow individuals to seize opportunities and acquire new experiences that enrich their lives. Additionally, individuals exhibiting impulsive tendencies tend to outperform their less impulsive counterparts in scenarios where limited time is allocated for decision-making.²⁶

Impulsivity has been proposed as a significant factor in self-injurious behaviour. Both theoretical models and empirical evidence indicate that the main objective of self-harm is to adjust affect; notably, adolescents commonly engage in self-injury to cope with their emotions, particularly to ease negative emotional states (emotional modulation). Urgency Theory suggests that certain individuals, when confronted with intensified negative affect, exhibit a greater tendency to act impulsively for relief from adverse emotional states. This may prompt impulsive

actions aimed at achieving immediate gratification, often at the expense of longer-term goals. As a result, impulsivity may increase an individual's vulnerability to engage in immediately accessible yet maladaptive coping strategies, such as self-harm, to regulate their emotional state. The Motivational–Volitional (IMV) model outlines a tripartite diathesis-stress framework that explains the association between background stressors, the development of ideation and intent, and the shift of cognitive processes into self-harming behaviours.²⁷

Defining Coping Skills

Coping is characterized as the conscious and voluntary employment of cognitive and behavioural resources aimed at addressing both internal and external stressful stimuli. These strategies aid individuals in reducing or coping with stress, anxiety, and other unfavourable emotional conditions, and can be skilfully utilized for stress regulation or to confront diverse difficulties.²⁸

Coping Mechanisms

Coping mechanisms are classified into two main types: proactive coping and reactive coping. Proactive coping is an effort to deal with an ongoing stressful encounter or one that has already happened (Ralf Schwarzer). Individuals initiate strategies to prevent potential stressors. Individuals with proactive coping mechanisms typically succeed in stable environments because of their well-defined and inflexible nature, which reduces their susceptibility to stressors.²⁸ Reactive coping is an effort to deal with imminent threat that will occur in the near future. Individuals respond to stressors after occurrence, reactive coping strategies often perform optimally in less predictable environments.²⁸

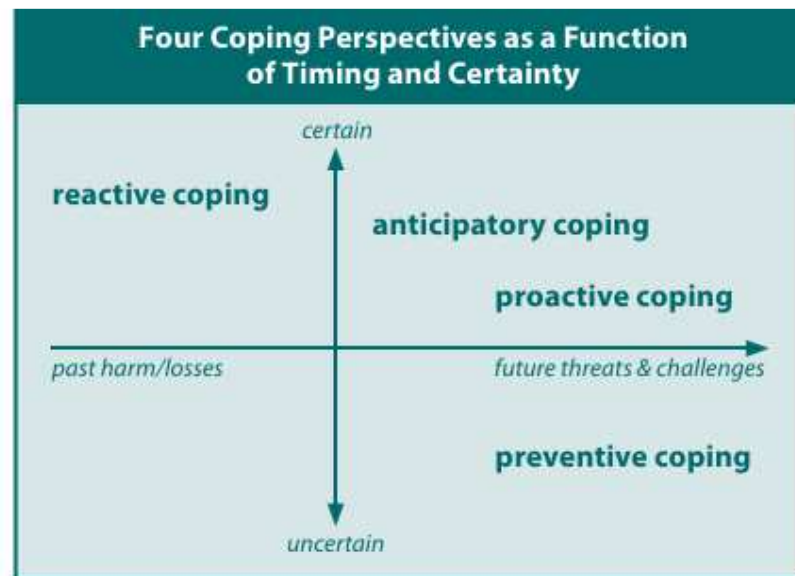


Figure 3: Coping as a function of timing and certainty

Coping is broadly categorised into four primary categories:²⁸

- 1) Problem-focused: Tackles the core issues that lead to distress: Examples of this approach comprise active coping, strategic planning, restrained coping, and the inhibition of competing activities.
- 2) Emotion-focused: Seeks to alleviate the negative emotional effects of the problem: Examples of this approach include positive reframing, acceptance, reliance on spirituality, and humour.
- 3) Meaning-focused: The individual makes use of cognitive approaches to develop and control the meaning of the event.
- 4) Social coping (support-seeking): The individual lessens stress through the pursuit of emotional or practical support from their social network.²⁸

Adaptive vs maladaptive coping:

Adaptive coping:²⁸ Characterized by an individual managing stressors through the pursuit of personal growth, cultivating an optimistic perspective, employing solution-focused approaches, showcasing ingenuity, and exhibiting flexibility.

Different coping approaches used include problem-solving, reaching out for support (active), changing our expectations to better fit the situation (accommodative), regulating stress-related emotions (emotional), breathing techniques to reduce stress (behavioural), changing the way we think about the stressor (cognitive).²⁸

Maladaptive coping:²⁸ Individuals cope with stressors by employing strategies that provide temporary relief; however, these approaches do not effectively resolve the underlying issues. This behaviour is marked by tendencies toward denial, self-criticism, and a lack of assertiveness. Different coping approaches used include substance use, rumination, physical escape, mental escape (dissociation, numbing, daydreaming), procrastination, self-injury, binge eating, avoidance, risk-taking behaviour.²⁸

Coping Skills and Self-Harm:

Maladaptive Coping and Self-Harm:²⁹

Affective regulation is generally understood as a process directed towards achieving specific goals that are influenced by emotional motives and objectives. This process involves recognizing a goal (such as mood enhancement) and subsequently choosing strategies from the existing options, executing those strategies, and assessing the results to shape future expectations and inform subsequent actions (Gross, 2015). Strategies that yield positive outcomes tend to be reinforced, while those that result in negative consequences are less likely to be repeated; furthermore, when actions are associated with emotional feedback, reinforcement learning becomes more pronounced (Marinier, Laird, & Marinier III, 2008). Therefore, if Non-Suicidal Self-Injury (NSSI) can effectively reduce emotional pain and is readily achievable with accessible resources, individuals may prefer NSSI over other methods deemed more

expensive or less likely to yield similar advantages. Importantly, this decision-making process is influenced by the individual's past and present emotional state.²⁹

Adaptive Coping as Protective factor:³⁰

Adaptive coping is linked to the enhancement of positive emotions and psychological health, promoting emotional regulation and a constructive outlook even during challenging times. Individuals who utilize this strategy face stressors directly, engaging in a thorough examination of the problem and formulating effective solutions. This proactive method not only tackles the immediate obstacles but also enables individuals to cultivate a sense of control over their situation. It frequently entails acknowledging the significance of social relationships such as pursuing social support, whether from friends, family, or support groups, enables individuals to share the impact of stressors, gain insight, and access the emotional and practical assistance of others. The collaborative aspect of seeking social support reinforces the notion that effective coping transcends individual efforts. Another essential adaptive coping technique is positive reframing, in which individuals cognitively reinterpret stressors in a more favourable manner. Research has shown that those who engage in active problem-solving, seek social support, and practice positive reframing experience lower levels of psychological distress and enhanced overall well-being.³⁰

Previous Literature:

Author	Type of Study	Population Sample	Findings
Jacqueline Mangnall and Eleanor Yurkovich ³¹ (2008)	<p>Literature review on DSH definitions and implications</p> <p>Survey of college students, conducted to assess DSH prevalence</p> <p>Discusses qualitative findings related to self-harm behaviours</p>	Not addressed in the paper.	<p>DSH is linked to various co-morbidities, including mood and anxiety disorders.</p> <p>Non-judgmental therapeutic approaches may be more effective for DSH treatment.</p>
Thach Tran, Huong Nguyen, and others ³² (2020)	<p>Secondary analysis of prospective data.</p> <p>School-based, two-arm parallel controlled trial.</p> <p>Participants recruited from public high schools in Hanoi.</p>	<p>552 participants from the control arm.</p> <p>Participants recruited from two urban and two rural districts.</p> <p>Random selection used for schools and classes.</p>	<p>16.9% of adolescents had self-harm thoughts at baseline.</p> <p>14.5% reported self-harm thoughts at 8-month follow-up.</p> <p>Greater coping self-efficacy reduces self-harm thoughts among adolescents.</p> <p>School-based programs may prevent self-harm by strengthening coping strategies.</p>
Emma Nielsen, Kapil Sayal, and Ellen Townsend ³³ (2016)	<p>Community sample investigation with 1332 participants.</p> <p>Examines relationships between experiential avoidance, coping, and self-harm.</p> <p>Utilizes self-report measures for data collection.</p>	1,332 participants aged 16-69 years, from a community sample.	<p>Higher experiential avoidance is linked to self-harm history.</p> <p>Self-harm participants endorse more avoidance coping strategies.</p> <p>Recent self-harm correlates with lower approach and emotion regulation coping.</p> <p>A large sample (88.1%) reported lifetime self-harm.</p>
Michael Kaess et al. ³⁴ (2012)	School survey	45,806 students aged 15–16 years	Self-harm prevalence is 18% worldwide (children and adolescents)

			<p>Lifetime self-injury rates in European adolescents up to 39%</p> <p>Suicidal ideation and attempts reported in 12% and 4% of adolescents</p> <p>Adolescent self-harm is a strong predictor of future suicidal behaviour</p>
<p>Diogo F Guerreiro, Diana Cruz, and others³⁵ (2013)</p>	<p>Eighteen studies met inclusion criteria</p> <p>Five studies used clinical samples</p> <p>Ten studies involved community samples from schools or colleges</p> <p>Most studies were cross-sectional</p>	<p>Sample size was 24,702 subjects</p> <p>4,177 subjects (16.9%) met criteria for DSH</p> <p>Included community and clinical samples</p> <p>Community samples were predominant, 10 out of 18 studies</p>	<p>Coping is linked to DSH in adolescents</p> <p>Emotion-focused coping correlates with DSH; problem-focused coping shows a negative relation</p> <p>Most studies reviewed were cross-sectional, limiting causality conclusions</p>
<p>Rachana Parikh, Mahima Sapru, Madhuri Krishna, Pim Cuijpers, Vikram Patel, and Daniel Michelson³⁶ (2019)</p>	<p>Qualitative research design</p> <p>Involved focus group discussions with adolescents</p>	<p>Sample size was 191 adolescents, including 112 girls and 79 boys</p> <p>Purposively sampling to maximize variation across age, gender, and sites</p> <p>Focus group discussions included 22 FGDs conducted in Delhi and Goa</p>	<p>Adolescents face stress from academic pressure and social relationships</p> <p>Emotion-focused coping strategies are more common than problem-focused strategies</p> <p>Interventions should enhance adaptive coping skills for adolescents</p> <p>The research emphasizes the need for culturally sensitive psychosocial interventions</p>
<p>Burešová I et al.³⁷</p>	<p>one-shot cross-sectional</p>	<p>Sample consisted of</p>	<p>20% of adolescents</p>

(2015)	<p>survey design</p> <p>Aimed to explore associations between self-harm and parenting styles</p>	<p>1,466 respondents aged 11 to 16 years</p> <p>Random sampling with ethical considerations</p> <p>A pilot study validated the psychometric properties with 235 participants</p>	<p>experienced self-harm at least once</p> <p>Self-harm prevalence varied by family structure; two-parent families had lower rates</p> <p>Weak parenting styles correlated with higher self-harm occurrences</p> <p>Most shared self-harm experiences with peers, not parents</p>
<p>Yannavita Hadi Suwignyo, Nana Usnawati, Tutiek Herlina, and Rahayu Sukmaningsih³⁸ (2024)</p>	<p>Analytic study with a case-control design</p> <p>Examines the relationship between parenting styles and self-harm behaviour</p>	<p>Sample size 42 students and their parents</p> <p>Case group used total population technique; control group used simple random sampling</p>	<p>Parenting styles in the case group, predominantly authoritarian</p> <p>Control group parenting styles are democratic</p> <p>All adolescents in the case group engage in self-harm, no self-harm is reported in the control group</p> <p>Significant relationship exists between parenting styles and self-harm behaviour</p>
<p>Katie Glazebrook, Ellen Townsend, and Kapil Sayal³ (2015)</p>	<p>Cross-sectional online survey study</p> <p>Convenience sampling was used for participant selection</p>	<p>Sample size: 314 participants</p>	<p>Insecure attachment is linked to self-harm in young people</p> <p>Poorer attachment quality correlates with increased self-harm risk</p> <p>Higher quality attachment promotes adaptive coping strategies</p> <p>Invalidating childhood environments impact mental health later</p>
Zsuzsanna Thesis, M	Investigates suicidal	Sample size for clinical	Depressed youths show

<p>D Tamás, and Ágnes Vetro³⁹ (2018)</p>	<p>behaviours and their correlates</p> <p>Statistical analyses of temperament and emotion regulation</p>	<p>characteristics: 553 depressed youths</p> <p>Sample size for temperament and emotion regulation: 407 youths</p> <p>Sampling methods included structured interviews for demographic and health data</p>	<p>high rates of suicidal behaviour</p> <p>68.9% of depressed youths had suicidal ideation, 41.6% had a suicide plan, 15.4% had attempted suicide</p> <p>Impulsivity and aggression are linked to suicidal behaviour</p>
<p>Sean H Y Toh, Michelle J S Wan, Leoniek M Kroneman, N Nyein, and John C M Wong⁴⁰ (2023)</p>	<p>Case-control design comparing adolescents with and without suicide attempts</p> <p>Research focused on temperament traits and their relationship to suicide attempts</p>	<p>Sample size: 118 adolescents</p> <p>Sample included 60 cases and 58 controls</p>	<p>Suicide attempts are linked to difficult temperament traits in adolescents</p> <p>Positive mood and adaptability reduce suicide attempt likelihood</p> <p>Psychiatric comorbidity significantly correlates with suicide attempts</p> <p>Temperament screening may help identify at-risk adolescents</p>
<p>Elena Predescu and Roxana Sipos⁴¹ (2023)</p>	<p>Retrospective, cross-sectional study design</p> <p>Data collected from patients' medical records</p>	<p>Sample of 194 patients aged 6-18 years</p> <p>After applying criteria, 95 patients were included in the study</p> <p>Participants selected from emergency admissions in Cluj-Napoca</p>	<p>Study found a strong association between self-harm and suicide attempts</p> <p>Girls with depressive symptoms had more suicide attempts than boys</p> <p>Suicidal behaviours were linked to conflictual family environments</p>
<p>Fiona McNicholas, John Fagan, Brid Tobin, Mairin Doherty, and Neil Adamson⁴² (2011)</p>	<p>Retrospective, examining case-notes from 1993-2003</p>	<p>Sample size was 231 children admitted for DSH or suicidal ideation</p> <p>The study period</p>	<p>DSH is a significant public health issue in Ireland</p> <p>Overdose was the most common method of</p>

		spanned from 1993 to 2003	self-harm Youth-friendly services may improve engagement and identification of at-risk youths
P Krishnakumar ⁸ (2010)	Psychological evaluations of children with deliberate self-harm Included interviews with children and parents regarding stress factors	Sample size: 30 children	52% of children had some psychiatric disorder 90% of children experienced stress leading to deliberate self-harm
Marco Bennardi, Elaine McMahon, Paul Corcoran, Eve Griffin, and Ella Arensman ⁴³ (2016)	Data taken from National Self-Harm Registry Ireland from 2007 to 2014 Research employed survival analysis and generalized estimating equation analysis	Sample comprised 28,700 individuals with 42,642 presentations of DSH Consecutive patients aged 10 to 29 years were included	Repeated self-harm is a strong suicide risk factor among young people Self-cutting is linked to higher repetition risk than drug overdose Young females (15-19 years) and males (20-24 years) are at highest risk Risk assessments should include psychosocial characteristics and self-harm history
Mert Sekmen and Carlos G Grijalva ⁴⁴ (2023)	Study is a secondary analysis Focuses on psychiatric comorbidity in children and adolescents.	Sample size was 1098 children, aged 5 to 18	Four distinct profiles of psychiatric comorbidity were identified for self-harm risk Low-risk profile includes children aged 5 to 9 without psychiatric diagnoses High-risk profile features older females with anxiety and depression Very high-risk profile

			includes younger males with mood and developmental disorders
Diogo Guerreiro ⁴ (2013)	<p>Cross-sectional sample of public school students</p> <p>Involved anonymously completed self-report instruments</p> <p>Research assessed the relationship between self-harm and affective temperaments</p>	<p>Sample size was 1713 adolescents in Portugal</p>	<p>Self-harm (SH) is a major health problem in adolescents</p> <p>Lifetime SH prevalence was 7.3%, higher in females</p> <p>Depressive temperament significantly predicts SH in both genders</p> <p>Cyclothymic and irritable temperaments also associate with SH</p>
Sandeep Grover, Siddharth Sarkar, Subho Chakrabarti, Savita Malhotra, and Ajit Avasthi ⁵ (2015)	<p>Study utilized a retrospective design</p>	<p>Sample size was 101 patients aged ≤ 19 years</p> <p>Patients were identified from the CL psychiatry registry</p> <p>Study period from 2000 to 2012</p>	<p>Self-harm is more common in females from nuclear families</p> <p>Common self-harm method is ingestion of insecticides</p> <p>Self-harm behaviour often linked to family interpersonal problems</p> <p>Study highlights need for clear insecticide policy and safe storage</p>
Poornima Bhol, Munivenkatappa Manjula, Vanitha Rajappa, and Mariamma Phillip ⁴⁵ (2017)	<p>Quantitative research design with surveys.</p> <p>Assessed self-injurious behaviours among youth in urban India</p>	<p>The population sample size is not specified in the contexts</p>	<p>Self-injurious behaviours were reported by 33.8% of youth surveyed</p> <p>6.8% of participants engaged in self-injurious acts with suicidal intent</p> <p>Male gender and youth under 18 predicted self-injurious behaviour</p> <p>Female gender and higher pain levels</p>

			<p>predicted self-injury with suicidal intent</p> <p>Mental health vulnerabilities were higher among youth who self-injured.</p>
<p>Emma Diggins, Rachael Kelley and others⁴⁶ (2016)</p>	<p>Observational study</p> <p>Analyses self-harm episodes in emergency departments</p> <p>Data was collected from existing hospital records of Leeds ED attendances</p> <p>The study spans from 2004 to 2007</p>	<p>Sample size was 3782 self-harm episodes involving 2559 individuals aged 12-25 years</p>	<p>High self-harm rates are noted in younger females, decreasing with age</p> <p>Self-injury increases with age, while self-poisoning decreases</p> <p>Younger individuals receive quicker assessments and more aftercare</p> <p>Repetition of self-harm is common, especially in younger age groups</p>
<p>Mary Rothbart and Stephan Ahadi⁴⁷ (2000)</p>	<p>Not addressed in the paper</p>	<p>The contexts do not provide information on population sample size.</p> <p>The contexts do not mention any sampling methods used.</p>	<p>Temperament influences personality development and psychopathology risk</p> <p>Early temperament predicts later personality traits and behaviors</p> <p>Interaction of temperament and environment shapes individual differences</p> <p>Distress-proneness affects attachment and self-regulation development</p>

Need for Study

Self-harming behaviours in children and adolescents pose a significant and growing public health issue. Recent findings suggest that self-injury is beginning at increasingly younger ages, with a notable proportion of adolescents admitting to at least one episode of non-suicidal self-injury (NSSI) during their formative years.⁴⁹ Although self-harm frequently indicates underlying psychological distress, it is not limited to clinical populations. Numerous young individuals who engage in self-injury do so without any formal mental health assistance, highlighting the necessity for early detection and preventive measures based on psychological risk factors.¹⁵

While many studies have investigated the prevalence, methods, and psychological factors associated with self-harm, most have focused on adults or young adults with adolescents, leaving considering children and adolescents less frequently for such studies. Furthermore, current research frequently focuses on isolated psychological factors, such as emotional dysregulation or depressive symptoms, instead of adopting a comprehensive perspective on the developmental and dispositional elements that may interact to shape the onset of self-harming behaviours. In particular, the combined influence of coping skills and temperament—both crucial for emotional development—has not been adequately explored in the context of self-harm among younger populations.⁵⁰

Temperament, defined as a biologically rooted individual difference in reactivity and self-regulation, has been associated with a range of internalizing and externalizing behaviours, including emotional dysregulation and impulsivity.⁴⁸ In the meantime, coping skills play a vital role in mediating how individuals cope with emotional distress. Adolescents lacking effective coping skills are more inclined to

resort to maladaptive behaviours like self-injury to alleviate psychological pain.¹⁶ However, there is a paucity of research investigating how particular temperament traits might affect the development or choice of coping strategies, especially among individuals who engage in self-harm.

Gaining insight into the interplay between temperament and coping mechanisms that impact self-harming behaviours in children and adolescents can address a significant gap in existing research. This understanding would facilitate the creation of refined, temperament-sensitive interventions that not only aim to diminish self-injury but also seek to enhance adaptive emotional and behavioural responses prior to the emergence of harmful actions. For instance, children exhibiting high emotional reactivity might find early training in emotional regulation beneficial, whereas those demonstrating low effortful control may require assistance with impulse management.¹⁷

Further, recognizing at-risk profiles through these psychological traits may improve early identification and intervention strategies within educational institutions, paediatric environments, and mental health services. Preventative approaches that consider the unique aspects of individual temperament and coping abilities could play a crucial role in alleviating long-term psychological damage and decreasing the chances of chronic self-harm or the development of suicidal thoughts.¹⁹

Given the increasing incidence of self-harm among young people, the emotional and social ramifications linked to such actions, along with the absence of integrative developmental studies, there is a necessity to investigate the relationship between self-harming behaviours, coping mechanisms, and temperament characteristics in children and teenagers. This research seeks to fill this void by

examining these factors collectively to enhance early intervention approaches and contribute to a more thorough understanding of self-injury within younger demographics.

MATERIALS AND METHODS

The study was designed as a cross-sectional observational study, to analyse the clinical profile and correlation between clinical history, temperament and coping skills in children and adolescents. It was conducted at the Department of Psychiatry over a period of one year from 1st March 2023 to 29th February 2024. The Source of samples were patients under the age of 18 who attended the outpatient department of the department of psychiatry and child development centre (CDC), and those admitted to psychiatry and paediatric ward.

Objectives:

1. To determine association between coping skills and temperament in children and adolescents with suicidal behaviour or non-suicidal self-injury.
2. To assess the socio-demographic and clinical profile of children and adolescents with suicidal behaviour or non-suicidal self-injury.

Inclusion Criteria:

Children and adolescents presenting with suicidal behaviour or non-suicidal self-injury in present or past, as defined by DSM-5-TR¹.

Exclusion Criteria:

1. Patients with severe Autism Spectrum Disorder.
2. Patients with self-injurious or stereotypical behaviour of Intellectual Developmental Disorder, Autism Spectrum Disorder.
3. Patients with severe Intellectual Disability.

Ethical Considerations:

Prior to commencement, ethical clearance was obtained from Institutional Ethics Committee, Jawaharlal Nehru Medical College, Belagavi with Ethical Clearance number MDC/JNMCIEC/244. Informed consent was obtained from the parents of patients who fulfilled the inclusion criteria and assent was obtained from the participants.

Sample Size:

Calculation of sample size using standard formula was not possible as data available was only related to prevalence-based studies. As we were conducting an observational association-based study, we took data from our hospital. Looking at the chart review of the previous 2 years, the average number of cases with suicidal behaviour or non-suicidal self-injury were found to be 40 per year. Hence, we took the sample size as N=40.

Following tools were used:

1. Thomas and Chess Temperament Questionnaire for Children⁵⁰

It is a structured psychological assessment tool designed to evaluate a child's temperament based on the pioneering work of Alexander Thomas and Stella Chess. Their research identified nine key temperament traits, including activity level, rhythmicity, approach/withdrawal, adaptability, intensity of reaction, mood, persistence, distractibility, and sensory threshold. The questionnaire helps parents, caregivers, and professionals gain insights into a child's natural behavioural tendencies, emotional responses, and adaptability to new situations. By categorizing children into broad temperament types—such as "easy," "difficult," or "slow to warm up"—the tool aids in understanding how children interact with their environment and

guides strategies for effective parenting, teaching, and social development. It is widely used in developmental psychology to tailor caregiving and educational approaches to match a child's inherent temperament.⁵⁰

2. Parental Authority Questionnaire (PAQ)⁵¹

It is a psychological assessment tool designed to measure parenting styles based on Baumrind's typology, which includes authoritative, authoritarian, and permissive parenting. Developed by John R. Buri in 1991, the PAQ consists of 30 self-report items that evaluate the extent to which parents exhibit specific behaviours and attitudes toward their children. The questionnaire is typically used in research and clinical settings to assess parental influence on child development, discipline strategies, and overall family dynamics. Each parenting style is assessed based on factors such as control, warmth, communication, and responsiveness. The authoritative style is characterized by high responsiveness and high demands, the authoritarian style by high demands and low responsiveness, and the **permissive** style by low demands and high responsiveness. The PAQ can be completed separately for mothers and fathers, offering a comprehensive view of how parental authority is perceived. Researchers and practitioners often use it to explore the relationship between parenting styles and outcomes such as academic performance, self-esteem, and emotional regulation in children.⁵¹

3. Mini-International Neuropsychiatric Interview for Children and Adolescents (MINI Kid)⁵²

It is a structured diagnostic interview as per DSM-IV and ICD-10 criteria designed for use in clinical and research settings. Used in a paediatric population, it examines the 30 most common and clinically relevant disorders or disorder subtypes. MINI Kid disorder subtyping has been shown to have validity and test-retest reliability, which renders it useful in diagnostic screening in paediatric psychiatry. It requires on average, 15 minutes to administer and is preferred to interview both parent and child. However, interviewing the parent either with the separate parent module or not interview is at the discretion of the interviewer. There are other versions of the MINI Kid used for a specific disorder, such as psychotic disorders, depressive disorders, eating disorders and suicidality. In our study, we have used English version 6.0.⁵²

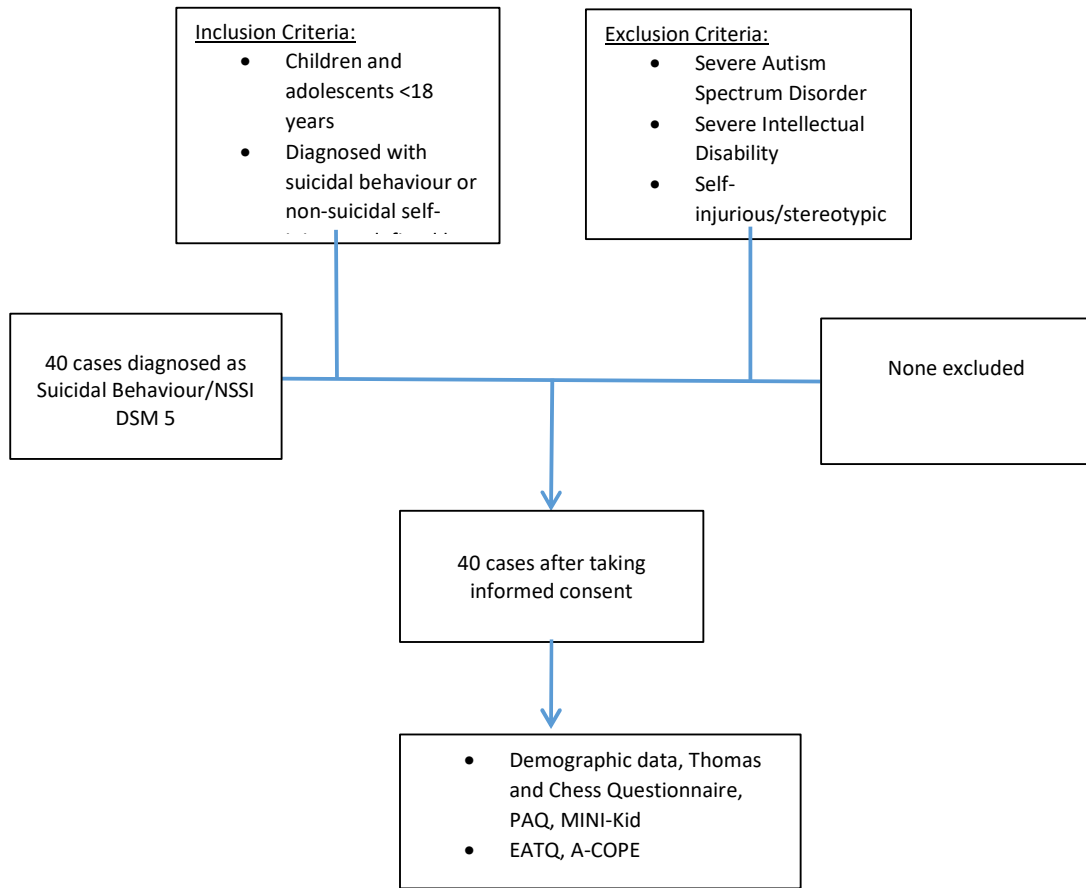
4. Adolescent-Coping Orientation for Problem Experiences (A-COPE)⁵³

A-COPE (Patterson & McCubbin, 1987) is a self-report questionnaire consisting of 54 specific coping behaviours. It is a psychological assessment tool designed to measure how adolescents manage and respond to stress in their daily lives. This self-report questionnaire evaluates a wide range of coping strategies, including problem-solving, seeking social support, engaging in recreational activities, and avoiding stressors. A-COPE helps researchers, educators, and mental health professionals understand the adaptive and maladaptive coping mechanisms that adolescents use in response to challenges such as academic pressure, peer relationships, and family conflicts. By identifying coping patterns, the tool aids in the development of targeted interventions to promote resilience and emotional well-being in young individuals.⁵³

5. Early Adolescent Temperament Questionnaire (EAT-Q)⁵⁴

It is a 65-item psychological assessment tool adapted from the Physiological Reactions Questionnaire developed by Derryberry and Rothbart. It is designed to evaluate temperament traits in adolescents, typically ranging from ages 9 to 15. It focuses on key dimensions of temperament, including effortful control, negative affectivity, surgency, and affiliation, which influence emotional regulation, social interactions, and behavioural tendencies. The EATQ consists of both self-report and parent-report versions, allowing for a comprehensive understanding of an adolescent's temperament from different perspectives. This questionnaire is widely used in developmental psychology and clinical research to explore how temperament contributes to social, emotional, and cognitive development. By assessing traits such as impulsivity, attention regulation, frustration tolerance, and sociability, the EATQ provides valuable insights into an adolescent's personality, aiding parents, educators, and mental health professionals in fostering adaptive development and well-being.⁵⁴

Procedure:



The children and adolescents diagnosed with Suicidal Behaviour or Non-suicidal Self-injury as per DSM-5-TR, along with the parents, were interviewed by the Principal Investigator (PI). They were explained regarding the study and its implications. A written informed consent was obtained from the parents, along with assent from the patients in their own vernacular language. Following this, study participants meeting inclusion criteria were assessed using detailed proforma to collect socio-demographic and clinical features including number of previous attempts, method used, and questionnaires such as Thomas and Chess Temperament Questionnaire, PAQ, MINI-Kid, EATQ, A-COPE were applied to obtain details about temperament dimensions, parenting styles, coping skills, and to assess co-morbidities.

Data Analysis:

The data obtained was tabulated in Microsoft Excel version 16.64 and appropriate statistical analysis was done using IBM SPSS 25. The socio-demographic and clinical details of the patients (descriptive statistics) was described using percentages for categorical variables or as mean and standard deviation for continuous variables (A-COPE, EAT-Q). Significant correlations assessed using the Kruskal-Wallis Test due to the abnormal distribution of continuous variables. P value of <0.05 was considered significant.

RESULTS

1. Table 1: Socio-demographic Characteristics of the Study Sample:

Socio-Demographic Details	Mean \pm SD N (%) (N=40)
Age (Years)	15.30 \pm 1.68
Age Group:	
10-13 Years	5 (12.5%)
14-18 Years	35 (87.5%)
Gender:	
Male	20 (50.0%)
Female	20 (50.0%)
Socio Economic Status (Modified Kuppaswamy):	
Upper	16 (40.0%)
Upper Middle	14 (35.0%)
Lower Middle	6 (15.0%)
Upper Lower	3 (7.5%)
Lower	1 (2.5%)
Type Of Family:	
Nuclear	35 (87.5%)
Joint	5 (12.5%)
Single Parent (Yes)	3 (7.5%)
School Grade:	
3-6 th	2 (5%)
6-9 th	17 (42.5%)
9-12 th	21 (52.5%)

Table 1 depicts that the study sample comprised of 40 individuals with a mean age of 15.30 \pm 1.68 years, ranging from 10 to 18 years. The majority (87.5%) belonged to the 14-18 age group, while 12.5% were aged 10-13 years. Gender distribution was equal. Socioeconomic status was assessed based on **Modified Kuppaswamy Scale**,

with 40% in the upper class, 35% in the upper-middle class, 15% in the lower-middle class, 7.5% in the upper-lower class, and 2.5% in the lower socio-economic status. Most participants (87.5%) came from nuclear families, while 12.5% belonged to joint families. Additionally, 7.5% were from single-parent households. In terms of education, 5% of students were in grades 3-6, 42.5% in grades 6-9, and 52.5% in grades 9-12. In terms of the educational board, 70% studied under the State board, while 30% were in CBSE-affiliated institutions.

2. Table 2: Clinical Details of the Study Sample:

Clinical Details	N (%) (N=40)
Stressor:	
IPR Issues/Argument With Family Member	30 (75.0%)
Academic Stress/Exam Result	6 (15.0%)
Changed School/Boarding	2 (5.0%)
Bullying	1 (2.5%)
Financial Issues	1 (2.5%)
Method Used:	
Poisoning	25 (62.5%)
Hanging	9 (22.5%)
Cutting	4 (10.0%)
Head Banging	1 (2.5%)
Scratching	1 (2.5%)
Diagnosis (DSM-5-TR):	
Impulsive DSH	15 (37.5%)
Adjustment Disorder With DSH	13 (32.5%)
Major Depressive Episode With DSH	3 (7.5%)
Generalised Anxiety Disorder With Cluster B Traits	3 (7.5%)
Body Dysmorphic Disorder	1 (2.5%)
Conduct Disorder With DSH	1 (2.5%)

Dermatitis Artifacta	1 (2.5%)
IDD Mild with ADHD	1 (2.5%)
ADHD with ODD with SLD	1 (2.5%)
SLD With Conduct Disorder	1 (2.5%)
Any Previous Attempts (Yes)	7 (17.5%)
Number of Previous Attempts:	
Nil	33 (82.5%)
1	3 (7.5%)
2	1 (2.5%)
3	2 (5.0%)
4 or more	1 (2.5%)

Table 2 represents clinical details of individuals who have engaged in deliberate self-harm (DSH), categorizing data by stressors, methods used, diagnoses, and previous attempts. Among the identified stressors, conflicts (IPR issues/arguments) with a family member were the most common, affecting 75.0% of cases, followed by academic stress or exam results (15.0%). Other stressors included changing schools or moving to boarding school (5.0%), bullying (2.5%), and financial issues (2.5%). Regarding the method of self-harm, poisoning was the most frequently used (62.5%), followed by hanging (22.5%), cutting (10.0%), headbanging (2.5%), and scratching (2.5%). Diagnostically (DSM-5-TR), impulsive DSH accounted for the largest proportion (37.5%), while other diagnoses included adjustment disorder with DSH (32.5%), and major depressive disorder with DSH (7.5%). Less common conditions included anxiety disorders, body dysmorphic disorder, conduct disorder, dermatitis artifacta, and neurodevelopmental disorders such as IDD, ADHD, and specific learning disorders. A history of previous self-harm attempts was reported in 17.5% of cases, with most individuals (82.5%) having no prior attempts. Among those with prior attempts, 7.5% had attempted once, while 2.5% had attempted twice, 5.0% had attempted three times, and 2.5% had attempted four times. These findings highlight

the significant interplay of familial and academic stressors in self-harm behaviours and the diversity of psychological conditions associated with self-harm in the study population.

3. Table 3: Type of Poison used in Poisoning Subgroup:

Type of Poison used	N(%) (N=25)
Agrochemicals (Pesticide/Herbicide)	16 (64.0%)
Toilet Cleaner	6 (24.0%)
Mosquito Repellent	3 (12.0%)

Table 3 represents data on the types of poison used. Among these, agrochemicals were the most commonly used poison, accounting for 16 cases (64.0%). This suggests that agrochemicals, possibly due to their easy availability and widespread use in households and agriculture, are a prevalent choice in poisoning incidents. Toilet cleaners were the second most frequently used, reported in 6 cases (24.0%), indicating that household cleaning agents also pose a significant risk. Mosquito repellents were the least common among the reported cases, with 3 instances (12.0%). Although less frequent, their presence in poisoning cases highlights the potential danger of such chemical substances. Overall, the data underscores the importance of safe storage and regulation of these toxic substances to prevent accidental or intentional poisoning incidents.

4. Table 4: Premorbid/Personal History of the Study Sample:

Premorbid/Personal History	N (%) (N=40)
Number Of Family Members	5.10 ± 1.74
Temperament (Thomas and Chess Temperament Questionnaire):	
Easy Child	5 (12.5%)
Slow To Warm Up	23 (57.5%)
Difficult Child	12 (30.0%)
Parenting Style (Parental Authority Questionnaire):	
Authoritarian	24 (60.0%)
Permissive	9 (22.5%)
Authoritative	7 (17.5%)
Family History:	
None	32 (80.0%)
Depression	5 (12.5%)
Alcohol Dependence	2 (5.0%)
Alcohol Dependence + Depression	1 (2.5%)

Table 4 represents premorbid and personal history. The data provides insight into various factors influencing the individuals studied. On average, participants come from families with approximately 5 members (M = 5.10, SD = 1.74). Temperament was assessed by Thomas and Chess Temperament Questionnaire, the majority (57.5%) were categorized as "Slow to Warm Up," while 30% were classified as "Difficult Child," and only 12.5% were considered "Easy Child". Parenting styles,

assessed by Parental Authority Questionnaire (PAQ) varied, with most individuals (60%) raised under an authoritarian style, followed by 22.5% under a permissive approach, and 17.5% experiencing an authoritative upbringing. This suggests higher prevalence of self-harm in children with "Slow to Warm Up" more than "Difficult Child" temperament, as well as with authoritarian and permissive parenting in the study population. Family history analysis showed that 80% had no significant psychiatric history, while 12.5% had a family history of depression, 5% had a history of alcohol dependence, and 2.5% had both Alcohol dependence and depression. Birth history indicated that nearly all participants (97.5%) were delivered through normal full-term vaginal delivery (NFTVD), with only 2.5% being born prematurely. Additionally, all individuals had no significant developmental concerns, as 100% reported a typical developmental history.

5. Table 5: Scores of Adolescent-Coping Orientation for Problem Experiences (A-COPE) of Study Participants:

A-COPE (Subscales)	Scores (Mean \pm SD)
Ventilating Feelings	2.93 \pm 0.68
Seeking Diversions	2.73 \pm 0.46
Developing Self-Reliance	2.61 \pm 0.46
Developing Social Support	2.43 \pm 0.47
Solving Family Problems	2.36 \pm 0.76
Avoiding Problems	3.45 \pm 0.91
Seeking Spiritual Support	1.76 \pm 0.61
Investing In Close Friends	2.10 \pm 0.83
Seeking Professional Support	1.32 \pm 0.61

Engaging In Demanding Activity	2.36 ± 0.73
Being Humorous	2.09 ± 0.78
Relaxing	2.90 ± 0.47

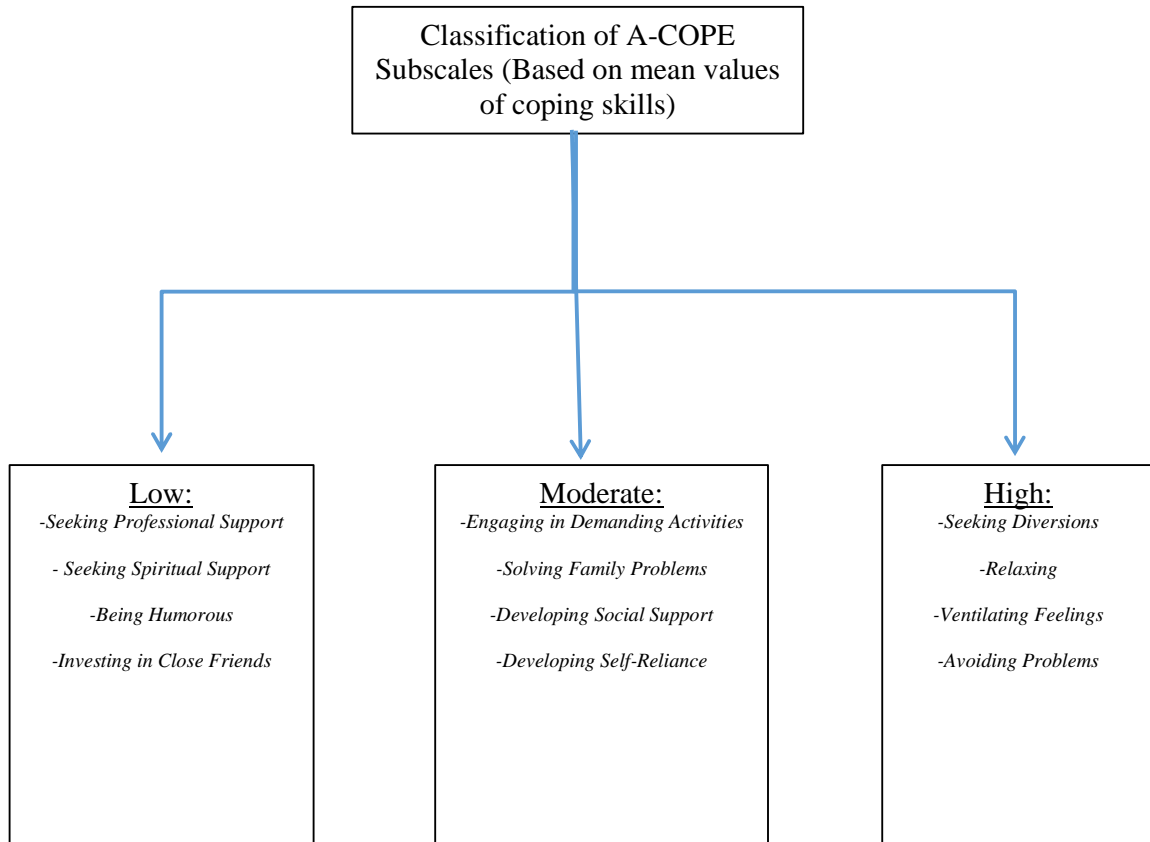
Table 5 represents scores on A-COPE (Adolescent Coping Orientation for Problem Experiences) subscales. Individuals' reliability on coping mechanisms can be classified as low, moderate, or high based on comparing mean values.

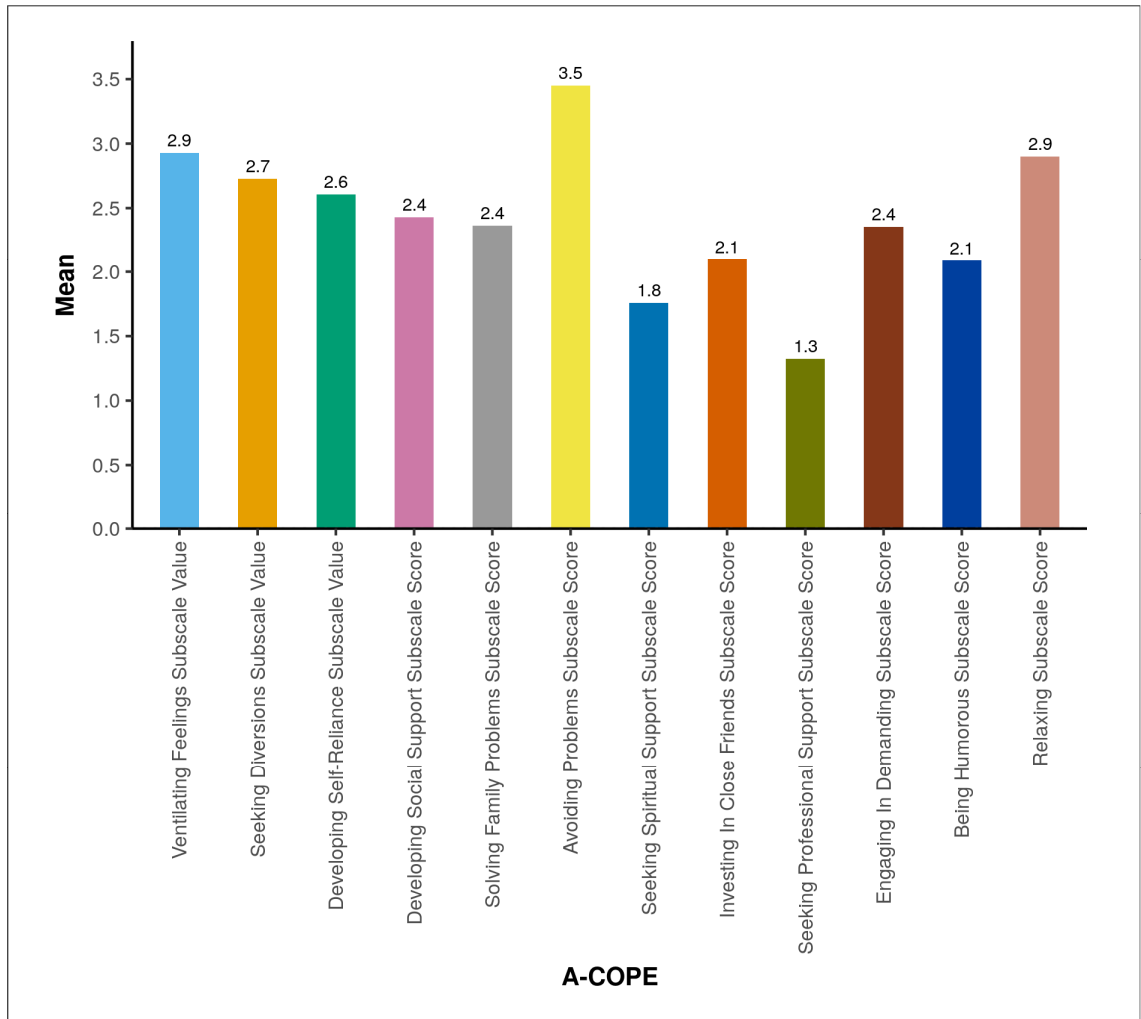
The subscales with low mean values, including *Seeking Professional Support* (M = 1.32, SD = 0.61), *Seeking Spiritual Support* (M = 1.76, SD = 0.61), *Being Humorous* (M = 2.09, SD = 0.78), and *Investing in Close Friends* (M = 2.10, SD = 0.83), indicate lower tendencies towards specific coping strategies such as seeking professional assistance, engaging in religious activities, using humour, and pursuing closeness and understanding from peers within the study sample.

The subscales with moderate mean values, including *Engaging in Demanding Activities* (M = 2.36, SD = 0.73), *Solving Family Problems* (M = 2.36, SD = 0.76), *Developing Social Support* (M = 2.43, SD = 0.47), and *Developing Self-Reliance* (M = 2.61, SD = 0.46), indicate these coping mechanisms are relatively more frequently utilized. These mechanisms encompass behaviours such as participating in challenging activities, employing interpersonal coping strategies, mitigating family tensions, striving for self-improvement, and assuming control of the situation.

The subscales with high mean values, including *Seeking Diversions* (M = 2.73, SD = 0.46), *Relaxing* (M = 2.90, SD = 0.47), *Ventilating Feelings* (M=2.93, SD = 0.68), and *Avoiding Problems* (M = 3.45, SD = 0.91) indicate that these coping mechanisms are the most frequently employed during stress. They involve activities

such as sleeping or watching TV, daydreaming, listening to music, expressing frustrations (yelling, blaming others, complaining), and avoidance behaviour.





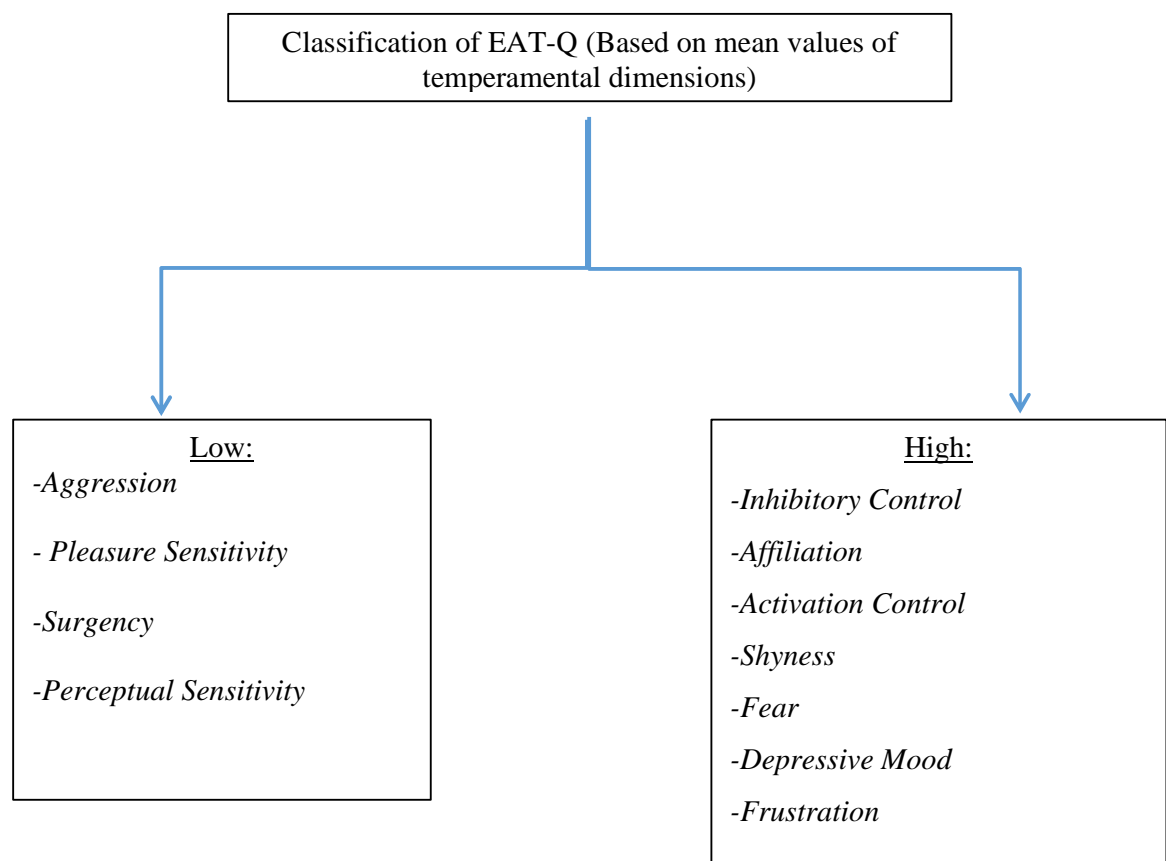
6. Table 6: Scores of of Early Adolescent Temperament Questionnaire (EAT-Q) of Study Participants:

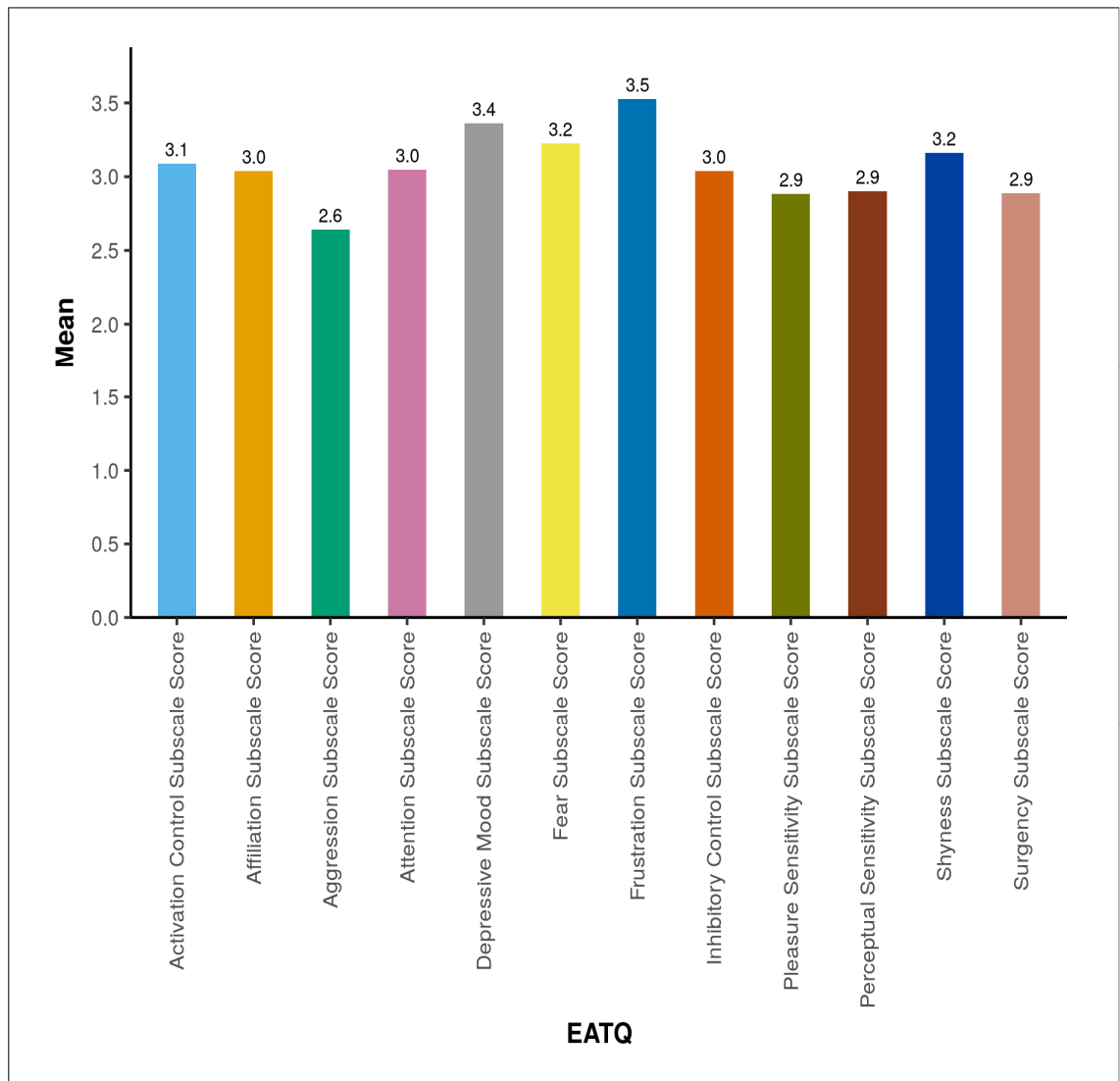
EAT-Q (Subscales)	Scores (Mean \pm SD)
Activation Control	3.09 \pm 1.03
Affiliation	3.04 \pm 0.93
Aggression	2.64 \pm 1.15
Attention	3.05 \pm 0.74
Depressive Mood	3.36 \pm 0.85
Fear	3.22 \pm 0.94
Frustration	3.52 \pm 0.45
Inhibitory Control	3.04 \pm 0.76
Pleasure Sensitivity	2.89 \pm 0.68
Perceptual Sensitivity	2.90 \pm 0.81
Shyness	3.16 \pm 1.10
Surgency	2.89 \pm 1.00

Table 6 represents scores for various subscales of the Early Adolescent Temperament Questionnaire (EAT-Q) in study participants. Individuals' temperament dimensions can be classified as low or high based on comparing mean values.

The subscales with low mean values, including *Aggression* (2.64 \pm 1.15), *Pleasure Sensitivity* (2.89 \pm 0.68), *Surgency* (2.89 \pm 1.00), and *Perceptual Sensitivity* (2.90 \pm 0.81), suggest lower levels of hostile reactivity (physical/verbal aggression), pleasure from low-intensity complex stimuli, perceptual awareness, and pleasure from high-intensity novel stimuli within the sample.

The subscales with high mean values, including *Inhibitory Control* (3.04 ± 0.76), *Affiliation* (3.04 ± 0.93), *Attention* (3.05 ± 0.74), *Activation Control* (3.09 ± 1.03), *Shyness* (3.16 ± 1.10), *Fear* (3.22 ± 0.94), *Depressive Mood* (3.36 ± 0.85), and *Frustration* (3.52 ± 0.45), reflect relatively higher tendencies to suppress inappropriate responses, a desire for closeness with others, an ability to focus, a capacity to take action when there is a strong tendency to avoid it, behavioural inhibition, unpleasant affect while anticipating distress, low mood, and negative affectivity towards situations within the sample.





7. **Table 7: Correlation between A-COPE Subscales and Number of Previous Attempts, Method Used, and Diagnosis:**

A-COPE (Subscales)	Number of Previous Self-harm Attempts (p value)	Method Used (p value)	Diagnosis (p value)
Ventilating Feelings***	0.049***	0.119	0.084
Seeking Diversions	0.184	0.050	0.364
Developing Self-Reliance***	0.043***	0.022***	0.076
Developing Social Support***	0.578	0.015***	0.097
Solving Family Problems***	0.100	0.110	0.037***
Avoiding Problems Subscale	0.067	0.061	0.085
Seeking Spiritual Support	0.098	0.587	0.115
Investing In Close Friends	0.844	0.472	0.334
Seeking Professional Support	0.435	0.579	0.347
Engaging In Demanding Activity***	0.112	0.011***	0.100
Being Humorous***	0.996	0.019***	0.131
Relaxing	0.301	0.052	0.416

Table 7 represents p-values indicating statistical significance of correlations between various A-COPE (Adolescent Coping Orientation for Problem Experiences) subscales and three key factors: the number of previous self-harm attempts, the method used for self-harm, and diagnosis. Subscales marked with "***" denote significant findings.

The *Ventilating Feelings Subscale* shows a significant correlation with the number of previous self-harm attempts ($p = 0.049$), suggesting that individuals with higher scores on this subscale are more likely to use expression of frustrations and tensions such as yelling, blaming others, saying mean things, and complaining to friends or family as coping strategy. The *Developing Self-Reliance Subscale* is significantly associated with two parameters, indicating that self-reliance strategies may vary depending on history and method of self-harm. Higher scores on this subscale indicate direct efforts by the adolescent to be more organized and in charge of the situation. Lower mean values of *Developing Self-Reliance* were observed in individuals with more violent methods of self-harm such as cutting (2.42 ± 0.62) and hanging (2.35 ± 0.15). Adolescents with no history of self-harm report higher *Ventilating Feelings* (3.01 ± 0.64) and *Developing Self-Reliance* (2.48 ± 0.45) scores, suggesting healthier coping strategies compared to those with previous attempts.

Developing Social Support ($p = 0.015$), *Engaging in Demanding Activity* and *Being Humorous Subscales* show significant correlations with the method used ($p = 0.011$ and $p = 0.019$, respectively). Individuals with hanging (2.28 ± 0.49) and cutting (1.83 ± 0.19) as methods put less efforts to stay emotionally connected with other people through problem solving, talking, apologising to others, while those who used hanging scored lowest in *Being Humorous* (1.61) and *Engaging in Demanding Activity* (1.72). Suggesting individuals with hanging tend to take situations too seriously and rarely joke in times of stress, as well as avoid working hard for self-improvement or achieving goals.

Solving Family Problems is significantly associated with diagnosis ($p = 0.037$), lower scores in neurodevelopmental disorders (1.61), generalised anxiety disorder with cluster B traits (1.33) were observed suggesting these individuals tend to not follow parents' rules or requests nor do they actively put effort to solve family

problems. While individuals with adjustment disorder (2.71 ± 0.61), depression (2.44 ± 0.67), and impulsive DSH (2.47 ± 0.55) had higher scores in the study sample.

8. **Table 8: Correlation between EAT-Q Subscales and Number of Previous Attempts, Method Used, and Diagnosis:**

EAT-Q (Subscales)	Number of Previous Self-harm Attempts (p value)	Method Used (p value)	Diagnosis (p value)
Activation Control	0.478	0.211	0.210
Affiliation***	0.588	0.040***	0.145
Aggression***	0.037***	0.243	0.024***
Attention	0.408	0.071	0.230
Depressive Mood	0.254	0.158	0.051
Fear***	0.020***	0.351	0.044***
Frustration	0.093	0.408	0.168
Inhibitory Control	0.091	0.678	0.171
Pleasure Sensitivity***	0.094	0.029***	0.511
Perceptual Sensitivity	0.578	0.231	0.197
Shyness	0.114	0.734	0.065
Surgency***	0.032***	0.696	0.049***

Table 8 represents the p-values depicting correlations between various subscales of the Early Adolescent Temperament Questionnaire (EAT-Q) and three factors: the number of previous self-harm attempts, the method used for self-harm, and diagnosis. Statistically significant values ($p < 0.05$) are indicated with "***" mark.

The *Aggression* ($p = 0.037$), *Fear* ($p = 0.020$), and *Surgency* ($p = 0.032$) *Subscales* shows significant correlations with number of previous self-harm attempts. This suggests a link between higher aggression levels with increasing number of attempts at self-harm. Similarly, individuals with higher values in *Fear Subscale* had no previous attempts (3.51 ± 0.67). Notably, Fear scores decreased significantly with more self-harm attempts. Higher values of Surgency Subscale suggest more pleasure is derived from novel or high-risk activities, a trend of higher scores with more number of attempts was observed in the study sample.

The *Affiliation Subscale* and *Pleasure Sensitivity Subscale* are significantly related to the method used for self-harm ($p = 0.040$ and $p = 0.029$, respectively), implying that social desire for warmth and closeness and sensitivity to pleasurable experiences might influence self-harm methods. Lower values of Pleasure Sensitivity were observed in hanging (2.64 ± 0.56) and cutting (2.10 ± 0.20).

Additionally, the *Aggression* ($p = 0.024$), *Fear* ($p = 0.044$), and *Surgency Subscale* ($p = 0.049$) is significantly correlated with diagnosis, highlighting the role of high-energy, impulsive behaviours in self-harm tendencies. Neurodevelopmental disorders and generalised anxiety with cluster B traits were associated with higher *Aggression* and lower *Fear* scores, while vice-versa was true for impulsive DSH and adjustment disorder. Individuals with disorders associated with impulsivity such as ADHD, IDD, conduct disorder, and cluster B traits had higher values in *Surgency* suggesting more pleasure sensitivity towards novel or high-risk activities.

DISCUSSION

The objectives of this cross-sectional observational study were to evaluate the clinical and socio-demographic profiles, along with self-harm-related parameters, in children and adolescents exhibiting suicidal behaviours and non-suicidal self-injury. The study aimed to systematically evaluate the sociodemographic and clinical characteristics of the individuals, and to examine the contextual factors associated with self-harm. The findings of the study are compared with existing national and international literature to contextualize the results and understand the temperamental and coping patterns and predictors of self-harm in child and adolescent population.

Socio-Demographic Data:

The study sample consists of 40 participants with a mean age of 15.30 ± 1.68 years, with ages between 10 and 18 years. Most participants (87.5%) were in the 14-18 age range, and 12.5% were aged 10-13 years. Gender distribution was equal. In Grover et al.'s⁵ study in Chandigarh, the mean age was 17 years, with 39.6% males and 60.4% females.⁵ Bholra et al.'s⁴⁵ study in Bangalore reported a mean age of 17.5 years.⁴⁵ Diggins et al.⁴⁶ found a mean age of 17 ± 1.58 years in a multicentric study in Leeds.⁴⁶ In our study, mean age was lower than others, this could be either due to other studies covering only adolescent population (Bholra et al.⁴⁵), or adolescents and young adults (Diggins et al.⁴⁶). While equal gender distribution in our study suggests that self-harm is equally present in either gender in younger individuals. Majority of participants (87.5%) in this study were from nuclear families, 12.5% from joint families. Additionally, 7.5% were from single-parent households. In Bholra et al.'s⁴⁵ study majority hailed from nuclear families (70.2%) while 10.2% were from single-parent household.⁴⁵ This suggests, higher occurrence of self-harm in nuclear families,

possibly due to protective effect of joint family structure due to better support. Socioeconomic status based on **Modified Kuppaswamy Scale**, was upper class (40%) in most, followed by upper-middle class (35%), lower-middle class (15%), upper-lower class (7.5%), and lower socio-economic status (2.5%). In terms of education, majority were in grades 9-12 (52.5%) and in grades 6-9 (42.5%) suggesting DSH is more common as adolescence advances. Other parameters such as SES, school board and grade were not assessed in these studies.

Clinical Data:

In the study sample, conflicts with family members were the most common, affecting 75.0% of cases, followed by academic stress or exam results (15.0%), similar to Grover et al.⁵ and Krishnakumar et al.⁸ where the main precipitating factor was IPR issues within the family, followed by academic difficulties.^{5,8} Poisoning was the most frequently used (62.5%) method, use of agrochemicals accounts for 64.0% cases, followed by hanging (22.5%), cutting (10.0%). In Krishnakumar et al.⁸ and Grover et al.⁵ consumption of pesticide (62.4%)¹ was the most common method used^{5,8} followed by attempted hanging⁸. Similar observations about method used were made by Diggins⁴⁶ et al in the adolescent population.⁴⁶ These findings may be attributed to the widespread availability of such chemicals in an agriculturally predominant country, where they are easily accessible in most households.

The number of previous attempts in the study population were reported in 17.5% of cases. Among those with prior attempts, 7.5% attempted once, while 2.5% attempted twice, 5.0% attempted three thrice, and 2.5% had attempted four times. There are very few studies accounting for number of previous attempts in children and adolescents with no available studies in the Indian context. However, a

retrospective study done in a paediatric hospital in Dublin (McNicholas et al)⁴² reported that 29% of the 231 individuals had a history of self-harm with 8.5% presenting with more than 3 attempts.⁴² Predescu et al.⁴¹ in her Romanian study reported history of self-harm in nearly all individuals⁴¹, the exact number of instances were not reported in either of the studies. This suggests a history of self-harm as a possible risk factor and predictor of future attempts.

In terms of diagnosis, impulsive DSH was the most common (37.5%), followed by adjustment disorder with DSH (32.5%) and major depressive disorder with DSH (7.5%). Less prevalent diagnoses included anxiety disorders, body dysmorphic disorder, conduct disorder, dermatitis artifacta, and neurodevelopmental disorders such as IDD, ADHD, and specific learning disorders. This indicates that about 70% (impulsive DSH and adjustment disorder) of the sample had no prior history of a psychiatric diagnosis or self-harm suggesting the possible interplay of certain premorbid factors, such as temperament and coping to stressful events, affecting these incidents. There are limited studies in the available literature addressing these parameters, mostly in context of recurrent self-injury. Predescu et al.⁴¹ studied the presence of psychiatric disorders in children and adolescents presenting with self-harm and found major depressive disorder (86.3%) to be the most common diagnosis.⁴¹ But, this data was limited to the individuals presenting in the emergency department and excluded patients seen on an out-patient basis.

The predominance of acute stressors (conflict with family and academic stress) in 90%, diagnosis of impulsive DSH and adjustment disorder in 70%, and absence of previous attempts in 82.5% of the sample indicates that most attempts at self-harm were possibly an effort to deal with acute distress caused by these events.

Parenting Style:

According to the Parental Authority Questionnaire (PAQ), 60% of individuals were raised with an authoritarian style, 22.5% with a permissive style, and 17.5% with an authoritative style in the study population. A study in Indonesia by Suwignyo YH et al.³⁸ found that adolescents with authoritarian parents are significantly more likely to engage in self-harm behaviours than those raised with authoritative parents.³⁸ Our study found that 60% of participants experienced an "Authoritarian" parenting style, 71.4% of individuals with previous self-harm attempts also had authoritarian parents. This depicts a similar pattern suggesting higher risk is associated with this parenting style. A Czech Republic based study by Burešová et al.³⁷ found that adolescents who self-harm often come from families with less effective parenting, either emotionally cold or inconsistent.³⁷ Single-parent households are more common among these groups.³⁰ Balanced and consistent parental involvement is crucial for adolescents' well-being and can help prevent self-harm behaviours.³⁰ Suggesting negative parental interactions can increase the risk of self-harm in individuals.

Coping skills:

In our study the data on mean scores of A-COPE subscales indicates that avoidance is the most prevalent coping mechanism within the sample. This is followed by expressing frustrations, relaxing, and seeking distractions. Strategies such as assuming control of the situation, striving for self-improvement, reducing family tensions, reciprocal problem solving, and participation in challenging activities are employed to a moderate extent. Conversely, pursuing closeness and understanding from peers, using humour, engaging in religious activities, and seeking professional help are the least commonly utilized strategies.

A comprehensive review of 18 studies from Europe, North America, Australia, and South Korea by Guerreiro et al.³⁵ identified that in adolescents, emotion-focused coping strategies, particularly avoidant strategies, were frequently associated with higher levels of self-harm and increased risk for recurrent self-harm.³⁵ Problem-focused coping in the study was less consistent, but its use at times was noted as a protective factor against self-harm.³⁵ In the current study, adolescents who engaged in self-harm exhibited a similar pattern, showing higher reliance on *Avoiding Problems* as their primary coping strategy for stress, followed by *Ventilating Feelings*, *Relaxing*, and *Seeking Diversions*. This indicates a tendency towards maladaptive strategies within this population. Glazebrook et al.³ in her UK based study of 314 university students investigated the relationship between parental attachment, coping strategies, and self-harm in young individuals (18-20 years).³ Participants who engaged in self-harm often preferred emotion-focused coping strategies like avoidance and blaming others, and were less likely to use problem-focused coping.³ Despite involving a young adult population, the study clearly shows a correlation between coping skills and self-harm. Another study from UK involving a community-based sample by Neilsen et al.³³ had similar findings that participants with avoidant coping have a higher risk of self-harm. Recent self-harm was also associated with poor emotional regulation.³³

There are very limited Indian studies available in the context of coping skills and self-harm. Hence, comparison from an Indian study could not be commented on.

Temperament:

In this study, according to the Thomas and Chess Temperament Questionnaire, 57.5% of children were classified as "Slow to Warm Up," 30% as "Difficult Child," and 12.5% as "Easy Child." Toh et al.⁴⁰ in his Singapore based case control study

compared temperament and adolescent suicide attempts.⁴⁰ The findings of the study indicated presence of “difficult temperament” traits and negative mood was predominant in suicide attempters.⁴⁰ A notable interaction between adaptability and mood was observed, indicating that higher adaptability is linked to a positive mood and a lower likelihood of suicide attempts, while lower adaptability has the opposite effect.⁴⁰ In our study, majority of the sample (87.5%) falls within the age group of 14-18 years. Among this sample, six out of seven individuals (85.7%) who had previously attempted self-harm exhibited a "Difficult Child" temperament. Additionally, 66.6% (four individuals) had more than one instance of deliberate self-harm in the past. This indicates a higher probability of suicide risk, recurrent self-harm, and low adaptability with negative mood among these individuals. A study by Tamás Z et al.³⁹ in Hungary found a correlation between temperament and emotion self-regulation with clinical features of suicidality.³⁹ The research indicated that maladaptive emotion regulation strategies and certain temperament traits, such as low activity and high shyness, were significantly associated with suicidality, regardless of the severity of depression.³⁹

In our study the data on mean scores of EAT-Q subscales indicating that negative affectivity is the most prevalent temperament dimension in the sample. This is followed by low mood or reduced interest in activities, fear due to unpleasant stimuli, behavioural inhibition, ability to take action while there is a tendency to avoid, ability to focus, seeking warmth, and inhibition control were among the temperament dimensions with high prominence in the sample. Preference for high intensity novel stimuli, awareness of surroundings, preference for low-intensity complex stimuli, and the tendency for hostile behaviour had lower predominance.

A cross-sectional study by Guerreiro et al.⁴ in Lisbon used the TEMPS-A questionnaire to assess temperament based on five affective dimensions: depressive, cyclothymic, hyperthermic, irritable, and anxious in adolescents with self-harm.⁴ The study showed higher scores on depressive, cyclothymic, irritable, and anxious temperament dimensions in individuals with self-harm.⁴ These results suggest that certain innate personality traits, particularly those measured by the depressive temperament, may serve as indicators for identifying adolescents at risk for self-harm.⁴ Comparing these findings to the current study, the *Depressive Mood* subscale was second most common, indicating a correlation with self-harming behaviour. A case-control study on adolescents conducted in Singapore by Toh et al.⁴⁰ found that “difficult temperament” traits, such as negative mood, were significantly more common among individuals with self-harm.⁴⁰ A correlation between adaptability and mood was observed, where higher adaptability was linked to positive mood, potentially serving as a protective factor against self-harm.¹⁵ Higher values of Frustration and Depressive Mood indicate a greater prevalence of negative mood in the sample.

There are very limited Indian studies available in the context of temperament and self-harm. Hence, comparison from an Indian study could not be commented on.

Correlation between Coping skills and Number of Previous Attempts, Method

Used, and Diagnosis:

Although there is growing literature on self-harm in children and adolescents, very few studies have explored how these behaviours relate to underlying coping strategies and temperamental traits. The available literature tends to examine coping

skills with limited attempts to explore their association with clinical parameters of self-harm behaviours.

In our study, number of previous self-harm attempts had statistically significant correlation to two A-COPE subscales: *Ventilating feelings* ($p = 0.049$) and *Developing Self-Reliance* ($p = 0.043$). Higher scores on *Ventilating feelings* were more common in adolescents with no history of self-harm, suggesting that individuals who use expression of frustrations and tensions—such as yelling, blaming others, saying mean things, and complaining to friends or family—as a coping strategy have a lower likelihood of frequent attempts. Individuals with no history of self-harm scored higher on *Developing Self-Reliance* (2.70 ± 0.43), indicating that better organization and self-reliance skills are linked to a lower risk of self-harm.

Method of self-harm was found to have statistically significantly correlation to four A-COPE subscales: *Developing Self-Reliance* ($p = 0.22$), *Developing Social Support* ($p = 0.015$), *Engaging in Demanding Activity* ($p = 0.011$), and *Being Humorous* ($p = 0.019$). All four correlated subscales were associated to more violent methods of harm, suggesting more violent methods of self-harm such as cutting and hanging were associated with lower values on this scale. *The Developing Self-Reliance* subscale [cutting (2.42 ± 0.62); hanging (2.35 ± 0.15)], *Developing Social Support* [hanging (2.28 ± 0.49); cutting (1.83 ± 0.19)], *Engaging in Demanding Activity* [hanging (1.72 ± 0.42); cutting (2.00 ± 0.96)], and *Being Humorous* [hanging (1.61 ± 0.60); cutting (1.62 ± 0.25)] all had the lowest mean scores suggesting individuals with more violent methods put less efforts to stay emotionally connected with other people through problem solving, talking, apologising to others, tend to take situations too seriously and rarely joke in times of stress, as well as avoid working hard for self-improvement or achieving goals.

Solving Family Problems ($p = 0.037$) is significantly associated with diagnosis, showing lower scores in neurodevelopmental disorders (1.61), generalised anxiety disorder with cluster B traits (1.33), indicating a tendency not to follow parents' rules or requests nor to actively put effort into solving family problems. Individuals with adjustment disorder (2.71 ± 0.61), depression (2.44 ± 0.67), and impulsive self-harm behaviour (2.47 ± 0.55) had higher scores in the study sample.

Comparing these clinical parameters to A-COPE subscales indicates a correlation between violent methods of self-harm and factors such as poor self-reliance, limited social support, reduced use of humour, and minimal efforts at self-improvement during stressful situations. Adolescents with tendencies towards self-reliance and expressing frustrations and tensions were less likely to engage in frequent self-harm. Individuals with neurodevelopmental disorders often show less compliance to parental requests and put less effort into resolving family issues.

Correlation between Temperament dimensions and Number of Previous Attempts, Method Used, and Diagnosis:

Although there is growing literature on self-harm in children and adolescents, very few studies have explored how these behaviours relate to underlying coping strategies and temperamental traits. The available literature tends to examine temperament with limited attempts to explore their association with clinical parameters of self-harm behaviours.

In our study number of previous self-harm attempts” had statistically significant correlation to three EAT-Q subscales: *Aggression* ($p = 0.037$), *Fear* ($p = 0.020$), and *Surgency* ($p = 0.032$). Higher *Aggression* and *Surgency* subscale scores were correlated with an increased number of self-harm attempts. Individuals without a

history of self-harm had the lowest scores [Aggression: (2.36 ± 0.94); Surgency (2.62 ± 0.80)], while those with the highest number of attempts had the highest scores [Aggression: (4.83 ± 0); Surgency (4.67 ± 0)]. Higher Fear subscale values (3.51 ± 0.67) correlated with no self-harm history, while lower values (1.33 ± 0) were seen with more instances of self-harm. This suggests that adolescents who exhibit more aggressive behaviour, derive greater pleasure from novel or high-risk activities, and experience less fear in distressing situations are at a greater risk for repeated self-harming behaviour.

Method of self-harm was found to have statistically significant correlation to two EAT-Q subscales: *Affiliation* (p = 0.40) and *Pleasure Sensitivity* (p = 0.29). The *Affiliation* subscale showed no significant trend, while lower scores in *Pleasure Sensitivity* were associated with more violent methods of self-harm, such as hanging (2.64 ± 0.56) and cutting (2.10 ± 0.20). This suggests that social desires for warmth and closeness, as well as sensitivity to pleasurable experiences, might influence the choice of self-harm methods.

Diagnosis on correlation was found to have statistically significant correlation to three EAT-Q subscales: *Aggression* (p = 0.24), *Fear* (p = 0.044), and *Surgency* (p = 0.049). The role of high-energy and impulsive behaviours in self-harm tendencies is significant. Neurodevelopmental disorders and generalised anxiety with cluster B traits were correlated with higher *Aggression* and lower *Fear* scores; conversely, individuals with impulsive deliberate self-harm (DSH) and adjustment disorder exhibited the opposite trend. Disorders characterised by impulsivity, such as ADHD, intellectual developmental disorder (IDD), *conduct* disorder, and cluster B traits, demonstrated higher values in *Surgency*, indicating increased pleasure sensitivity towards novel stimuli.

The comparison of these clinical parameters with the EAT-Q subscales suggests a correlation between increased levels of aggression, greater enjoyment derived from novel or high-risk stimuli, and reduced fear in stressful situations, which are associated with a higher frequency of attempts. Similarly, higher tendency towards aggression and more pleasure from high-risk activities was associated with Neurodevelopmental disorders and individuals with cluster B traits, along with lesser fearfulness in these individuals.

CONCLUSION

In this study, majority of the patients were adolescents, belonging to nuclear families with IPR issues with family members and academic stress being the most common stressors in this population. The most common method of self-harm was poisoning, with agrochemicals being the most commonly used and most of the adolescents had no past history of psychiatric disorders or self-harm. Predominant temperament in the study population was “Slow to Warm Up” based on Thomas and Chess Temperament questionnaire, most parents followed an authoritarian parenting style with no history of psychiatric illnesses in the family.

When it comes to coping skills in our study, most adolescents had higher tendency to use avoidance as a coping mechanism in times of stress and seeking professional help was employed the least on A-COPE. The sample had predominantly higher levels of frustration and exhibited higher negative affect, with aggression being the least prominent temperament dimension based on EAT-Q.

Higher tendency to use expressions of frustrations, more self-reliance, and higher fear levels were associated with fewer attempts at self-harm. While higher aggression, and high-risk novelty seeking behaviour had higher risk for repeated attempts. Lesser self-reliance, poor quality of social relations, and fewer efforts at self-improvement, higher aggression, was associated with more violent methods of self-harm. Individuals with disorders associated with impulsivity such as neurodevelopmental disorders and cluster B traits had higher levels of aggression, and surgency with lower levels of fear.

Strengths of the Study:

1. Multifactorial Approach by integrating temperament and coping skills.
2. Focus on a vulnerable age group (children and adolescents) with limited literature with respect to self-harm.
3. Assessment of premorbid characteristics (temperament and coping skills) as an approach to self-harm.
4. Lack of available literature on the subject.
5. Use of structured assessment tools.
6. Variables such as temperament, parenting, previous attempts, family history and more details regarding illness characteristics were studied, which have not been well studied previously.

Limitations of the Study:

1. Cross-sectional study design.
2. Unicentric study.
3. Small study sample.
4. Self-report biases due to nature of scales used for assessment.
5. Reporting bias, as details in some cases were obtained right after the incident of self-harm.
6. Limited generalisability.

SUMMARY

This was a cross-sectional observational study conducted within the Department of Psychiatry at KLES Prabhakar Kore Hospital and MRC, spanning from March 1, 2023, to February 29, 2024. A total of 40 children and adolescents under the age of 18, who were either referred to or presented directly at the department, were diagnosed based on DSM-5-TR criteria and were willing to participate, provided they did not have any severe mental health issues or intellectual disabilities, and appropriate consent was obtained. Upon presentation, a semi-structured questionnaire was utilized to gather socio-demographic information, along with details regarding the illness and the patients' characteristics. The Adolescent-Coping Orientation for Problem Experiences (A-COPE) was implemented to evaluate the coping mechanisms of the study participants, while the Early Adolescent Temperament Questionnaire (EATQ) was employed to assess various dimensions of temperament. The MINI-KID was administered to identify and/or exclude any co-existing psychiatric disorders. The data were analysed using percentages for categorical variables and standard deviation for continuous variables. Clinical details, including the number of prior self-harm attempts, methods used, and diagnoses, were compared against scores on the A-COPE and EAT-Q, with correlations assessed using the Kruskal-Wallis Test due to the abnormal distribution of continuous variables.

The average age of the cases was found to be 15.3, with most of the children (87.5%) falling within the 14-18 years age bracket, exhibiting an even gender distribution. A mere fraction of the patients reported a family history of psychiatric or medical conditions, or had a concurrent psychiatric illness. A significant portion of the cases (87.5%) came from nuclear family structures. In terms of illness characteristics, the most prevalent stressors were familial (75.0%) or academic

(15.0%) in nature. Poisoning emerged as the most frequently utilized method (62.5%), followed by hanging (22.5%), with many self-harm attempts being impulsive (37.5%), and adjustment disorder was identified as the second most common diagnosis (32.5%). A considerable majority of patients (82.5%) had no prior attempts, with authoritarian parenting (60.0%) being the most predominant style, succeeded by permissive parenting (22.5%), and most participants (80.0%) did not have a family history of any psychiatric conditions.

In the evaluation using A-COPE, the predominant coping strategy among the population was avoiding problems, whereas seeking professional support ranked lowest in usage. According to EAT-Q findings, depressive mood emerged as the most significant temperament dimension, while aggression was the least notable. Correlations were observed between coping skills, temperament dimensions, and clinical parameters related to self-harm, such as the number of prior attempts, methods used, and diagnoses. An increased tendency to express frustrations, greater self-reliance, and elevated fear levels were linked to fewer self-harm attempts. Conversely, higher aggression and risk-seeking behaviours were associated with a greater likelihood of repeated attempts. Reduced self-reliance, poor social relationships, fewer self-improvement efforts, and increased aggression were correlated with more violent self-harm methods. Individuals with disorders characterized by impulsivity, including neurodevelopmental disorders and cluster B traits, displayed heightened levels of aggression and surgency, alongside diminished fear levels.

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ANNEXURE I:
KAHERs JNMC
BELAGAVI
INFORMED CONSENT FORM

**“STUDY OF ASSOCIATION BETWEEN COPING SKILLS AND TEMPERAMENT IN CHILDREN
AND ADOLESCENTS WITH SUICIDAL BEHAVIOR OR NON-SUICIDAL SELF-INJURY”**

Principal Investigator (PI): Dr.

Name of the Participant:

Purpose of the study: We request you to permit your child to be a subject in an observational study, the purpose of which is to study association between coping skills and temperament in children and adolescents with suicidal behaviour or non-suicidal self- injury in Belagavi city conducted between 28th March, 2023 to 28th March, 2024, by _____ a postgraduate student in the Department of Psychiatry at Jawaharlal Nehru Medical College, KLE University, Belgaum, Karnataka. This research is being conducted under the supervision of _____

We request you to permit your child to participate in this study as your child is suffering from a psychiatric disorder which needs intervention. Therefore, the above study helps provide better quality of care for effective integration of the patients back into the society.

Procedure involved: If you agree to your child being a part of the study, the PI will interview you/your child and take the details according to predesigned proforma and questionnaires after obtaining written and informed consent from you, and verbal assent from your child following ethical clearance from institutional ethical committee. PI will ask questions from early childhood about child’s behaviour, emotional response, coping skills, and other areas of child behaviour

Risks and benefits involved: There are no risks involved. During the period of study, the existence or development of any significant findings in terms of psychiatric disorders will be informed by the PI to you as well as the parent consultant for the appropriate action.

Alternatives: Your/your child’s participation in this study is a completely voluntary decision. If you/your child do/does not want to be a part of the study, you/your child may refuse for the same or if you/your child are/is already a part of the study and if you/your child want/wants to withdraw from the study for any reason, you/your child may do so without any hesitation. Discontinuation from the study for any reason will not affect your/your relative’s current or future relationship with KLES Dr. Prabhakar Kore Hospital, Belgaum.

Privacy and confidentiality: The information provided by you/your child will be known to the PI and the members of the research team. This information will remain confidential and will be disclosed to others only with your written permission or if required by the law.

Institutional/Sponsors Policy: Not applicable for this research

Financial incentives for participation: You/your child will not be paid/offered any gifts for participation in the research. There will not be any remuneration for participating in the research and you/your relative will not be reimbursed for any expenses, such as bus/train travelling /companion/assistant etc.

Voluntary Participation/Withdrawal from the study: Taking part in the study is voluntary. You may choose not to enroll your child in this study and may choose to leave the study anytime in between.

Authorization to publish results: When the results of the research are to be published or discussed in conferences by the PI, no information will be disclosed that will reveal your/your child's identity.

If you have any questions about this study, you may contact:

Dr. Harsha Hegde, Chairperson, JNMC, IEC & Scientist D, ICMR, National Institute of Traditional Medicine, Belagavi - Ph. 9480422500

You/your relative will be given a copy of this consent form for your/your relative's information and records.

Signature/Thumb Impression of the Caretaker

STATEMENT OF CONSENT

PRIMARY INVESTIGATOR: _____

GUIDE: _____

CO-GUIDE: _____

Dear Mr./Mrs./Dr. _____, you are kindly requested to enroll your child in a research study titled, **“STUDY OF CLINICAL ASSOCIATION BETWEEN COPING SKILLS AND TEMPERAMENT IN CHILDREN AND ADOLESCENTS WITH SUICIDAL BEHAVIOUR OR NON-SUICIDAL SELF-INJURY”** being conducted by _____ a post graduate student in M.D. Psychiatry and the study will be carried out under the direct supervision and guidance of _____ Department of Psychiatry, Jawaharlal Nehru Medical College, Belagavi.

You have been requested to permit your child to participate in this as they fit into the laid-out criteria for a study 'subject' / participant.

You and your child's participation in study is voluntary. During the study you and your child will be undergoing an interview session. Your decision whether or not to participate in the study will not affect your treatment in any form. If you decide to participate you are free to withdraw at any time.

My signature/thumb impression below indicates that I have read or have been told about this entire consent form including the risks and benefits and have had all my questions answered. I will be given a copy of this consent form.

Participant details:

Signature/Thumb Impression of the authorized representative/parent: _____

Name: _____

Relation to the subject: _____

Date: _____

Signature of the witness: _____

Name: _____

Date: _____

Signature of investigator: _____

Name: _____

Date: _____

अनुसंधान अध्ययन में भाग लेने के लिए सहमति

मैं समझता हूँ कि मेरा बच्चा अध्ययन में भाग ले रहा है।

मैं पुष्टि करता हूँ कि मैंने रोगी सूचना पत्र में जानकारी पढ़ी और समझी है। अध्ययन ने बताया कि मुझे अध्ययन में भाग लेने के फायदे और नुकसान के बारे में जानकारी के साथ-साथ विस्तार से बताया गया है। मुझे परीक्षण के सभी पहलुओं पर चर्चा करने, सवाल पूछने और इस तरह ऊपर परीक्षण में भाग लेने के लिए सहमति देने का अवसर दिया गया है।

यह समझें कि इस अध्ययन में भाग लेने का निर्णय पूरी तरह से स्वैच्छिक है और मुझे पता है कि मैं एक समय में अध्ययन सेवाएं लेने का विकल्प चुन सकता हूँ

चिकित्सा, वैज्ञानिक या शैक्षिक उद्देश्यों के लिए मेरे शरीर के उपयुक्त भाग के साथ काम करने के लिए प्रक्रिया को फोटो या रिकॉर्ड करने की अनुमति दी जाती है, बशर्ते मेरी पहचान चित्रों में या उनके साथ आने वाले वर्णनात्मक ग्रंथों में प्रकट न हो।

मैं समझता हूँ कि यह अध्ययन किसी महत्वपूर्ण जोखिम को कवर नहीं करता है।

परिणाम के अनुसार किसी भी व्यक्ति द्वारा कोई गारंटी या आश्वासन नहीं दिया जाता है।

इस फॉर्म पर मेरा हस्ताक्षर दर्शाता है कि मैंने उपरोक्त जानकारी को समझने के बाद सहर्ष निर्णय लिया है।

प्रतिभागी / कानूनी रूप से अधिकृत प्रतिनिधि का नाम:

हस्ताक्षर का नाम:

गवाह के हस्ताक्षर:

साक्षात्कारकर्ता का नाम और हस्ताक्षर:

तारीख:

स्थान:

यदि आपके पास इस अध्ययन के बारे में कोई प्रश्न हैं, तो आप संपर्क कर सकते हैं:

डॉ. हर्षा हेगड़े, अध्यक्ष, जेएनएमसी, आईईसी और वैज्ञानिक डी, आईसीएमआर, राष्ट्रीय पारंपरिक चिकित्सा संस्थान, बेलगावी:
9480422500

ಕನ್ನಂಟ್ ಸ್ಕೀಟ್‌ಂಟ್

ಈ ಅಧ್ಯಯನದಲ್ಲಿ ನನ್ನ ಮಗುವಿನ ಭಾಗವಹಿಸುವಿಕೆಯನ್ನು ನಾನು ಸ್ವಯಂಪ್ರೇರಣೆಯಿಂದ ಒಪ್ಪುತ್ತೇನೆ.

ನನ್ನ ಮಗುವಿಗೆ ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಪಾಲ್ಗೊಳ್ಳಲು ನಾನು ಅನುಮತಿಸಿದರೂ, ಯಾವುದೇ ಸಮಯದಲ್ಲಿ ಹಿಂತೆಗೆದುಕೊಳ್ಳುವ ಸ್ವಾತಂತ್ರ್ಯ ನನಗೆ ಇದೆ ಎಂದು ನಾನು ಅರ್ಥಮಾಡಿಕೊಂಡಿದ್ದೇನೆ.

ಸಂಶೋಧನೆಯಲ್ಲಿ ಭಾಗವಹಿಸಿದ್ದಕ್ಕಾಗಿ ನನಗೆ ಹಣ ಪಾವತಿಸಲಾಗುವುದಿಲ್ಲ. ನಾನು / ನನ್ನ ಸಂಬಂಧಿಕರು ಪ್ರಯಾಣದಂತಹ ಯಾವುದೇ ಖರ್ಚುಗಳಿಗೆ ಮರುಪಾವತಿ ಮಾಡಲಾಗುವುದಿಲ್ಲ.

ಈ ಅಧ್ಯಯನದಲ್ಲಿ ನಾನು / ನನ್ನ ಮಗುವಿನ ಭಾಗವಹಿಸುವಿಕೆ ಸಂಪೂರ್ಣವಾಗಿ ಸ್ವಯಂಪ್ರೇರಿತ ನಿರ್ಧಾರವಾಗಿದೆ.

ನಾನು / ನನ್ನ ಮಗು ಯಾವುದೇ ಕಾರಣಕ್ಕೂ ಅಧ್ಯಯನದಿಂದ ಹಿಂದೆ ಸರಿಯಲು ಬಯಸಿದರೆ, ನಾನು ಯಾವುದೇ ಹಿಂಜರಿಕೆಯಿಲ್ಲದೆ ಹಾಗೆ ಮಾಡಬಹುದು.

ಯಾವುದೇ ಕಾರಣಕ್ಕೂ, ಅಧ್ಯಯನವನ್ನು ಸ್ಥಗಿತಗೊಳಿಸುವುದರಿಂದ ಬೆಲ್ಜಿಯಂನ ಕೆಎಲ್‌ಇಎಸ್ ಡಾ. ಪ್ರಭಾಕರ್ ಕೋರೆ ಆಸ್ಪತ್ರೆಯೊಂದಿಗಿನ ನನ್ನ ಸಂಬಂಧದ ಮೇಲೆ ಪರಿಣಾಮ ಬೀರುವುದಿಲ್ಲ ಎಂದು ನಾನು ಅರ್ಥಮಾಡಿಕೊಂಡಿದ್ದೇನೆ.

ಅಧ್ಯಯನದಲ್ಲಿ ಯಾವುದೇ ಅಪಾಯಗಳಿಲ್ಲ ಎಂದು ನಾನು ಅರ್ಥಮಾಡಿಕೊಂಡಿದ್ದೇನೆ. ಯಾವುದೇ ಮಹತ್ವದ ಆವಿಷ್ಕಾರಗಳನ್ನು ಅಧ್ಯಯನದ ಅವಧಿಯಲ್ಲಿ ತಿಳಿಸಲಾಗುತ್ತದೆ.

ನಾನು / ನನ್ನ ಮಗು ಒದಗಿಸಿದ ಮಾಹಿತಿಯು ಸಂಶೋಧನಾ ತಂಡದ ಸದಸ್ಯರಿಗೆ ತಿಳಿಯುತ್ತದೆ. ಈ ಮಾಹಿತಿಯು ಗೌಪ್ಯವಾಗಿ ಉಳಿಯುತ್ತದೆ ಮತ್ತು ನನ್ನ ಲಿಖಿತ ಒಪ್ಪಿಗೆಯೊಂದಿಗೆ ಅಥವಾ ಕಾನೂನಿನ ಪ್ರಕಾರ ಇತರರಿಗೆ ಬಹಿರಂಗಗೊಳ್ಳುತ್ತದೆ.

ಸಮ್ಮೇಳನಗಳಲ್ಲಿ ಸಂಶೋಧನೆಯ ಫಲಿತಾಂಶಗಳನ್ನು ಪ್ರಕಟಿಸಲು ಅಥವಾ ಚರ್ಚಿಸಲು ಬಂದಾಗ, ನನ್ನ ಮಗುವಿನ ಗುರುತನ್ನು ಬಹಿರಂಗಪಡಿಸಲಾಗುವುದಿಲ್ಲ.

ಈ ಒಪ್ಪಿಗೆ ಪತ್ರದ ನಕಲನ್ನು ನನಗೆ ನೀಡಲಾಗುವುದು.

ಕೆಳಗಿನ ನನ್ನ ಸಹಿ / ಹೆಬ್ಬರಳು ಅನಿಸಿಕೆ ನಾನು ಅಪಾಯಗಳು ಮತ್ತು ಪ್ರಯೋಜನಗಳನ್ನು ಒಳಗೊಂಡಂತೆ ಈ ಸಂಪೂರ್ಣ ಒಪ್ಪಿಗೆಯ ರೂಪವನ್ನು ಓದಿದ್ದೇನೆ ಅಥವಾ ಹೇಳಿದ್ದೇನೆ ಮತ್ತು ನನ್ನ ಎಲ್ಲಾ ಪ್ರಶ್ನೆಗಳಿಗೆ ಉತ್ತರಿಸಿದ್ದೇನೆ ಎಂದು ಸೂಚಿಸುತ್ತದೆ.

ಭಾಗವಹಿಸುವವರ ಹೆಸರುಗಳು / ಕಾನೂನುಬದ್ಧವಾಗಿ ಅಧಿಕೃತ ಪ್ರತಿನಿಧಿ:

ಗಾರ್ಡಿಯನ್ / ಪೋಷಕ ಸಹಿ / ಹೆಬ್ಬರಳು ಅನಿಸಿಕೆ:

ದಿನಾಂಕ ಮತ್ತು ಸ್ಥಳ:

ಡಾ. ಹರ್ಷ ಹೆಗಡೆ, ಅಧ್ಯಕ್ಷರು, ಜೆಎನ್‌ಎಂಸಿ, ಐಇಸಿ ಮತ್ತು ವಿಜ್ಞಾನಿ ಡಿ, ಐಸಿಎಂಆರ್, ನ್ಯಾಷನಲ್
ಇನ್‌ಸ್ಟಿಟ್ಯೂಟ್ ಆಫ್ ಟ್ರೆಡಿಷನಲ್ ಮೆಡಿಸಿನ್, ಬೆಳಗಾವಿ: 9480422500

संशोधन सहभागी होण्यासाठी संमती विधान

या अभ्यासात मी माझ्या मुलाचा सहभाग स्वेच्छेने स्वीकारतो.

जरी मी माझ्या मुलास या अभ्यासामध्ये भाग घेण्याची परवानगी देत असलो तरी मला हे समजले आहे की मला कधीही माघार घेण्याचे स्वातंत्र्य आहे.

मला संशोधनात भाग घेण्यासाठी पैसे दिले जाणार नाहीत. प्रवासासारख्या कोणत्याही खर्चासाठी मला / माझ्या नातेवाईकांना परतफेड केली जाणार नाही.

या अभ्यासात मी / माझ्या मुलाचा सहभाग हा पूर्णपणे ऐच्छिक निर्णय आहे.

मी / माझे मुल जर कोणत्याही कारणास्तव अभ्यासामधून माघार घेऊ इच्छित असेल तर मी हे न डगमगता करू शकतो.

कोणत्याही कारणास्तव, हा अभ्यास बेळगावच्या डॉ. केएलईएसने बंद केला होता. मला समजले आहे की प्रभाकर कोरी हॉस्पिटलशी माझे संबंध प्रभावित होणार नाहीत.

मला समजले की अभ्यासामध्ये कोणतीही जोखीम नाही. अभ्यासाच्या काळात कोणत्याही महत्त्वपूर्ण निष्कर्षांवर लक्ष दिले जाईल.

मी / माझ्या मुलाद्वारे प्रदान केलेली माहिती शोध पथकाच्या सदस्यांना माहिती असेल. ही माहिती गोपनीय राहिल आणि कायद्याद्वारे किंवा माझ्या लेखी संमतीने इतरांना जाहीर केली जाईल.

कॉन्फरन्समध्ये संशोधन निकाल प्रकाशित करणे किंवा त्यावर चर्चा करण्याची वेळ येते तेव्हा माझ्या मुलाची ओळख जाहीर केली जाऊ शकत नाही.

मला या संमती पत्राची एक प्रत दिली जाईल.

खाली माझी स्वाक्षरी / अंगठ्याचा ठसा सूचित करतो की मी जोखीम आणि फायद्यांसह हा संपूर्ण संमती फॉर्म वाचला आहे किंवा सांगितले आहे आणि माझ्या सर्व प्रश्नांची उत्तरे दिली आहेत.

सहभागीची नावे / कायदेशीर अधिकृत प्रतिनिधी:

पालक / पालकांची सही / अंगुठा

तारीख आणि ठिकाण:

तुम्हाला या अभ्यासाविषयी काही प्रश्न असल्यास, तुम्ही संपर्क साधू शकता:

डॉ. हर्षा हेगड़े, अध्यक्ष, जेएनएमसी, आईईसी और वैज्ञानिक डी, आईसीएमआर, राष्ट्रीय पारंपरिक चिकित्सा संस्थान, बेलगावी: 9480422500

VERBAL ASSENT

[FOR AGES 5-12]

Title of Research Study: STUDY OF ASSOCIATION BETWEEN COPING SKILLS AND TEMPERAMENT IN CHILDREN AND ADOLESCENTS WITH SUICIDAL BEHAVIOUR OR NON-SUICIDAL SELF-INJURY

Principal Investigator:

Why are we meeting with you?

We want to tell you about something we are doing called a research study. A research study is when doctors collect a lot of information to learn more about something. We are doing a study to learn more about children with a condition called non-suicidal self-injury. After we tell you about it, we will ask if you'd like to be in this study or not.

Why are we doing this study?

We want to find out any reasons and how well treatment is working for your condition. So, we are getting information from lots of boys and girls like you.

In the whole study, there will be children who have the same condition as you.

What will happen to you if you are in this study?

Only if you agree, I will be asking you and your parents some questions about yourself and your family.

Will this study hurt?

No, I will not be doing anything that will hurt you.

Will you get better if you are in this study?

No, this study won't make you feel better or get well. But the doctors might find out something that will help other children like you later.

Do you have to be in this study?

No, you don't. If you don't want to be in this study, just tell us. Or if you do want to be in the study, tell us that. And, remember, you can say yes now and change your mind later. It's up to you.

Some of the things that I will ask might make you uncomfortable. Some of the questions or tests might be hard to answer. If you get too tired or uncomfortable, just let me know. If you want to stop at any time, just tell me and we will stop.

Your parents say it is okay for you to be in this study. If you have questions for me or for your parents you can ask them now or later.

ADOLESCENT ASSENT FORM

[FOR AGES 13-18]

Your parent has given permission for you to be in a project called a research study. But first, we want to tell you all about it so you can decide if you want to be in it. If you don't understand, please ask questions. You can choose to be in the study, not be in the study or take more time to decide.

What is the name of the study?

STUDY OF ASSOCIATION BETWEEN TEMPERAMENT AND COPING SKILLS IN CHILDREN AND ADOLESCENTS WITH SUICIDAL BEHAVIOUR OR NON-SUICIDAL SELF-INJURY

Who is in charge of the study?

The doctor in charge of the study is _____

What is the study about?

We would like to find out what are some the factors that may be leading to your condition, and how better you feel after 1 month of treatment.

Why are you asking me to be in this study?

You are being asked to be in the study because you are between the ages of 5 and 18, and have this condition we are studying about.

What will happen to me in the study?

If you decide to be in the study, I will be asking you and your parents/guardian some questions regarding your family and yourself.

Will I be paid to be in this study?

You/your family will not be paid for being in this study.

Do I have to be in the study?

You don't have to do the study if you don't want to. If you are in the study, you can stop being in it at any time. Nobody will be upset with you if you don't want to be in the study or if you want to stop being in the study. The doctors and nurses will take care of you as they have in the past. If you have any questions or don't like what is happening, please tell the doctor or nurse. You have had the study explained to you. You have been given a chance to ask questions. By writing your name below, you are saying that you want to be in the study.

Signature of Adolescent: _____ Name of Adolescent:

Signature of Investigator: _____ Name of Investigator:

Signature of Parent/Guardian: _____ Name of Parent/Guardian:

ANNEXURE II:**DEMOGRAPHIC DETAILS**

PATIENT NUMBER					
NAME					
DATE OF BIRTH & AGE					
SEX					
ADDRESS					
RELIGION					
FATHER'S NAME					
FATHER EDUCATION LEVEL	UNEDUCATED	HIGH SCHOOL	BACHELORS	MASTERS	OTHER
FATHER OCCUPATION					
MOTHERS NAME					
MOTHERS EDUCATION LEVEL	UNEDUCATED	HIGH SCHOOL	BACHELORS	MASTERS	OTHER
MOTHERS OCCUPATION					
SOCIO-ECONOMIC STATUS	UPPER CLASS	UPPER MIDDLE	LOWER MIDDLE	UPPER LOWER	LOWER
TYPE OF FAMILY	NUCLEAR	JOINT	SINGLE PARENT		
NUMBER OF MEMBERS IN FAMILY					

CLINICAL HISTORY

Age of the child/adolescent at which self-injury was inflicted?		
Frequency of self-injury in the child/adolescent?		
Types of self-injury inflicted by the child/adolescent?		
When was the last instance of self-injury?		
What was the stressor/reason for the self-injury?		
Any previous instances of self harm? Number of instances:	YES	NO
Has been dull/low on energy lately?	YES	NO
Does not seem interested in meeting friends/going out/watching tv/hobbies recently?	YES	NO
Prefers to stay alone lately?	YES	NO
Has ever indicated self-harm by actions/gestures/words?	YES	NO
Frequently complains of chest discomfort, nausea, rapid heart rate, sweating?	YES	NO
Gets easily bothered by trivial matters?	YES	NO
Has ever been bullied in school/by friends?	YES	NO
Any sudden weight changes recently/in past not related to any medical condition?	YES	NO
Irregular/unhealthy food habits? (Overeating/undereating)	YES	NO
Any unexplained vomiting episodes following meals?	YES	NO
Over concerned about physical appearance? (Repeated grooming/body-image issues)	YES	NO

Excess phone use/unable to resist using phone?	YES	NO
Uses social media regularly? (Instagram/facebook/twitter/snapchat)	YES	NO
Has ever been observed viewing questionable/age inappropriate content?	YES	NO
Gets irritable if asked not use/unable to use phone?	YES	NO
Interacts/communicates with family members regularly?	YES	NO
Asks for support from family members if worried/stressed?	YES	NO
Gets involved in activities with family? (Helping out at home/family time)	YES	NO
Prefers being alone or distant from family?	YES	NO
Frequently fights with family members? (Instigates/picks up fights for no reason)	YES	NO
Actively participates in class/extra curricular activities?	YES	NO
Any sudden decline in academic performance?	YES	NO
Any complaints from school/teachers?	YES	NO
Has ever been caught bunking school/class?	YES	NO
Frequently tries to avoid school by making excuses? (Currently/in past)	YES	NO
Has difficulty making friends in school/neighbourhood?	YES	NO
Has friends that get into trouble frequently?	YES	NO
Any instances of lying/stealing/harming animals/fire setting behaviour?	YES	NO
Any instances of bullying other kids?	YES	NO
Any instance of drug use? (Smoking/tobacco/alcohol/illicit drug use)	YES	NO

TEMPERAMENT

<u>(CHECK WHICH APPLICABLE)</u>	<u>EASY CHILD</u>	<u>DIFFICULT CHILD</u>	<u>SLOW TO WARM UP CHILD</u>
ACTIVITY LEVEL		HIGH	LOW
BIOLOGICAL REGULARITY	REGULAR	IRREGULAR	
	SLEEP WAKE CYCLE		
	HUNGER		
	BOWEL AND BLADDER MOVEMENTS		
ADAPTIBILITY	QUICKLY	SLOWLY	SLOWLY
APPROACH/WITHDRAWAL	POSITIVE	NEGATIVE	NEGATIVE
SENSITIVITY THRESHOLD	LOW	HIGH	
INTENSITY OF EMOTIONAL RESPONSE	LOW TO MODERATE	HIGH	LOW
DISTRACTIBILITY	LOW	HIGH	
QUALITY OF MOOD	POSITIVE	NEGATIVE/SERIOUS	
PERSISTENCE/ATTENTION SPAN	LOW	HIGH	

PARENTING STYLE (CHECK WHICH APPLICABLE)

AUTHORITARIAN	
PERMISSIVE/INDULGENT	
UNINVOLVED	
AUTHORITATIVE	

FAMILY HISTORY

PSYCHIATRIC ILLNESS	YES		NO	
DEGREE RELATION	1ST	2ND	3RD	4 TH
CURRENTLY SYMPTOMATIC	YES		NO	
TREATMENT DETAILS				
MEDICAL ILLNESS	YES		NO	
DEGREE RELATION	1ST	2ND	3RD	4 TH
TREATMENT DETAILS				

Parental Authority Questionnaire

Instructions: For each of the following statements, circle the number of the 5-point scale (1 = strongly disagree, 5 = strongly agree) that best describes how that statement applies to you and your mother. Try to read and think about each statement as it applies to you and your mother during your years of growing up at home. There are no right or wrong answers, so don't spend a lot of time on any one item. We are looking for your overall impression regarding each statement. Be sure not to omit any items.

- 1 = Strongly disagree
 2 = Disagree
 3 = Neither agree nor disagree
 4 = Agree
 5 = Strongly Agree

1. While I was growing up my mother felt that in a well-run home the children should have their way in the family as often as the parents do.	1	2	3	4	5
2. Even if her children didn't agree with her, my mother felt that it was for our own good if we were forced to conform to what she thought was right.	1	2	3	4	5
3. Whenever my mother told me to do something as I was growing up, she expected me to do it immediately without asking any questions.	1	2	3	4	5
4. As I was growing up, once family policy had been established, my mother discussed the reasoning behind the policy with the children in the family.	1	2	3	4	5
5. My mother has always encouraged verbal give-and-take whenever I have felt that family rules and restrictions were unreasonable.	1	2	3	4	5
6. My mother has always felt that what her children need is to be free to make up their own minds and to do what they want to do, even if this does not agree with what their parents might want.	1	2	3	4	5
7. As I was growing up my mother did not allow me to question any decision she had made.	1	2	3	4	5
8. As I was growing up my mother directed the activities and decisions of the children in the family through reasoning and discipline.	1	2	3	4	5
9. My mother has always felt that more force should be used by parents in order to get their children to behave the way they are supposed to.	1	2	3	4	5
10. As I was growing up my mother did not feel that I needed to obey rules and regulations of behavior simply because someone in authority had established them.	1	2	3	4	5

11. As I was growing up I knew what my mother expected of me in my family, but I also felt free to discuss those expectations with my mother when I felt that they were unreasonable.	1	2	3	4	5
12. My mother felt that wise parents should teach their children early just who is boss in the family.	1	2	3	4	5
13. As I was growing up, my mother seldom gave me expectations and guidelines for my behavior.	1	2	3	4	5
14. Most of the time as I was growing up my mother did what the children in the family wanted when making family decisions.	1	2	3	4	5
15. As the children in my family were growing up, my mother consistently gave us direction and guidance in rational and objective ways.	1	2	3	4	5
16. As I was growing up my mother would get very upset if I tried to disagree with her.	1	2	3	4	5
17. My mother feels that most problems in society would be solved if parents would not restrict their children's activities, decisions, and desires as they are growing up.	1	2	3	4	5
18. As I was growing up my mother let me know what behavior she expected of me, and if I didn't meet those expectations, she punished me.	1	2	3	4	5
19. As I was growing up my mother allowed me to decide most things for myself without a lot of direction from her.	1	2	3	4	5
20. As I was growing up my mother took the children's opinions into consideration when making family decisions, but she would not decide for something simply because the children wanted it.	1	2	3	4	5
21. My mother did not view herself as responsible for directing and guiding my behavior as I was growing up.	1	2	3	4	5
22. My mother had clear standards of behavior for the children in our home as I was growing up, but she was willing to adjust those standards to the needs of each of the individual children in the family.	1	2	3	4	5
23. My mother gave me direction for my behavior and activities as I was growing up and she expected me to follow her direction, but she was always willing to listen to my concerns and to discuss that direction with me.	1	2	3	4	5
24. As I was growing up my mother allowed me to form my own point of view on family matters and she generally allowed me to decide for myself what I was going to do.	1	2	3	4	5

25. My mother has always felt that most problems in society would be solved if we could get parents to strictly and forcibly deal with their children when they don't do what they are supposed to as they are growing up.	1	2	3	4	5
26. As I was growing up my mother often told me exactly what she wanted me to do and how she expected me to do it.	1	2	3	4	5
27. As I was growing up my mother gave me clear direction for my behaviors and activities, but she was also understanding when I disagreed with her.	1	2	3	4	5
28. As I was growing up my mother did not direct the behaviors, activities, and desires of the children in the family.	1	2	3	4	5
29. As I was growing up I knew what my mother expected of me in the family and she insisted that I conform to those expectations simply out of respect for her authority.	1	2	3	4	5
30. As I was growing up, if my mother made a decision in the family that hurt me, she was willing to discuss that decision with me and to admit it if she had made a mistake.	1	2	3	4	5

Description: The PAQ is designed to measure parental authority, or disciplinary practices, from the point of view of the child (of any age).

The PAQ has three subscales:

permissive (P: items 1, 6, 10, 13, 14, 17, 19, 21, 24 and 28), authoritarian (A: items 2, 3, 7, 9, 12, 16, 18, 25, 26 and 29), and authoritative/flexible (F: items 4, 5, 8, 11, 15, 20, 22, 23, 27, and 30). Mother and father forms of the assessment are identical except for references to gender.

Scoring: The PAQ is scored easily by summing the individual items to comprise the subscale scores. Scores on each subscale range from 10 to 50.

Author: Dr. John R. Buri, Department of Psychology, University of St. Thomas, 2115 Summit Avenue, St. Paul, MN 55105.

Source: Buri, J.R. (1991). Parental Authority Questionnaire, *Journal of Personality and Social Assessment*, 57, 110-119

Patient Name: _____	Patient Number: _____
Date of Birth: _____	Time Interview Began: _____
Interviewer's Name: _____	Time Interview Ended: _____
Date of Interview: _____	Total Time: _____

MODULES	TIME FRAME	MEETS CRITERIA	DSM-IV	ICD-10
A MAJOR DEPRESSIVE EPISODE	Current (2 weeks)	<input type="checkbox"/>		
	Past	<input type="checkbox"/>		
	Recurrent	<input type="checkbox"/>		
MAJOR DEPRESSIVE DISORDER	Current (2 weeks)	<input type="checkbox"/>	296.20-296.26 Single	F32.x <input type="checkbox"/>
	Past	<input type="checkbox"/>	296.20-296.26 Single	F32.x <input type="checkbox"/>
	Recurrent	<input type="checkbox"/>	296.30-296.36 Recurrent	F33.x <input type="checkbox"/>
B SUICIDALITY	Current (Past Month)	<input type="checkbox"/>	N/A	N/A
	Risk: <input type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High			
C DYSTHYMIA	Current (Past 1 year)	<input type="checkbox"/>	300.4	F34.1 <input type="checkbox"/>
D MANIC EPISODE	Current	<input type="checkbox"/>		
	Past	<input type="checkbox"/>		
HYPOMANIC EPISODE	Current	<input type="checkbox"/>		
	Past	<input type="checkbox"/>	<input type="checkbox"/> Not Explored	
BIPOLAR I DISORDER	Current	<input type="checkbox"/>	296.0x-296.6x	F30.x- F31.9 <input type="checkbox"/>
	Past	<input type="checkbox"/>	296.0x-296.6x	F30.x- F31.9 <input type="checkbox"/>
BIPOLAR II DISORDER	Current	<input type="checkbox"/>	296.89	F31.8 <input type="checkbox"/>
	Past	<input type="checkbox"/>	296.89	F31.8 <input type="checkbox"/>
BIPOLAR DISORDER NOS	Current	<input type="checkbox"/>	296.80	F31.9 <input type="checkbox"/>
	Past	<input type="checkbox"/>	296.80	F31.9 <input type="checkbox"/>
E PANIC DISORDER	Current (Past Month)	<input type="checkbox"/>	300.01/300.21	F40.01-F41.0 <input type="checkbox"/>
	Lifetime	<input type="checkbox"/>		
F AGORAPHOBIA	Current	<input type="checkbox"/>	300.22	F40.00 <input type="checkbox"/>
G SEPARATION ANXIETY DISORDER	Current (Past Month)	<input type="checkbox"/>	309.21	F93.0 <input type="checkbox"/>
H SOCIAL PHOBIA (Social Anxiety Disorder)	Current (Past Month)			
	Generalized	<input type="checkbox"/>	300.23	F40.1 <input type="checkbox"/>
	Non-Generalized	<input type="checkbox"/>	300.23	F40.1 <input type="checkbox"/>
I SPECIFIC PHOBIA	Current (Past Month)	<input type="checkbox"/>	300.29	N/A <input type="checkbox"/>
J OBSESSIVE COMPULSIVE DISORDER	Current (Past Month)	<input type="checkbox"/>	300.3	F42.8 <input type="checkbox"/>
K POST TRAUMATIC STRESS DISORDER	Current (Past Month)	<input type="checkbox"/>	309.81	F43.1 <input type="checkbox"/>
L ALCOHOL DEPENDENCE	Past 12 Months	<input type="checkbox"/>	303.9	F10.2x <input type="checkbox"/>
L ALCOHOL ABUSE	Past 12 Months	<input type="checkbox"/>	305.00	F10.1 <input type="checkbox"/>
M SUBSTANCE DEPENDENCE (Non-alcohol)	Past 12 Months	<input type="checkbox"/>	304.00-.90/305.20-.90	F11.1-F19.1 <input type="checkbox"/>
M SUBSTANCE ABUSE (Non-alcohol)	Past 12 Months	<input type="checkbox"/>	304.00-.90/305.20-.90	F11.1-F19.1 <input type="checkbox"/>
N TOURETTE'S DISORDER	Current	<input type="checkbox"/>	307.23	F95.2 <input type="checkbox"/>
MOTOR TIC DISORDER	Current	<input type="checkbox"/>	307.22	F95.1 <input type="checkbox"/>
VOCAL TIC DISORDER	Current	<input type="checkbox"/>	307.22	F95.1 <input type="checkbox"/>

M.I.N.I. 5.0 Parent 6.0 (January 1, 2010).

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	TRANSIENT TIC DISORDER	Current	<input type="checkbox"/>	307.21	F95.0	<input type="checkbox"/>
O	ADHD COMBINED	Past 6 Months	<input type="checkbox"/>	314.01	F90.0	<input type="checkbox"/>
	ADHD INATTENTIVE	Past 6 Months	<input type="checkbox"/>	314.00	F98.8	<input type="checkbox"/>
	ADHD HYPERACTIVE/IMPULSIVE	Past 6 Months	<input type="checkbox"/>	314.01	F90.0	<input type="checkbox"/>
P	CONDUCT DISORDER	Past 12 Months	<input type="checkbox"/>	312.8	F91.x	<input type="checkbox"/>
Q	OPPOSITIONAL DEFIANT DISORDER	Past 6 Months	<input type="checkbox"/>	313.81	F91.3	<input type="checkbox"/>
R	PSYCHOTIC DISORDERS	Lifetime	<input type="checkbox"/>	295.10-295.90/297.1/ 297.3/293.81/293.82/ 293.89/298.8/298.9	F20.xx-F29	<input type="checkbox"/>
	MOOD DISORDER WITH PSYCHOTIC FEATURES	Lifetime	<input type="checkbox"/>	296.24/296.34/296.44	F32.3/F33.3/	<input type="checkbox"/>
		Current	<input type="checkbox"/>	296.24/296.34/296.44	F30.2/F31.2/F31.5/ F31.8/F31.9/F39	<input type="checkbox"/>
S	ANOREXIA NERVOSA	Current (Past 3 Months)	<input type="checkbox"/>	307.1	F50.0	<input type="checkbox"/>
T	BULIMIA NERVOSA	Current (Past 3 Months)	<input type="checkbox"/>	307.51	F50.2	<input type="checkbox"/>
	ANOREXIA NERVOSA, BINGE EATING/PURGING TYPE	Current	<input type="checkbox"/>	307.1	F50.0	<input type="checkbox"/>
U	GENERALIZED ANXIETY DISORDER	Current (Past 6 Months)	<input type="checkbox"/>	300.02	F41.1	<input type="checkbox"/>
V	ADJUSTMENT DISORDERS	Current	<input type="checkbox"/>	309.24/309.28 309.3/309.4	F43.xx	<input type="checkbox"/>
W	MEDICAL, ORGANIC, DRUG CAUSE RULED OUT		<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Uncertain			
X	PERVASIVE DEVELOPMENTAL DISORDER	Current	<input type="checkbox"/>	299.00/299.10/299.80	F84.0/2/3/5/9	<input type="checkbox"/>

PRIMARY DISORDER

IDENTIFY THE PRIMARY DIAGNOSIS BY CHECKING THE APPROPRIATE CHECK BOX.

Which problem troubles him/her the most or dominates the others or came first in the natural history? _____

DISCLAIMER

Our aim is to assist in the assessment and tracking of patients with greater efficiency and accuracy. Before action is taken on any data collected and processed by this program, it should be reviewed and interpreted by a licensed clinician.

This program is not designed or intended to be used in the place of a full medical and psychiatric evaluation by a qualified licensed physician – psychiatrist. It is intended only as a tool to facilitate accurate data collection and processing of symptoms elicited by trained personnel.



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A-COPE
ADOLESCENT COPING ORIENTATION FOR PROBLEM EXPERIENCES[®]
 Joan M. Patterson Hamilton I. McCubbin

Purpose

A-COPE is designed to record the behaviors adolescents find helpful to them in managing problems or difficult situations which happen to them or members of their families.

Coping is defined as individual or group behavior used to manage the hardships and relieve the discomfort associated with life changes or difficult life events.

Directions


- Read each of the statements below which describes a behavior for coping with problems.
- Decide how often you do each of the described behaviors when you face difficulties of real tense. Even though you may do some of these things just for fun, please indicate only how often you do each behavior as a way to cope with problems.
- Circle one of the following responses for each statement:
 1 – NEVER 2 – HARDLY EVER 3 – SOMETIMES 4 – OFTEN 5 – MOST OF THE TIME
- Please be sure and circle a response for each statement.

<i>When you face difficulties or feel tense, how often do you:</i>	Never	Hardly Ever	Sometimes	Often	Most of the Time
1. Go along with parents' requests and rules	1	2	3	4	5
2. Read	1	2	3	4	5
3. Try to be funny and make light of it all	1	2	3	4	5
4. Apologize to people	1	2	3	4	5
5. Listen to music-stereo, radio, etc.	1	2	3	4	5
6. Talk to a teacher or counselor at school about what bothers you	1	2	3	4	5
7. Eat food	1	2	3	4	5
8. Try to stay away from home as much as possible	1	2	3	4	5
9. Use drugs prescribed by a doctor	1	2	3	4	5

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Please continue on other side

	Never	Hardly Ever	Sometimes	Often	Most of the Time
<i>When you face difficulties or feel tense, how often do you:</i>					
10. Get more involved in activities at school	1	2	3	4	5
11. Go shopping; buy things you like	1	2	3	4	5
12. Try to reason with parents and talk things out; compromise	1	2	3	4	5
13. Try to improve yourself (get body in shape, get better grades, etc.)	1	2	3	4	5
14. Cry	1	2	3	4	5
15. Try to think of the good things in your life	1	2	3	4	5
16. Be with a boyfriend or girlfriend	1	2	3	4	5
17. Ride around in the car	1	2	3	4	5
18. Say nice things to others	1	2	3	4	5
19. Get angry and yell at people	1	2	3	4	5
20. Joke and keep a sense of humor	1	2	3	4	5
21. Talk to a minister/priest/rabbi	1	2	3	4	5
22. Let off steam by complaining to family members	1	2	3	4	5
23. Go to church	1	2	3	4	5
24. Use drugs (not prescribed by doctor)	1	2	3	4	5
25. Organize your life and what you have to do	1	2	3	4	5
26. Swear	1	2	3	4	5
27. Work hard on schoolwork or other school projects	1	2	3	4	5
28. Blame others for what's going wrong	1	2	3	4	5
29. Be close with someone you care about	1	2	3	4	5
30. Try to help other people solve their problems	1	2	3	4	5
31. Talk to you mother about what bothers you	1	2	3	4	5
32. Try, on your own, to figure out how to deal with your problems or tension	1	2	3	4	5

Please continue on other side 

	Never	Hardly Ever	Sometimes	Often	Most of the Time
<i>When you face difficulties or feel tense, how often do you:</i>					
33. Work on a hobby you have (sewing, model building, etc.)	1	2	3	4	5
34. Get professional counseling (not from a school teacher or school counselor)	1	2	3	4	5
35. Try to keep up friendships or make new friends	1	2	3	4	5
36. Tell yourself the problem is not important	1	2	3	4	5
37. Go to a movie	1	2	3	4	5
38. Daydream about how you would like things to be	1	2	3	4	5
39. Talk to a brother or sister about how you feel	1	2	3	4	5
40. Get a job or work harder at one	1	2	3	4	5
41. Do things with your family	1	2	3	4	5
42. Smoke	1	2	3	4	5
43. Watch T.V.	1	2	3	4	5
44. Pray	1	2	3	4	5
45. Try to see the good things in a difficult situation	1	2	3	4	5
46. Drink beer, wine, liquor	1	2	3	4	5
47. Try to make your own decisions	1	2	3	4	5
48. Sleep	1	2	3	4	5
49. Say mean things to people; be sarcastic	1	2	3	4	5
50. Talk to your father about what bothers you	1	2	3	4	5
51. Let off steam by complaining to your friends	1	2	3	4	5
52. Talk to a friend about how you feel	1	2	3	4	5
53. Play video games (Space Invaders, Pac-Man) pool, pinball, etc.	1	2	3	4	5
54. Do a strenuous physical activity (jogging, biking, etc.)	1	2	3	4	5

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**Early Adolescent Temperament Questionnaire - Revised
Short Form**

Directions

On the following page you will find a series of statements that people might use to describe themselves. The statements refer to a wide number of activities and attitudes.

For each statement, please circle the answer that best describes how true each statement is **for you**. There are no best answers. People are very different in how they feel about these statements. Please circle the first answer that comes to you.

You will use the following scale to describe how true or false a statement is about you:

<u>Circle number:</u>	<u>If the statement is:</u>
1	Almost always untrue of you
2	Usually untrue of you
3	Sometimes true, sometimes untrue of you
4	Usually true of you
5	Almost always true of you

NOTE: Please make certain to answer all questions on BOTH SIDES of the page.

Please tell us:

Your date of birth: _____

Your gender: M / F

Family ID code: _____

How true is each statement for you?	Almost always untrue	Usually untrue	Sometimes true, sometimes untrue	Usually true	Almost always true
1) It is easy for me to really concentrate on homework problems.	1	2	3	4	5
2) I feel pretty happy most of the day.	1	2	3	4	5
3) I think it would be exciting to move to a new city.	1	2	3	4	5
4) I like to feel a warm breeze blowing on my face.	1	2	3	4	5
5) If I'm mad at somebody, I tend to say things that I know will hurt their feelings.	1	2	3	4	5
6) I notice even little changes taking place around me, like lights getting brighter in a room.	1	2	3	4	5
7) I have a hard time finishing things on time.	1	2	3	4	5
8) I feel shy with kids of the opposite sex.	1	2	3	4	5
9) When I am angry, I throw or break things.	1	2	3	4	5
10) It's hard for me not to open presents before I'm supposed to.	1	2	3	4	5
11) My friends seem to enjoy themselves more than I do.	1	2	3	4	5
12) I tend to notice little changes that other people do not notice.	1	2	3	4	5
13) If I get really mad at someone, I might hit them.	1	2	3	4	5
14) When someone tells me to stop doing something, it is easy for me to stop.	1	2	3	4	5
15) I feel shy about meeting new people.	1	2	3	4	5
16) I enjoy listening to the birds sing.	1	2	3	4	5
17) I want to be able to share my private thoughts with someone else.	1	2	3	4	5
18) I do something fun for a while before starting my homework, even when I'm not supposed to.	1	2	3	4	5
19) I wouldn't like living in a really big city, even if it was safe.	1	2	3	4	5
20) It often takes very little to make me feel like crying.	1	2	3	4	5
21) I am very aware of noises.	1	2	3	4	5
22) I tend to be rude to people I don't like.	1	2	3	4	5
23) I like to look at the pattern of clouds in the sky.	1	2	3	4	5
24) I can tell if another person is angry by their expression.	1	2	3	4	5
25) It bothers me when I try to make a phone call and the line is busy.	1	2	3	4	5
26) The more I try to stop myself from doing something I shouldn't, the more likely I am to do it.	1	2	3	4	5
27) I enjoy exchanging hugs with people I like.	1	2	3	4	5
28) Skiing fast down a steep slope sounds scary to me.	1	2	3	4	5
29) I get sad more than other people realize.	1	2	3	4	5
30) If I have a hard assignment to do, I get started right away.	1	2	3	4	5
31) I will do most anything to help someone I care about.	1	2	3	4	5
32) I get frightened riding with a person who likes to speed.	1	2	3	4	5

33) I like to look at trees and walk amongst them.	1	2	3	4	5
34) I find it hard to shift gears when I go from one class to another at school.	1	2	3	4	5
35) I worry about my family when I'm not with them.	1	2	3	4	5
36) I get very upset if I want to do something and my parents won't let me.	1	2	3	4	5
37) I get sad when a lot of things are going wrong.	1	2	3	4	5
38) When trying to study, I have difficulty tuning out background noise and concentrating.	1	2	3	4	5
39) I finish my homework before the due date.	1	2	3	4	5
40) I worry about getting into trouble.	1	2	3	4	5
41) I am good at keeping track of several different things that are happening around me.	1	2	3	4	5
42) I would not be afraid to try a risky sport, like deep-sea diving.	1	2	3	4	5
43) It's easy for me to keep a secret.	1	2	3	4	5
44) It is important to me to have close relationships with other people.	1	2	3	4	5
45) I am shy.	1	2	3	4	5
46) I am nervous of some of the kids at school who push people into lockers and throw your books around.	1	2	3	4	5
47) I get irritated when I have to stop doing something that I am enjoying.	1	2	3	4	5
48) I wouldn't be afraid to try something like mountain climbing.	1	2	3	4	5
49) I put off working on projects until right before they're due.	1	2	3	4	5
50) When I'm really mad at a friend, I tend to explode at them.	1	2	3	4	5
51) I worry about my parent(s) dying or leaving me.	1	2	3	4	5
52) I enjoy going places where there are big crowds and lots of excitement.	1	2	3	4	5
53) I am not shy.	1	2	3	4	5
54) I am quite a warm and friendly person.	1	2	3	4	5
55) I feel sad even when I should be enjoying myself, like at Christmas or on a trip.	1	2	3	4	5
56) It really annoys me to wait in long lines.	1	2	3	4	5
57) I feel scared when I enter a darkened room at home.	1	2	3	4	5
58) I pick on people for no real reason.	1	2	3	4	5
59) I pay close attention when someone tells me how to do something.	1	2	3	4	5
60) I get very frustrated when I make a mistake in my school work.	1	2	3	4	5
61) I tend to get in the middle of one thing, then go off and do something else.	1	2	3	4	5
62) It frustrates me if people interrupt me when I'm talking.	1	2	3	4	5
63) I can stick with my plans and goals.	1	2	3	4	5
64) I get upset if I'm not able to do a task really well.	1	2	3	4	5
65) I like the crunching sound of autumn leaves.	1	2	3	4	5

Sl. No.	Age (Years)	Age Group	Gender	Religion	Fathers Education	Fathers Occupation	Mothers Education	Mothers Occupation	Social Economic Status	Type Of Family	Single Parent	Stressor	Any Previous Attempts	Number of Previous Attempts	Method Used	Number of Family Members	Temperament	Personality Style	Family History	Birth History	Developmental History	Diagnoses	Treatment	Class	Education	State	Board	A-COPE: Verbalized Feelings Subscale Value	A-COPE: Seeking Distraction Subscale Value	A-COPE: Problem Solving Subscale Value	A-COPE: Developing Social Support Subscale Score	A-COPE: Avoiding Problems Subscale Score	A-COPE: Accepting Responsibility Subscale Score	A-COPE: Improving by Close Friends Subscale Score	A-COPE: Seeking Emotional Support Subscale Score	A-COPE: Denial/Denializing Subscale Score	A-COPE: Inaction/Inactivity Subscale Score	A-COPE: Blaming Subscale Score	EATQ: Academic Control Subscale Score	EATQ: Affiliation Subscale Score	EATQ: Aggression Subscale Score	EATQ: Attention Subscale Score	EATQ: Dependency Subscale Score	EATQ: Four Subscale Score	EATQ: Frustration Subscale Score	EATQ: Inhibitory Control Subscale Score	EATQ: Physical Activity Subscale Score	EATQ: Perceptual Sensitivity Subscale Score	EATQ: Shyness Subscale Score	EATQ: Secondary Subscale Score
37	17	14-17 Years	Female	Hindu	High School	Business	Middle School	Housewife	Upper	Nuclear	No	IPR Issues With Family Member	No	Nil	Poisoning	5	Slow To Warm Up	Authoritarian	None	NFTVD	Nil Significant	Adjustment Reaction With DSH Attempt	NI	12th	Intermediate	State	3.00	2.63	2.50	2.83	3.33	3.00	1.67	2.00	1.00	2.75	2.00	3.00	3.40	3.33	3.33	3.67	4.00	2.80	3.40	3.25	3.00	3.75	2.50	
38	17	14-17 Years	Male	Hindu	Bachelors	Contractor	High School	Housewife	Upper	Nuclear	No	Changed School/Boarding	No	Nil	Poisoning	4	Slow To Warm Up	Authoritarian	None	NFTVD	Nil Significant	Adjustment Reaction With DSH Attempt	NI	11th	Intermediate	CBSL	3.83	2.63	2.83	2.67	3.33	4.00	1.67	2.00	1.00	3.25	2.50	2.50	3.40	3.40	4.17	3.33	3.83	3.29	4.20	3.20	4.75	4.75	1.17	
39	16	14-17 Years	Female	Muslim	High School	Shopkeeper	Middle School	Housewife	Upper Middle	Nuclear	No	IPR Issues With Family Member	No	Nil	Hanging	5	Slow To Warm Up	Authoritarian	None	NFTVD	Nil Significant	Impulsive DSH Attempt	NI	10th	High School	State	2.83	2.50	2.33	2.67	1.83	3.80	1.67	3.00	2.50	1.50	1.50	3.00	2.60	3.40	3.17	2.33	4.50	3.67	3.57	2.40	2.00	2.75	3.00	2.67
40	16	14-17 Years	Female	Hindu	High School	Driver	High School	Housewife	Upper Middle	Nuclear	No	Academic Stress/Exam Result	No	Nil	Cutting	4	Slow To Warm Up	Authoritarian	None	NFTVD	Nil Significant	Acute Stress Reaction With DSH Attempt	NI	10th	High School	CBSL	2.17	3.00	2.17	1.67	2.33	2.80	1.33	2.00	1.00	1.25	2.50	3.40	3.20	1.50	3.33	4.00	3.67	3.00	3.60	2.00	3.50	3.75	2.50	