



ORIGINAL RESEARCH PAPER

Psychology

DEFENSE MECHANISMS IN NORMAL, SUICIDAL, AND NONSUICIDAL SELF-INJURIOUS (NSSI) BEHAVING YOUNG ADULTS

KEY WORDS:

Defense mechanisms, Nonsuicidal Self-injury, young adults, Suicidal Behavior.

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ABSTRACT

Coping behavior in an unpleasant situation or emotion is an unchangeable thing. The goal of the current exploratory study was to examine the level of defense mechanisms in normal, suicidal, and NSSI young adults, as well as to compare the defense mechanisms of these groups of young adults. 200 young adults (100 females and 100 males) were used for the Personal Data Schedule, Beck Depression Inventory-II (BDI-II), Defense Mechanism Inventory (DMI), and Structured Interview (Lifestyle Modification Factors). Of these, 22 (9 females and 13 males) reported NSSI, 17 (5 females and 12 males) reported suicidal ideation, and 30 (15 females and 15 males) were randomly selected as normal young adults. The study's findings indicate that individuals who engage in NSSI and suicidal behavior use Principalization (PRN) and Turning Against Object (TAO) more frequently as defense mechanisms than do normal people. Only those who engage in suicidal behavior also exhibit Projection (PRO) as a defense mechanism.

INTRODUCTION

Human emotions and the situations they face on a daily basis are reflected in their behavior. These circumstances may also be beneficial or unfavorable. Thus, the person mirrors their behavior. They use various coping mechanisms to deal with these situations. Both conscious and unconscious activities can serve as the mechanisms. Defense can be defined as unconscious mental processes that are aimed at both external and internal drive pressures, particularly those that pose a threat to one's self-esteem or self-structure, such as when friends or family fail to show empathy or are otherwise "lost" to the person. The defensive mechanism has two purposes: it shields the person from excessive worry and safeguards the self-integration [1]. Nonsuicidal self-injury and suicidal behavior look similar, and both acts physically injure one's body; however, NSSI is a coping strategy to feel good, but suicidal behavior is to end one's life [2]. Some people reported that they feel emotional experiences before engaging in NSSI, namely guilt, sadness, overwhelmed, anxiety, frustration, anger toward themselves or others, low self-worth, and self-blame [3]. Self-harm is a type of mechanism used to cope with emotional distress, such as anxiety, depression, etc. [4].

As we mentioned, the studies of nonsuicidal self-injury are a coping strategy to dissolve emotional distress (depression), which is related to ego defense mechanisms. Ego Defenses can also be a source of suicidal behavior. There has been a lot of research related to NSSI, and defense mechanisms, but these have not been researched together, and few studies are there about all of these in conjunction. Uttarakhand, the northern region of India, has a lack of studies about NSSI. The present study unfolded the new aspect of NSSI with the defense mechanism.

The present study's aims were as follows:

1. To study the level of defense mechanisms in normal, suicidal, and NSSI young adults.
2. To compare the level of defense mechanisms in normal, suicidal, and NSSI young adults.

MATERIALS AND METHODS

The current study used an exploratory sequential design and a mixed-methods research technique. The population for this study included young adults (males and females) between the ages of 18 and 29 who lived in Nagar Palika Parishad, Pithoragarh, Uttarakhand. 69 young adults aged 18 to 29 made up the randomly chosen sample for the study (22 were NSSI, 17 were suicidal, and 30 were normal).

The sampling procedure was finished in two stages. The stages are listed below:

Stage 1: In the first stage, 200 young adults (100 males and 100 females) from different institutions in the Nagar Palika region of Pithoragarh were chosen at random and given the Personal Data Schedule (PDS) and Beck Depression Inventory-II (BDI-II). At first, 17 incomplete forms were eliminated. Additionally, 74 young adults who reported a history of drug and substance abuse, who were pregnant or lactating mothers, or used medicine for any specified psycho-physiological issues, were not included in the sample. The symptoms of NSSI and suicidal thoughts were then examined in 109 samples. There were 67 normal young adults, 19 suicidal, and 23 NSSI. The chosen sample was then given the instruments.

Stage 2: The purpose of the structured interview was to gather more data on cyber usage, self-harming behavior, and lifestyle modification factors. 1 NSSI, 2 suicidal, and 37 normal young adults were not available for the interview during this period. Therefore, 69 young adults (22 NSSI, 17 Suicidal, and 30 Normal) were sampled.

The following tools were employed in the current study:

1. **Personal Data Schedule:** This personal data schedule has been constructed by the researcher. In this questionnaire, there are some questions related to the personal life of youth, such as name, father's name, mother's name, age, height, weight, address, etc.
2. **Structured Interview:** The structured interview has been designed by the researcher. In this questionnaire, the questions are based on the young adults' daily life routine, such as sleeping patterns, internet usage, mobile content, drug and alcohol consumption, NSSI behaviour, etc.
3. **Beck Depression Inventory (BDI-II):** The Beck Depression Inventory-second edition [5] is a self-report instrument for measuring the severity of depression in adults and adolescents aged 13 years and older. In BDI-II, 21 depressive symptoms and attitudes are listed. Scoring of this scale is 0-13 for minimal depression, 14-19 for mild depression, 20-28 for moderate depression, and 29-63 for severe depression. The reliability of the tool is .74 and the construct validity of the tool is 0.93.
4. **Defense Mechanism Inventory (DMI):** The Indian adaptation of DMI was done by [6]. There are two versions of this inventory, one for males and the other for females. Each version contains 10 stories. Four types of behavior evoked by the situation described in the story: (a) *Proposed actual behavior*, (b) *Impulsive behavior* (in

fantasy), (c) *Thoughts*, (d) *Feelings*. This inventory provides five clusters of defense mechanisms: Turning against Object (TAO), Projection (PRO), Principalization (PRN), Turning against Self (TAS) & Reversal (REV). The test-retest reliability for the five defenses (product-moment correlation) ranges from .08 to .92, and the validity is ensured.

STATISTICAL METHODS

1. Descriptive Statistics: To determine the characteristics of the dependent variables, the mean and standard deviation (SD) were calculated.
2. Inferential Statistics: SPSS-20 was used to compute One-way ANOVA and least significant difference (LSD) as post hoc.

RESULTS

The sample is divided into three groups; details related to the groups are in the following table (Table 1):

Table 1: Details of the sample

S. No.	Name Of Group	Male	Female	Sample Size
1.	NSSI	13	9	22
2.	Suicidal ideation	12	5	17
3.	Normal	15	15	30
Total		40	19	69

Table 2. Mean, SD of young adults NSSI group (N=22)

S. No.	Dependent Variables	Mean	SD
1.	TAO (DMI)	36.82	9.78
2.	PRO	37.55	7.49
3.	PRN	43.23	5.58
4.	TAS	36.00	5.68
5.	REV	45.18	6.515

Table 3. Mean, SD of young adults Suicidal Ideation group (N=17)

S. No.	Dependent Variables	Mean	SD
1.	TAO (DMI)	37.12	6.716
2.	PRO	40.65	3.89
3.	PRN	41.88	5.58
4.	TAS	33.76	6.49
5.	REV	44.82	6.044

Table 4. Mean, SD of young adults Normal group (N=30)

S. No.	Dependent Variables	Mean	SD
1.	TAO (DMI)	31.53	7.055
2.	PRO	36.80	4.33
3.	PRN	48.23	4.47
4.	TAS	35.50	5.87
5.	REV	48.00	5.71

Table 5: ANOVA on TAO

S. No.	Sum of Square	df	Mean Square	f value	Level of significance at 0.05
Between groups	498.134	2	249.067	3.938	SIG
Within groups	4174.504	66	63.250		
Total	4672.638	68			

Table 5.1: Post hoc: Least Significant Difference (LSD) on TAO

Groups (I)	Comparisons to groups (J)	Mean Difference (I-J)	Std. Error	Level of significance at 0.05
NSSI	Suicidal	-.29	2.57	NS
	Normal	5.28	2.23	SIG
Suicidal	NSSI	.29	2.57	NS
	Normal	5.58	2.41	SIG
Normal	NSSI	-5.28	2.23	SIG
	Suicidal	-5.58	2.41	SIG

FIG. 1: Plotting of the mean of TAO

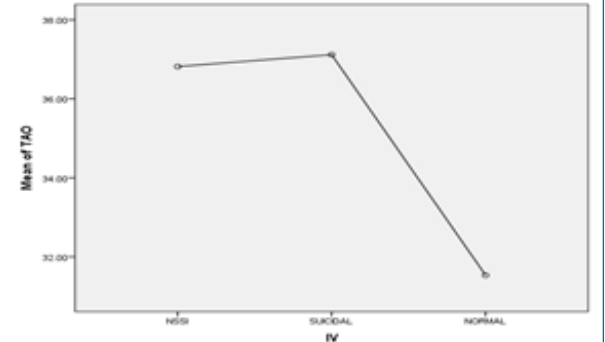


Table 5: ANOVA on TAO shows the significant difference among the groups. NSSI- Suicidal and Suicidal-NSSI were not significantly different, and NSSI-normal and suicidal-normal had a significant difference on TAO, as shown in Table 5.1. FIG. 1 reveals that the defense of TAO is least employed by normal individuals to ward off their anxieties, but most employed by young adults expressing suicidal intentions and NSSI.

Table 6: Anova On Pro

S. No.	Sum of Square	df	Mean Square	F value	Level of significane 0.05
Between groups	166.849	2	83.424	2.803	NS
Within groups	1964.137	66	29.760		
Total	2130.986	68			

Table 6.1: Post hoc: Least Significant Difference (LSD) on PRO

Groups (I)	Comparison to groups (J)	Mean Difference (I-J)	Std. Error	Level of significance at 0.05
NSSI	Suicidal	-3.10	1.76	NS
	Normal	.75	1.53	NS
Suicidal	NSSI	3.10	1.76	NS
	Normal	3.85	1.66	SIG
Normal	NSSI	-.75	1.53	NS
	Suicidal	-3.85	1.66	SIG

FIG. 2: Plotting of the mean of PRO

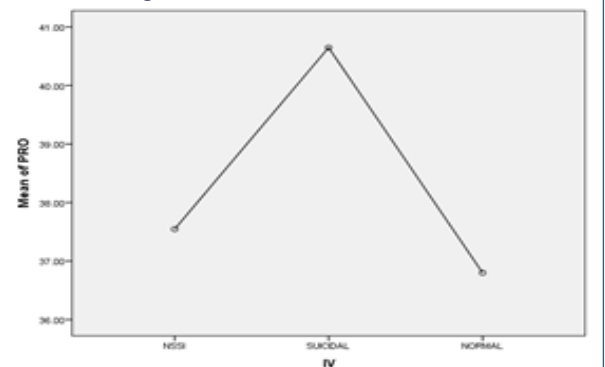


Table 6 shows ANOVA on PRO, revealing that there is no significant difference among the groups. On analyzing Table 6.1, it was deduced that the group NSSI-suicidal, NSSI-normal had no significant difference, and the group suicidal-normal had a significant difference. FIG.2 indicates that the level of PRO in suicidal individuals is higher than in NSSI and normal young adults.

Table 7: Anova On Prn

S. No.	Sum of Square	df	Mean Square	F Value	Level of significance at 0.05
Between groups	547.643	2	273.821	10.440	SIG
Within groups	1730.995	66	26.227		
Total	2278.638	68			

Table 7.1: Post hoc: Least Significant Difference (LSD) on PRN

Groups (I)	Comparisons to groups (J)	Mean Diff erence (I-J)	Std. Error	Level of significance at 0.05
NSSI	Suicidal	-1.34	1.65	NS
	Normal	-5.00	1.44	SIG
Suicidal	NSSI	-1.34	1.65	NS
	Normal	-6.35	1.55	SIG
Normal	NSSI	5.00	1.44	SIG
	Suicidal	6.35	1.55	SIG

FIG. 3: Plotting of the mean of PRN

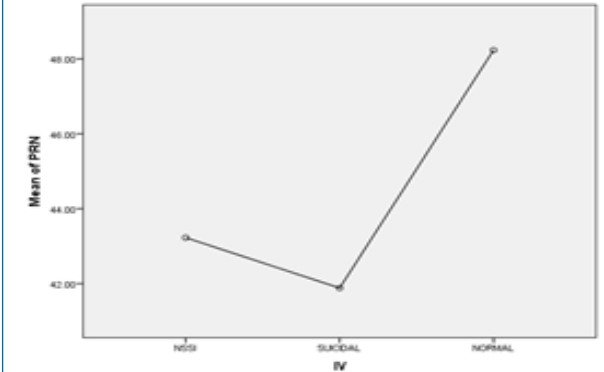


Table 7 reveals a significant difference among groups on the variable PRN. Table 7.1 reveals significant differences between NSSI-normal and suicidal-normal young adults. It is found that there was no significance different between NSSI-suicidal young adults. FIG. 3 represents that the usage of PRN is highest in normal young adults but least by suicidal young adults. Young adults exhibiting NSSI behavior employ PRN more than suicidal intentions, but the difference is not significant.

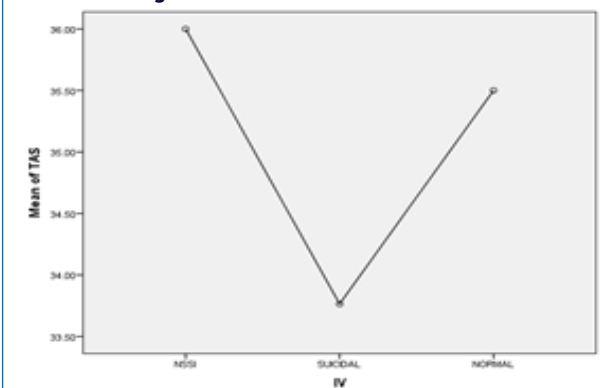
Table 8: ANOVA on TAS

S. No.	Sum of Square	df	Mean Square	F Value	Level of significance at 0.05
Between groups	51.731	2	25.866	.726	NS
Within groups	352.559	66	35.645		
Total	2404.290	68			

Table 8.1: Post hoc: Least Significant Difference (LSD) on TAS

Groups (I)	Comparisons to groups (J)	Mean Difference (I-J)	Std. Error	Level of significance at 0.05
NSSI	Suicidal	2.23	1.93	NS
	Normal	.50	1.67	NS
Suicidal	NSSI	-2.23	1.93	NS
	Normal	-1.73	1.81	NS
Normal	NSSI	-.50	1.67	NS
	Suicidal	1.73	1.81	NS

FIG. 4: Plotting of the mean of TAS



On observing Table 8, non-significant differences are found among the groups on the variable TAS. Table 8.1 reveals that all the groups have no significant difference between them. FIG.4 reveals that the mean of NSSI and normal young adults is more than that of suicidal young adults on the variable TAS.

Table 9: ANOVA on REV

S. No.	Sum of Square	df	Mean Square	F value	Level of significance at 0.05
Between groups	151.242	2	75.621	2.061	NS
Within groups	2421.743	66	36.693		
Total	2572.986	68			

Table 9.1: Post hoc: Least Significant Difference (LSD) on REV

Groups (I)	Comparisons to groups (J)	Mean Difference (I-J)	Std. Error	Level of significance at 0.05
NSSI	Suicidal	.36	1.96	NS
	Normal	-2.81	1.70	NS
Suicidal	NSSI	-.36	19.6	NS
	Normal	-3.18	1.84	NS
Normal	NSSI	2.81	1.70	NS
	Suicidal	3.17	1.84	NS

FIG. 5: Plotting of the mean of REV

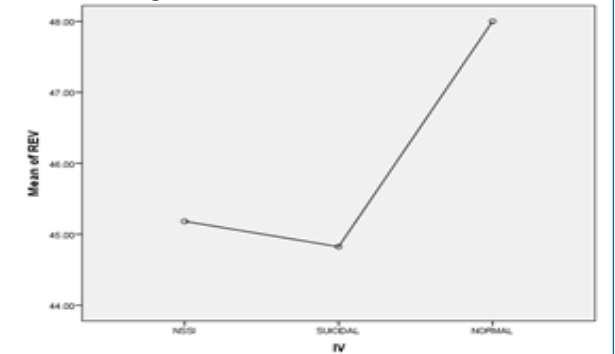


Table 9 reflects the presence of a non-significant difference among groups on the variable REV. Table 9.1 reveals that all the groups have no significant difference between them. In FIG. 5, the plot reveals that the mean of normal young adults is higher than that of NSSI and suicidal young adults. Though the mean difference between suicidal & normal is very high but is not significant. Maybe in a large sample size, significant differences can be observed.

DISCUSSION

The current study aimed to compare Defense Mechanisms among normal, suicidal, and NSSI individuals. Our findings, that TAO is highly employed by young adults expressing suicidal intentions, are not in agreement with those of [7], who revealed that turning against self (TAS) is significantly associated with suicidal attempts. Our findings reveal an interesting layer of psychic processes. Gleser & Ihilevich (as cited by [8]) defined TAO as including identification with the aggressor and displacement. This may be explained as the expression of an aggressive act or intention of hurting oneself, meant for the significant object, only to generate a sense of guilt in that significant other. The act of hurting or killing oneself may not be the aggression directed towards oneself, as in TAS, but to express aggression towards the other when one knows he/she is of vital importance to the other.

According to [1], projection is a late childhood and early adolescence defense and can be grouped into three categories, firstly, generalizing one's own thoughts and feelings, or self-image onto others, secondly, attribution of the responsibility of unacceptable characteristics on someone else and finally, attributing others of thoughts, feelings, wishes

or impulses that exist within oneself but of which one is not aware. On analyzing our results, in the light of Cramer's explanation of projection, our results seem to explain the usage of significantly high projection by suicidal young adults in comparison to their normal and NSSI counterparts. The suicidal young adults may seem to project negative thought processes (helplessness, hopelessness, and worthlessness, which are characteristic of depression) in their functioning environment. They may either feel that there is no hope for them in their functioning environment or that they are the victims of people's negative thought processes.

Gleser & Ihlevich (as cited by [8]) defined principalization as comprising intellectualization, isolation, and rationalization. Intellectualization and rationalization refer to the use of thoughts to handle unacceptable feelings and impulses (Vaillant, 1992), which seems to be cognitively difficult during the phase of suicidal intentions.

Our findings are not similar to the results of the previous studies. [7] observed that turning against self (TAS) is significantly associated with suicidal attempts, but in the present study, TAS is not significantly associated with suicidal young adults. Though the mean differences of TAS between suicidal, NSSI, and normal are high, they are not significant. This may be due to the small sample of suicidal young adults in the present study.

CONCLUSION

To conclude the study, the results show that people who indulge in NSSI and suicidal behavior have more use of the Turning Against Object (TAO) and Principalization (PRN) as a defense mechanism, compared to normal individuals, and only those who indulge in suicidal behavior also show the Projection (PRO) as a defense mechanism. Results revealed that Turning Against Self (TAS) and Reversal (REV) are not significantly associated with normal, NSSI, and suicidal young adults.

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