Trait Emotional Intelligence, Social Desirability and Non-Suicidal Self-harm Behavior among Adolescents: A Cross-Sectional Study

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Abstract

Non-suicidal self-injury (NSSI) is the intentional and acute harm done to one's body without the intention of committing suicide. Suicidal behavior (SB) and non-suicidal self-injury (NSSI) are the two primary health issues affecting teenagers. Despite increasing attention to such issues, very little work is done regarding these issues in Pakistan. The objective of this research was to determine the incidence of non-suicidal self-harm in adolescents and to find an association between non-suicidal self-injury and traits of emotional intelligence and social desirability in Pakistani adolescents who made up a typical sample of the general community. For this purpose, 195 participants were selected from different hospitals and areas of Islamabad and Rawalpindi. The non-suicidal self-injury student questionnaire, the trait emotional intelligence questionnaire (TEIQue-SF), and the social desirability scale (SDS-17) were used to collect data. According to the findings, people who were more socially desirable and have lower emotional intelligence traits were more likely to engage in NSSI. The results of this research provide insight into the intricate interactions among these factors and how they affect NSSI. Mental health practitioners can improve their capacity to recognize and assist people who are experiencing NSSI, thereby, supporting their well-being and recovery, by developing a deeper understanding of these aspects.

Keywords: Non-Suicidal Self-injury, Social Desirability, Trait Emotional Intelligence

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Introduction

Non-suicidal self-injury (NSSI) is the term for intentionally harming oneself without intending to end one's life. According to Nock (2010), the behavior is prompted by emotional distress, the urge to control strong emotions, or as a coping mechanism for a variety of psychological issues. Self-harming is often done for various reasons, such as coping with emotional suffering, expressing anguish or getting attention, and self-punishment or self-purification (Nesi et al., 2020). NSSI frequently takes the form of cutting, burning, or striking oneself. People who participate in such behaviors expressed feeling relieved, in control, or temporarily distracted from emotional suffering (Klonsky, 2011).

However, there has not been much research done on the prevalence of non-suicidal self-injury in Pakistan. NSSI is, however, not unusual among several demographics in the nation, according to the studies that are now accessible. It was discovered that NSSI was common among Pakistani university students, with about 17% of those students reporting engaging in self-injurious behaviors (Khan et al., 2019). Around 10% of the participants in another study that was specifically focused on teenagers reported using NSSI (Ahmed et al., 2022). This

research shows that NSSI is a problem for young people in Pakistan.

Additionally, trait emotional intelligence (EI) is a complex concept that refers to the capacity to recognize, comprehend, and effectively control one's emotions. The importance of trait EI in several domains of psychological well-being and maladaptive behaviors has been recognized in prior research. Studies have shown that those with lower trait EI are more likely to engage in self-destructive behaviors, such as NSSI (Wollny et al., 2019). On the contrary, studies have shown that people with higher trait EI typically exhibit better emotional regulation skills, problem-solving abilities, and interpersonal relationships. However, the association between trait EI and NSSI, specifically among Pakistani teenagers, has only been the subject of a small amount of research.

Another significant aspect that may affect NSSI behaviors is social desirability. The term "social desirability" describes people's propensity to report their genuine thoughts or behaviors rather than acting in a way they believe is socially acceptable. Due to the nature of their self-injurious behaviors, adolescents who are experiencing NSSI may feel stigmatized or ashamed, which causes them to have more social desirability worries. According to research, those who score highly on social desirability are more inclined to practice impression management and hide their genuine emotions or actions (Andersen, 2019). To address the potential influence of social norms and cultural factors on self-injurious behaviors, it is essential to comprehend the role of social desirability in NSSI among Pakistani adolescents.

Hence, this study was proposed to find out more about these aspects in the context of Pakistan as it can help us understand the particular cultural, social, and psychological elements that have an impact on NSSI behaviors in this population. Also, by studying the link between trait emotional intelligence, social desirability, and NSSI among teenagers in Pakistan, this study seeks to close the existing gap in the literature. Therefore, the objective of this study was to determine the influence of trait emotional intelligence and social desirability on non-suicidal self-injury among teenagers in Pakistan.

The results of this study will add to the body of knowledge already available on NSSI and have the potential to help educators, policymakers, and mental health professionals create effective prevention and intervention programs that are specifically suited to the needs of Pakistani adolescent populations. This will also help to lessen the prevalence and effects of NSSI in this population.

Method

Research Design

A quantitative research approach and non-experimental research design were used to gather information about various variables. The study was conducted in different hospitals and universities in Islamabad and Rawalpindi from February 2023 to June 2023.

Participants

The participants of the study comprised 195 unmarried young adolescents (18-23) who have done self-harm in the past year. The participants were selected using a purposive sampling technique and made sure not to include the ones suffering from any physical or mental disability.

Instruments

The following instruments were used for data gathering.

Demographic Form

A demographic form was utilized to study the participant's demographic data, which then assisted with the analysis. Name, age, gender, and basic university details were taken through this form.

Non-Suicidal Self-Injury (NSSI) Student Questionnaire (NSSI-SQ)

The NSSI Student Questionnaire was adapted from The Cornell Research Program on Self-Injury. It was developed by Whitlock et al. (2014). It consists of questions that gather data on the occurrence, seriousness, and characteristics of self-destructive behaviors. It consists of six items, with subsets of questions for each item. This questionnaire evaluates the intent, justification, timing, and likelihood of future attempts at self-harm (Klonsky, 2011). The reliability of this scale was reported to be 0.85.

Trait Emotional Intelligence Questionnaire-Short Form (TEIQue – SF)

This scale was developed by Perazzo et al. (2021). It is a 30-item questionnaire that measures four components of emotional intelligence. It's a streamlined version that's easier to read and comprehend. The questionnaire comprises a seven-point Likert-style scale from 1 indicating strongly disagree to 7 indicating strongly agree. Participants were supposed to rate how well they comprehend a set of 30 brief phrases. EI trait levels are considered to be higher with a high score on TEIQue. Past Reliability of this scale reported to be 0.88

Marlowe–Crowne Social Desirability Scale – Short Form (MCSDS-SF)

MCSDS-SF was developed by Leite and Nazari (2020). It is a 13-item scale comprising of true/false format. The scale consists of statements asking participants to indicate whether their responses conform to societal norms (Crowne & Marlowe, 1960). The highest score indicates a high level of social desirability. The reliability of this scale was reported to be 0.93.

Statistical Analysis

The Statistical Package for the Social Sciences (SPSS) version 26 was used to analyze the data. Calculations included frequency distributions, percentages, and one-way analysis of variance (ANOVA). $p< .05$ is regarded as significant. The data gathered by an intake form and a series of questionnaires was analyzed using Pearson correlation and an independent sample t-test.

Ethical Considerations

The participants' well-being was given priority in the research, and those who might be in danger of self-harm or who require resources were made sure to receive them. To avoid hurting or offending anyone, the research was conducted keeping in view cultural sensitivity, taking into account the cultural norms, values, and beliefs of the Pakistani populace. Furthermore, the integrity and credibility of the research were ensured by disclosing and addressing any potential conflicts of interest or biases and letting participants know their right to withdraw at any time.

Results

This study was conducted on 195 adolescents in the age range of 19 to 25 in Pakistan. Statistical analysis was done based on information gathered from the sample of 195 adolescents doing self-harm in the last year in different hospitals and universities of Islamabad and Rawalpindi. Table1shows that majority of the participants were females (55%, n=116) and are post-graduated (36%, n=71). Most of them belonged to middle-class families (51.3%, n=100).

Table 1

Demographic characteristics of data (n=195)

Variables	Categories	M	SD	f	(%)
Gender	Male			79	40.5%
	Female			116	55.5%
Age		4.34	1.04		
Education	Intermediate		.	26	13.3%
	Bachelors			85	43.6%
	Postgraduate			71	36.4%
	Other			13	6.7%
Socio	Upper class			38	19.5%
Economic	Middle class			100	51.3%
Status	Lower class			57	29.2%
Any Medical	No			140	71.8%
History	Allergies			15	79.5%
	Migraine			16	87.7%
	High blood pressure			11	93.3%
	Respiratory			13	100.0%
Any	No			100	51.3%
Psychiatric	Depression			82	42.1%
History	Anxiety			13	6.7%
Reason for doing Self-harm	Get relief from negative emotion			54	27.7%
	Deal with personal issues			97	49.7%
	Create positive feeling			44	22.6%

Table 2

Inter-correlations among Study Variables (n=195)

Variables	M	SD	1	2	3	4
Causes(s) for doing Self Harm	1.95	.71	-	-	-	-
Trait Emotional Intelligence	53.03	21.76	.30**	-	-	-
Social Desirability	21.65	2.28	-.18**	-.56**	-	-
Non-suicidal Self-injury	81.02	11.01	-.18**	-.62**	.56**	-

Note: M = mean, *SD* = standard deviation, **$p<.01$

Table number 2 shows that trait of emotional intelligence was shown to have a positive association with self-harm causes, whereas social desirability was found to have a negative link with these factors. Self-harm for causes other than suicide was also shown to be negatively related to social desirability. An association between social desirability and NSSI was also shown to be statistically significant.

Table 3

Regression Coefficients of Trait Emotional Intelligence and Social Desirability on Non-suicidal Self-injury

Variables	B	SE	t	p	95% CI
Constant	61.24	7.92	7.73	.000	[45.63,76.87]
Trait Emotional Intelligence	-.227	.033	-6.90	.000	[-.292, -.162
Social Desirability	1.470	.313	4.70	.000	[.853, 2.087

Note: B = Beta, SE= Standard Error, p= Significance level, CI = Confidence Interval

Multiple linear regressions showed that trait emotional intelligence and social desirability significantly influence non-suicidal self-injury among adolescents. Social desirability positively predicted self-injury, while trait emotional intelligence negatively predicted it. These predictors explained 45% of the outcome variable variance.

The R^2 value of .45 illustrated that the forecasters explained 45% variances in the result variable with $F(2, 192) = 78.45$, $p< .000$. Findings demonstrated that social desirability positively estimated NSSI ($\beta = 1.47$, $p< .000$). In contrast, trait emotional intelligence estimated NSSI adversely (($\beta = -.227$, $p< .000$) among adolescents.

Table 4

Group Differences in NSSI and Social Desirability regarding the Reason for doing Self-harm (n=195)

Variables	Get relief from a negative emotion		To deal with a personal issue		To create a positive feeling		F (2,192)	η²
	M	SD	M	SD	M	SD		
Non-suicidal Self-injury	84.09	11.04	80.52	11.27	78.43	9.71	3.47	.035
Social Desirability	22.26	2.10	21.57	2.33	21.09	2.80	3.37	.034

Note: M = mean, SD = standard deviation

The study found that the majority of participants preferred dealing with positive emotions over negative emotions for relief. The social desirability scale showed that the primary reason for dealing with negative emotions was to get relief, with a small effect size of 0.03.

Discussion

This research aimed to investigate the role of social desirability and trait emotional intelligence (EI) on non-suicidal self-injury (NSSI) among adolescents in Pakistan and to identify the main causes of self-injury and which genders are more likely to engage in it. Trait EI describes a person's capacity to recognize, comprehend, and control their own and other people's emotions. Some theories suggest that those with greater EI may also have more effective emotional coping mechanisms, which could act as deterrents to NSSI. On the other hand, social desirability, or the propensity for presenting oneself in a socially desirable manner, can affect how NSSI behaviors are reported,

causing underreporting or hiding of such activities.

The present study found a significant negative relationship between trait EI and NSSI, proving the first objective. However, this result is in line with earlier studies that suggest people with higher EI have better emotional regulation skills, problem-solving abilities, and coping mechanisms. These traits may act as protective factors against self-harming behaviors (Davis et al., 2019; Gutierrez et al., 2016).

These findings contribute to the body of research by demonstrating the significance of trait EI within a clinical population. There is strong evidence from numerous researches of a significant negative association between trait EI and NSSI. For example, a cross-sectional study found that participants with lower trait EI scores were more likely to participate in NSSI behaviors ($r = -0.32$, p 0.001). This indicates that there may be an increased risk of self-harming behaviors among people with lower emotional intelligence (Wu, 2023).

Additionally, a meta-analysis investigated the association between trait EI and self-harm across a range of age groups, finding a substantial negative association between trait EI and NSSI (Lee & Kim, 2021). Hence, this study lends more credence to the idea that higher levels of trait EI are linked to a lower probability of participating in NSSI.

Moreover, the study also examined the relationship of social desirability with NSSI, showing a significant positive correlation between the two variables ($r=.56$, $p<.01$). This finding supported the second hypothesis that there is a positive relationship between social desirability and NSSI. This finding is in line with the recent investigations showing an impressively positive relationship between social desirability and NSSI, indicating that those who practice NSSI typically have greater levels of social desirability.

Similarly, previous research on associated concepts and behaviors corresponds with the positive correlation between social desirability and NSSI, suggesting that those who score higher on social desirability tend to have lower self-esteem, which may lead to a greater intake of NSSI as a harmful coping technique (Moseley et al., 2022). This lends credence to the idea that social desirability might act as a bridge connecting psychological suffering and NSSI.

Additionally, research has shown that individuals with higher social desirability scores are more likely to engage in bad eating habits, suggesting that social desirability is linked to various self-harming behaviors, including NSSI. Hence, studies have consistently found a positive association between social desirability and NSSI, with participants reporting higher levels of social desirability compared to controls (Laye-Gindhu & Schonert-Reichl, 2005).

Furthermore, another study examined the association between non-suicidal self-injury and social desirability to identify the main cause of self-harm. The data showed that more participants cited dealing with positive feelings as a motivation than finding relief from negative emotions and developing positive feelings. The social desirability scale also revealed that participants' main motivation was to feel better, with a small effect size of 0.03 (<.50).

In addition to this, several studies have emphasized the importance of identifying gender variations within the NSSI community (Claes et al., 2009) therefore, gender differences in non-suicidal self-injury and trait emotional intelligence have also been found in the present study. Male students were found to have a higher level of non-suicidal self-injury compared to females, whereas females were reported to have lower trait emotional intelligence. Males may display unique patterns of self-injurious behavior, while females participate more

often in other harmless behaviors (Swannell et al., 2012).

These gender variations in non-suicidal self-injury (NSSI) have been attributed to various factors, including socialization processes that prevent men from expressing their emotional pain conventionally, gender-specific variables like stressors or psychosocial challenges, and the preference for females to exhibit higher levels of trait emotional intelligence (EI). Research has consistently shown that women perform better than men in terms of trait EI measures, with female respondents consistently outperforming male ones in various areas (Klonsky et al., 2011).

Social and cultural influences also contribute to the gender disparity in characteristic EI. Females may be able to communicate and comprehend feelings more freely than males, leading to the development of gender-specific emotional abilities (Whitlock et al., 2008). This societal desire may result in higher trait EI ratings, particularly in countries with stronger gender role differentiation.

Genetic variables, such as physiological and hormonal differences, may also play a role in the reported gender disparities in trait EI (Kaess et al., 2019). Gender variations in neural patterns of stimulation have been found in studies using functional magnetic resonance imaging (fMRI) to examine brain activity during emotional tasks. Additionally, estrogen, primarily prevalent in females, has been linked to research studying the effects of hormones on emotional processing (Anderson & Crowther, 2012).

Moreover, positive emotions have long been considered protective but recent research has found a counterintuitive connection between them and self-harm (Jenkins et al., 2015). Individuals who commit self-harm often experience relief, exhilaration, or a sense of control, which can lead to a feedback loop that reinforces self-harm as a dysfunctional coping strategy (Nock & Prinstein, 2004).

The affect regulation hypothesis suggests that people who damage themselves may do so to control their emotions, both good and negative. This suggests that self-harm functions as a technique to suppress happy emotions and restore emotional balance.

Hence, the findings of the current study may provide insight to clinicians for taking NSSI intervention initiatives aimed at at-risk individuals. Mental health practitioners and policymakers can create tailored interventions and preventive initiatives that address the underlying causes of NSSI among Pakistani adolescents by determining the precise contributions of trait EI and social desirability. Interventions focusing on emotional intelligence abilities, such as emotion regulation training and cognitive-behavioral therapy, may be beneficial.

Besides all the findings, there were certain limitations of the study such as the availability of time and resources. Researchers may in the future conduct a longitudinal or qualitative study to dig deep down into the causes of self-harm behavior. Also, a large number of participants could be taken and pre and post-analysis of self-harm behavior can also be taken into consideration for future research.

Conclusion

The present study was designed to examine the influence of trait emotional intelligence and social desirability on self-harm behavior. Findings showed that a lower level of emotional intelligence has a strong influence on self-harm behavior whereas a high level of social desirability is directly proportional to self-harm behavior. These findings suggest that therapeutic approaches should focus on enhancing emotional intelligence and resolving issues related to self-image, social pressure, and compliance. Also, treatments should emphasize developing resilience, self-acceptance, and assertiveness skills to lessen the urge for self-harm as a way of obtaining validation or meeting social expectations.

Contribution of Authors
Safa Waris: Conceptualization, Investigation, Methodology, Data Curation, Formal Analysis, Writing – Original Draft
Ansa Quratulain: Methodology, Writing - Reviewing & Editing, Supervision

Conflict of Interest
There is no conflict of interest declared by the authors.

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Data Availability Statement
The datasets of the current study are not available publicly due to ethical reasons but are available from the corresponding author [A.Q.] upon the reasonable request.

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