



## Creating a Training Package to Reduce Self-Injurious Behaviors, Based on the Lived Experiences of Teenagers Suffering From Self-Injurious Behaviors

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**Abstract:** The present study aimed to develop and validate an educational program designed to reduce self-injurious behavior (SIB) among adolescents. This program was developed based on the real-life experiences of adolescents who engage in self-harming behaviors. Employing a qualitative research approach, specifically the phenomenological method, the study encompassed all adolescents displaying self-harming behaviors in Shiraz city. The sampling process was deliberate, with the sample size determined by reaching a point of theoretical saturation. Ultimately, the perspectives of 15 adolescents (comprising 8 girls and 7 boys) were actively incorporated into the development of this educational and therapeutic package. This process involved the formulation of a model based on their lived experiences, which consisted of three core themes and 13 sub-themes. The end result was an educational-therapeutic package specifically designed to mitigate self-harming behaviors. The content validity of this educational-therapeutic package was assessed and confirmed using the content validity (Lawshe method). Importantly, this package holds significant potential for use in implementing educational and therapeutic interventions aimed at addressing self-harming behaviors among adolescents. These interventions can be effectively delivered within the context of schools, counseling centers, and educational institutions.

**Keywords:** Educational package, lived experiences, reducing self-harming behaviors, validation, teenagers

### Introduction

Adolescence is one of the crucial transitions during human development, where biological, psychological, and social forces influence adolescent growth. These internal pressures, coupled with societal expectations, may lead to moments of confusion, self-doubt, and despair in all adolescents (Habibi et al., 2013). Some adolescents successfully navigate this stage with the support of their parents and the maintenance of family cohesion, while others who lack appropriate social support within their family or face punitive reactions, such as placement in correctional facilities, may have their interactions and future prospects affected (Nooripour et al., 2020).

On the other hand, a part of the adolescent developmental process may involve self-injurious behaviors, manifesting as unhealthy sexual behaviors and the use of alcohol, cigarettes, and other substances (Mughal et al., 2019). Self-injury is defined as deliberate acts that cause harm to the body's tissues, encompassing self-mutilation and various forms of indirect self-harm. Self-injury exists among adolescents of all cultures (Peh et al., 2017). Self-injury behavior is an inappropriate coping mechanism for emotional problems, stress, anger, and perceived failure. While it may initially provide relief from

tension and a sense of calm, it often leads to feelings of guilt, shame, and a resurgence of negative emotions. Self-injury is mostly impulsive and may result from various mental health issues, such as depression, eating disorders, and borderline personality disorder. Self-injury and substance abuse are among the prevalent social-psychological problems during adolescence ([Blasczyk-Schiep et al., 2018](#)). In recent years, due to the increased prevalence of such behaviors and the growth in research dedicated to this issue, a diagnostic category called Non-Suicidal Self-Injury (NSSI) has been proposed in the diagnostic and statistical manuals of mental disorders ([Walsh, 2012](#)). The rate of self-injurious thoughts and behaviors significantly increases during the transition to adolescence. Therefore, adolescents are more exposed to self-injury than other age groups, and these behaviors have become more prevalent in recent decades ([Selby et al., 2014](#); [Vafaei et al., 2023](#)).

From the viewpoint of psychoanalysis, self-injurious behavior can be regarded as a response to the expectations of the "superego," a component of an individual's psyche that pursues gratification. When the superego's demands place pressure on an individual and are met with resistance from the "ego," which encompasses influences such as parents and societal norms, anxiety arises. To alleviate this anxiety, the rational aspect of the personality, the "self," employs defense mechanisms. Self-harm may be interpreted as one of these defense mechanisms used to mitigate anxiety ([Cesar Riani Costa et al., 2021](#)). From a biological perspective, it has been shown that self-injury prompts the brain to release pain-relieving and pleasure-inducing neurotransmitters like serotonin, similar to mood-altering substances. This behavior helps individuals manage their emotions and diverts their minds from social pressures. This act serves as a negative emotional regulation strategy to cope with distressing thoughts and emotions ([Kayani, 2019](#)). Research has been conducted in this field, aiming to reduce self-injury behaviors in the target community through educational and intervention methods. Studies by [Hoseinien et al. \(2020\)](#), [Vafaei et al. \(2023\)](#), [Hashemi et al. \(2019\)](#), [Damavandian et al. \(2022\)](#), [Robinson et al. \(2019\)](#), and [Holden et al. \(2021\)](#) are some examples.

The outcomes of these research initiatives can offer a distinct and pragmatic perspective for counselors and psychotherapists. Moreover, these discoveries can establish a suitable theoretical and practical foundation for enhancing psychological well-being among students in diverse educational and therapeutic settings, including university counseling centers and clinics. Hence, it is imperative to investigate the lived experiences of adolescents engaging in self-injury behaviors and evaluate interventions rooted in these experiences.

## **Material and Methods**

The present study is qualitative in nature and utilizes a phenomenological approach for its execution. This research aims to identify reality through the experiential research tradition and phenomenological methodology, presenting it in a way that resonates with the participants. In phenomenological research, instead of using data to test hypotheses (as done in quantitative research), verbal reports of individuals about their experiences are used as data. After collecting the participants' opinions through semi-structured interviews, an instructional package was prepared and validated using credible sources in the field of self-injury behaviors. The target population for this research consisted of all adolescents with self-injury behaviors in Shiraz city (Iran). The sampling method was purposeful, and the sample size was determined based on theoretical saturation. Eventually, the opinions of 15 adolescents (8 girls and 7 boys) were included as participants in developing the instructional package. In qualitative research, inclusion and exclusion criteria of participants are of utmost importance. In this study, these criteria were as follows:

### **Inclusion Criteria:**

1. Willing and informed consent to participate in the research.
2. Age range of 12-20 years.
3. Having self-injury behaviors.
4. No participation in counseling sessions in the last 6 months.

### **Exclusion Criteria:**

1. Engaging in any physically violent behavior.
2. Adolescents addicted to drugs.
3. Lack of confidentiality.
4. Having specific physical or psychological problems.

**Data Collection Method and Tools:** Data collection in this study was conducted through semi-structured interviews. A checklist of interview topics was provided to the interviewer to ensure the interview process was controlled. The interviews lasted between 90 to 120 minutes, and conversations were recorded using an audio recording device and transcribed verbatim. Before commencing the interviews, participants were given comprehensive explanations about the term "self-injury behavior." The interview questions were formulated after reviewing written texts and consulting with expert psychology and counseling professors (table 1).

**Table 1.** Semi-structured interview questions

Item	Question
1	What individual (personal) factors contributed to the emergence of self-harming behavior in you?
2	What factors within the family could cause self-harming behavior in you?
3	What factors within the society were able to form self-harming behaviors in you?
4	What was your best source of comfort when self-harming behaviors occurred?
5	At the time of self-harming behaviors, what was your feeling about the situation after these behaviors?
6	What factors aggravated your self-harming behaviors?
7	What is the best factor for going out when these behaviors occur?
8	How did you feel after the self-injurious behaviors ended?
9	After the self-injurious behaviors ended, how were your behaviors with the people around you?
10	After the self-injurious behaviors ended, did you make a decision to prevent these behaviors in the future?
11	All teenagers your age may be at risk of developing such behaviors. What is your advice to them?

### Ethical Considerations

1. Obtaining informed consent from the participants who took part in the research and ensuring that they can withdraw from the study at any stage.
2. All individuals participating in the research have the right to choose a pseudonym to protect their identities.
3. Ensuring that the information obtained from participants remains confidential and is not disclosed.
4. The researcher treats every individual involved in the research with ethical respect and avoids discrimination.

**Data Analysis:** First, the interviews were transcribed, and data coding and analysis were carried out using the Grounded Theory approach. The data analysis method was based on the proposed "Glaser" model, which consists of seven stages: reviewing all information, extracting important sentences, formulating meanings, placing formulated meanings into categories, and shaping themes within different categories, creating a brief narrative description, returning to verify and determine the credibility and confirmability ([Fassinger, 2005](#)). After categorizing the codes and merging codes related to specific formulated concepts into thematic subcategories, an attempt was made to classify all categorized concepts based on the goal of this phase of the research. Furthermore, efforts were made to consider four criteria for assessing qualitative data and its analysis: credibility, dependability, transferability, and confirmability. In this phase of the research, researchers tried to avoid any form of bias during the data collection process. To enhance the credibility of the data, after categorizing the data, researchers revisited each participant to verify their understanding of the content. Any potential ambiguous content was reviewed and clarified, thus obtaining the participants' confirmation and validation.

## Results

Participants in the research were adolescents who had engaged in self-injury behaviors during their adolescent period. They participated in the research with an average age of 14.56 years, and none of them had participated in counseling or psychotherapy sessions. In the current study, the findings were divided into three main sections: 1) extraction of a conceptual model of adolescents' lived experiences with self-injury behaviors, 2) development of an educational-therapeutic package for self-injury behaviors, and 3) validation of the educational package for self-injury behaviors.

### 1) Extraction the Conceptual Model of Adolescents' Lived Experiences with Self-injury Behaviors

The responses of the participants in the research were analyzed based on 11 interview questions using the Grounded Theory method. According to the stages present in this method, initial codes (meaning units), main themes (themes), and sub-themes (categories) were extracted. In the first step, interview sentences and the extraction of initial codes are presented in Table 2. It is worth mentioning that some participants did not answer certain interview questions or provided repetitive answers (similar to other participants), which were removed to avoid redundancy in the discussion. In Table 2, the interview sentences are transformed from colloquial language into meaningful and research units. The column "Repetition Frequency" indicates sentences that were similar or repeated verbatim by the participants. Based on the 15 interviews conducted, a total of 72 initial codes were extracted from 35 non-repetitive interview sentences.

**Table 2.** Extraction of initial codes from raw interview sentences

No.	The raw sentences of the interviews	Frequency	Initial codes
1	My father is stubborn and single-minded, if he wants to go on a trip, he will kill everyone.	6	Stubborn father
2	My father was very skeptical and bigoted, and I thought that in prison, when I was a child, I fell to the ground, I didn't tell my father at all, he would come back and fight with me.	5	Father's skepticism Father's bigotry
3	My mom and dad's relationship is good, but my mom is very nervous, she makes us nervous and gets angry over very small things.	6	Mother's nervousness
4	My parents did not have a very good relationship with each other, but my mother is silent in front of my father, who is very forceful and afraid of a fight.	2	Father's bullying Cowardly mother Mother's silence
5	Every time my parents would fight, something terrible would happen, for example, my mother's eyes would turn black and my mother's nose would break.	4	Mother beaten by father Physical injuries of the mother
6	My father's name was bad because he makes a lot of noise and shouts and is a quarrelsome person.	3	father's infamy Being a quarrelsome father
7	90% of my father is to blame because he restricts me a lot, he is very religious	12	Unreasonable restrictions on the part of religious families
8	My parents play a big role in my behavior, they put so much pressure on me that I am upset with them. Every night before going to sleep, I must cry first to calm down and then self-mutilate so that I can sleep easily.	4	Unreasonable and psychological pressure of the family Feeling good sleep after crying and self-harm
9	The relationship between my parents and family members was good during my early childhood, but later they had a lot of conflicts, and then they separated for three years, but they reconciled again, there were always a lot of arguments.	4	Parental conflict Separation of parents A lot of debate in the family environment

10	I don't like to do without deciding and without a plan. The work without the program makes me nervous. Also, the lack of proper app	6	Being unplanned Difficulty in making decisions Not having the right program
11	I smoke and once hit my vein, the family is not aware of my work. I will calm down with these things.	5	The pleasure of smoking Desire to commit suicide The pleasurable nature of secret behaviors
12	From the stubbornness, I also preferred to hit my hand, but not for the sake of suicide for more stubbornness.	3	A sense of revenge on others Stubbornness
13	I could get in touch with others very soon, but I was a little jealous and I was very evil and devil. I had many friends who came but went early.	4	Fast relationship Jealousy of others Mischievous and hyperactivity Failure to maintain a relationship
14	I get angry and run up and I might be a woman and smoking more.	8	aggression Nervous smoking (not just for pleasure) nervous self-mutilation
15	When I was hurting my hand, I was feeling bad at that moment and I had a lot of pills in the water.	2	Taking too many pills (with the intention of committing suicide)
16	I was drunk down the top of my mountain, though my stuck was stuck on the other hand and I was injured and broke.	5	Consumption of alcoholic beverages Jumping from a height
17	I was fighting with my boyfriend because of my dad's and my mom's hard work, I told my boyfriend to disrupt our relationship, but it didn't.	2	Disruption of the relationship between the sexes Strong need to establish a relationship with the opposite sex Inability to leave a relationship with the opposite sex
18	Sometimes we go to the shops and the seller's head with one or two of the kids and get the food and the things needed.	6	Failure to meet needs Committing theft in order to meet needs
19	I want to find a friend, but because of my parents' many fights, no one was staying and everyone was going to decide to be alone.	7	Loneliness Need a friend and talk
20	When I have stress and anxiety, I hit my head or hand my head.	4	Stress anxiety
21	In the anxiety, I blade more to myself. I feel relaxed.	9	Splinter yourself with the aim of achieving peace
22	I was razoring my hand and hurting myself, then it is time to reach the boundary of madness and I can't control myself. If I have cigarettes, I would go to the bathroom and smoke if not.	1	Inability to deal with bitter life events
23	I had to go back by my parents.	2	Not tolerating other people's pressure
24	My cousin also caused me a lot of emotional damage. He told me that I couldn't see you too much and I see you as a commute.	2	Emotional injuries A lot of interest in the opposite sex Rejection
25	One hundred percent of my parents played a role in my problem because they never let me love, and I was always alone.	2	Blaming others for loneliness Blaming others for personal problems
26	Yes, the community had an impact and made my religious parents more difficult to me.	3	Negative influence of society on religious parents
27	My grandmother's house we lived, I didn't know what to do, I was going to the boy I loved in a supermarket shop, but she was bigger than me.	5	Large families Closed society
28	Because I am very judged.	12	Irrational judgments of society
29	One hundred percent of the laws, the community, and the school have played a role in creating my problem that I can't be free or wearing a hat I can't have my favorite type because the agent takes me.	1	The cumbersome rules of society Improper school rules Community restrictions in determining the shape of clothing

			Gender restrictions and inequalities in society
30	I decide to never repeat this behavior again because I always feel ashamed and I am always afraid of being ashamed.	5	Do not repeat the behavior to prevent damage to the family feeling ashamed Fear of embarrassment
31	I also blame the school because when the teachers wanted my dad, my dad was ahead and they ate my pride	8	Breaking pride by others School of School Inspections
32	In relation to the opposite sex, it was more in cyberspace, my grandmother's home I met a boy.	9	Cyberspace Communication
33	My friends are also to blame because if the mindset of the generation was the generation of my friends, some of them would not have freedom and some have freedom and their thinking is different.	2	The difference in the way others think Cultural and generational problems Absence of social freedoms
34	In our country Iran is limited to coverage and religion and these issues are not right.	2	Non -choice in the community Religious -Social Restrictions
35	After doing these behaviors, I was strongly blamed myself and decided to never repeat it again. I also feel bad from the confrontation of others	4	Auspicious Blame others after the behavior
<b>Total</b>	<b>35 sentences interview (excluding repetitive sentences)</b>	<b>165 sentences (including repetitive sentences)</b>	<b>72 initial codes</b>

In the second step, the initial codes were categorized into sub-themes based on a review of documented sources related to self-injury behaviors. Finally, they were classified into main themes. Table 3 illustrates the extraction and relationship between initial codes, sub-themes, and main themes.

**Table 3.** Extraction and relationship between initial codes, sub-themes, and main themes

Initial codes (semantic unit)	Sub-themes (category)	Main themes
Stubborn father Father's bullying Mother's silence Mother beaten by father Physical injuries of the mother Being a quarrelsome father Parental conflict A lot of discussion in the family environment Blaming others for loneliness Blaming others for personal problems Breaking pride by others	Behavioral problems of others	Contextual factors
Father's skepticism Father's bigotry Mother's nervousness Cowardly mother Unreasonable and psychological pressure of the family	Other people's mental problems	
The pleasure of smoking Desire to commit suicide The pleasurable of secret behaviors A sense of revenge on others Stubbornness Fast relationship Jealousy of others	Psychological problems (intrapersonal)	

Mischief and hyperactivity Failure to maintain a relationship aggression Nervous smoking (not just for pleasure) Strong need to establish a relationship with the opposite sex Loneliness Need a friend and talk Inability to deal with bitter life events Not tolerating other people's pressure Emotional injuries A lot of interest in the opposite sex		
Negative influence of society on religious parents Religious-social restrictions Unreasonable restrictions on the part of religious families	Religious-social problems	
father's infamy Separation of parents Large families Closed community Random judgments of society The cumbersome rules of society Improper school rules Community restrictions in determining the shape of clothing Gender restrictions and inequalities in society School inquiries Cyber space communication Differences in the way of thinking of others Cultural and generational problems Lack of social freedoms Lack of choice in society	Cultural-social problems	
nervous self-mutilation	Inability to control oneself	
Consumption of alcoholic beverages		
Jumping from a height		
Disruption of the relationship between the sexes Inability to leave a relationship with the opposite sex Failure to meet needs Rejection	No reliable source	
Taking too many pills (with the intention of committing suicide) Committing theft in order to meet needs	Inability to deal with environmental factors	Processing factors
Feeling good sleep after crying and self-harm Stress anxiety Splinter yourself with the aim of achieving peace	Stress and anxiety	
Difficulty in making decisions Do not repeat the behavior to prevent damage to the family	Decision making	
Reprimand after the behavior occurs Blame others	to blame	Output factors
feeling ashamed Fear of embarrassment	feeling ashamed	
Being unplanned Not having the right plan	Unplanned	

In the step 3, a visual model of the lived experiences of self-injury behaviors in adolescents was presented (Figure 1).

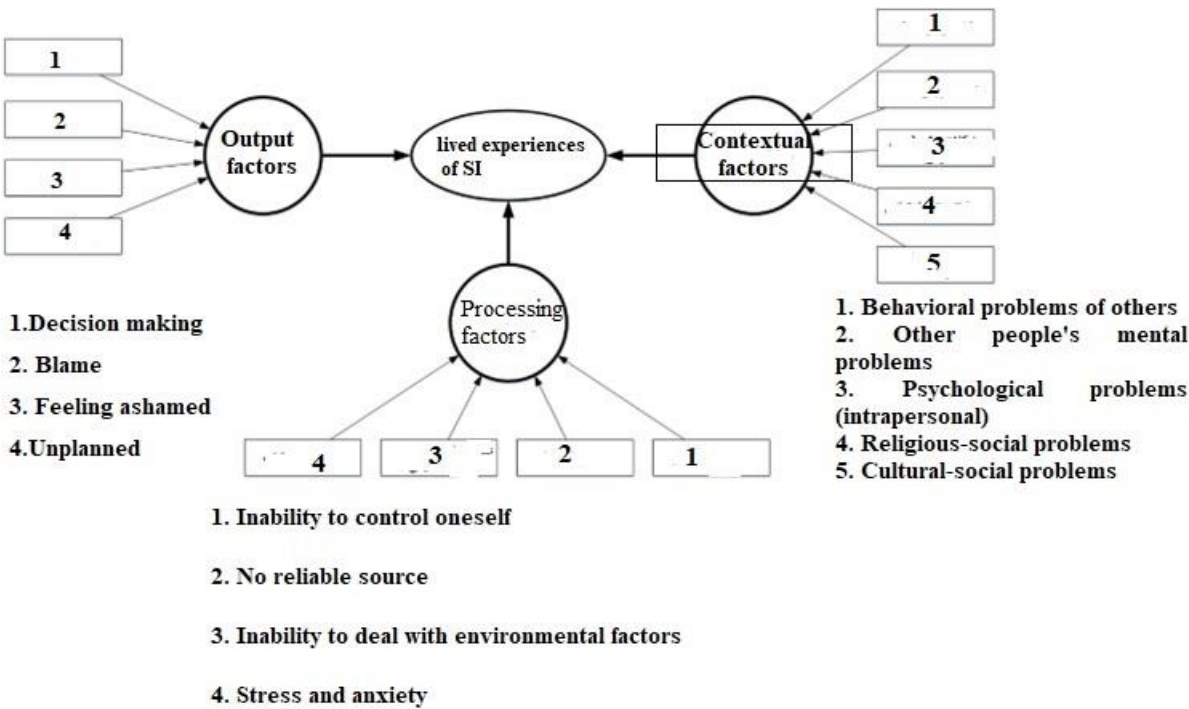


Figure 1. The conceptual model.

## 2) Development of the educational-therapeutic package for self-injury behaviors

Initially, the intervention and educational-therapeutic sessions were divided into four main sections (based on the main themes of the lived experience model). The first section was dedicated to introducing the new therapeutic method and the therapist-patient relationship. Additionally, the second section focused on the main theme of background factors, the third section on the main theme of process factors, and the fourth section on the main theme of outcome factors. One session was allocated to the first section, and for the other three sections, each consisted of three sessions. In total, 10 sessions of 90 minutes each were designed for the implementation of this intervention plan. Subsequently, using face-to-face discussions with counselors, psychologists, and university professors and benefiting from their valuable experiences in the field of self-harming behaviors, along with reviewing relevant research and documented texts, the conceptual model created in the previous section was transformed into the intervention content modules. Table 4 provides a description of the sessions based on the lived experiences model of self-injury behaviors in adolescents.

**Table 4.** Description of intervention sessions based on the lived experiences of self-harming behaviors in adolescents' model

Session	Content
1	Introducing the current treatment method - how the therapist and the treated person interact - providing a description of the sessions and stating the possible results as a result of the implementation of the current protocol
2	Teaching how to analyze and deal with psychological and behavioral issues of others - Teaching logical analysis in life issues - Teaching empathy and sharing personal emotions
3	Teaching how to identify mental (internal) problems, how they affect external behaviors, and how to solve them
4	Teaching how to deal with issues and problems related to society; How to correctly process religious and cultural issues
5	Learning self-control strategies and accessing reliable internal resources; Achieving a state of emotional stability that accepts the least negative impact in developmental, emotional and environmental changes
6	Teaching strategies to control stress and anxiety in painful life issues (1); Showing the negative consequences of stress and anxiety in relation to people around and important life plans
7	Teaching strategies to control stress and anxiety in painful life issues (2); Showing the positive consequences of controlling stress and anxiety in relation to the people around you and important life plans
8	Teaching strategies for making the right decision; Identifying the existing solutions, scientifically and accurately examining the solutions, adopting a definite path and in sync with the psychological and social issues of the individual.
9	Learning to accept the difficult conditions of life and avoid useless blame - turning the feeling of shame into a feeling of dynamism in the way of making up for past mistakes
10	Teaching correct planning to compensate for past mistakes - summarizing the intervention sessions - expressing the feelings of the participating members about the efficiency and effectiveness of the sessions - expressing the possible decisions of the members about not repeating self-harming behaviors in the future

### 3) Validation of the Educational Package for Self-Harming Behaviors

After the initial design of the sessions to determine the content validity of the educational-therapeutic package, the opinions of seven doctoral experts in psychology and counseling were sought. Content Validity Ratio (CVR) method was used to determine content validity. The CVR validity assessment is performed by having each expert classify each question or session into one of three categories: "necessary to hold this session," "useful to hold this session but not necessary," and "this session is not necessary." Table 5 displays the content validity assessment indices for the intervention sessions.

**Table 5.** Content validity assessment of intervention sessions

Session	1	2	3	4	5	6	7	8	9	10
Validity (CVR)	1	0.71	1	0.71	0.71	1	0.71	0.71	1	1

Considering the table 5, the content validity is found to be at an acceptable level, and the use of this educational package is not only unobstructed but also recommended from the perspective of psychology and counseling experts.

### Discussion

Despite the importance of treating self-harming behaviors, limited interventions have been examined in this area ([Gratz & Tull, 2011](#)). Group therapy combined with emotional regulation, guided Cognitive-Behavioral Therapy (CBT) ([Slee et al., 2008](#)), Dialectical Behavior Therapy, and Aversion therapy are empirically supported treatments for reducing self-harming behaviors ([Andover et al., 2017](#)). However, none of the mentioned treatment methods have been tailored to the existing reality and lived experiences

of the target group (adolescents). Therefore, the present educational-therapeutic protocol can have favorable effects on reducing self-harming behaviors. Since the structure of the present educational-therapeutic protocol was based on 13 subthemes (present in the conceptual model of lived experiences), the discussion about the most crucial and essential ones is necessary.

As indicated in the findings section, teaching empathy and sharing personal emotions were emphasized in therapy sessions for adolescents as a central and key element. Empathy, as an interpersonal skill, refers to a person's ability to identify and respond to others' mental states ([Shirmohammadi et al., 2021](#)). In other words, empathy is the fundamental capacity of individuals in regulating relationships, supporting collaborative activities, promoting group cohesion, and motivating social behaviors and actions that enhance group coherence ([Rieffe et al., 2010](#)). Empathy allows individuals to establish effective contact with the social environment, facilitate assistance to others, and prevent harm to individuals ([Baron-Cohen & Wheelwright, 2004](#)). Health professionals refer to empathy as health outcomes ([Hurter et al., 2014](#)). Among them, perceived empathy is considered a key multidimensional element in the biopsychosocial primary care model ([Nambisan, 2011](#)), playing a significant role in improving individuals' well-being and health ([Rakel et al., 2009](#)).

Self-control strategies were introduced as another central and pivotal factor in therapy sessions. Self-control, as the ability to suppress or modify internal responses to effectively eliminate behavioral tendencies (e.g., reactions) and refrain from acting on them, is defined. Self-control skills reflect self-growth. To control one's behavior, an individual must understand that they are the agent of their actions and recognize that behavior and its consequences result from an act they can control to some extent ([Beran, 2018](#)). Individuals with higher self-control tend to focus more on positive achievements in life, have behavior-oriented approaches, and focus less on avoidance, perform better in challenging situations, seek solutions to their problems in difficult times, and face fewer challenges, resulting in less pressure ([Shirmohammadi et al., 2021](#)).

Teaching anxiety control was another essential component discussed in therapy sessions. Anxiety disorder is one of the disorders that psychologists are fully aware of and can easily diagnose and treat. A person with anxiety may experience intense anxiety and worry even in normal conditions. Some symptoms of this disorder include difficulty concentrating, restlessness, irritability, feeling sick and experiencing bodily sensations like palpitations throughout the body, and rapid heartbeat. If left untreated, this anxiety can lead to devastating heart attacks. This disorder can be similar to panic disorder because both do not require a specific environmental factor. Stress is not like stress; it can be a specific and limited factor, and a clearer approach can be taken to eliminate it. In the difference between stress and anxiety, [Hurley \(2019\)](#) has stated that stress is the body's response to a stimulus and is usually a

short-term experience, while anxiety is a stable mental health disorder that can be caused by stress and can negatively affect social, occupational, and other areas of functioning.

Considering the discussions about central factors, the present therapeutic protocol can be used as an intervention program to reduce self-harming behaviors among adolescents and other age groups. It is recommended to use this intervention method for group and individual therapies and assess its effectiveness on homogeneous variables under study.

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