

A Study on Defense Mechanisms and Level of Anxiety in Adolescents

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ABSTRACT

Ego defense mechanisms are psychological processes that help us deal with anxiety as a consequence of being exposed to a stressful situation. These mechanisms assume a high level of importance especially in the assessment of people's personality characteristics, their level of anxiety, depression, and other severe psychopathologies as well as the nature of coping mechanisms being employed by them. While defense mechanisms are thought to shelter our mind against thoughts, feelings, and desires that are too heavy to be dealt with by our conscious mind, their overuse or rather, long-term use can be extremely harmful leading to an absolute denial of reality. The present study aims to explore the correlation between the sort of defense mechanisms employed by adolescents (age range: 12 to 18 years) and their level of anxiety. To give some momentum to the same, a sample consisting of 50 adolescents (25 males and 25 females) was selected. Standardized scales that identify the categories under which the various defense mechanisms fall and measure the anxiety levels were administered to the participants. The results of the study revealed a significant positive relation between mature defense mechanisms and neurotic defense mechanisms as well as between immature defense mechanisms and neurotic defense mechanisms. Furthermore, the research has shown that there is a negative correlation, though not a significant one, between all types of defense systems and anxiety levels. The findings suggest that a variety of environmental and genetic factors, and perhaps even the form and type of defense systems, all have a role in defining one's level of anxiety.

Keywords: *Adolescents, Defense styles, Mature defenses, Neurotic defenses, Immature defenses, Anxiety level*

"You see, long ago I built a wall, a defense mechanism as I recall." — Adielia Akoo

Defense mechanisms are strategies that are put to use by people around the world to separate themselves from unpleasant and hurtful events, thoughts, and desires. These mechanisms have proven their effectiveness by helping people in maintaining a safe level of distance from unwanted or undesired emotions such as that of shame and guilt. Furthermore, we are all acutely aware of how big events, or rather the buildup of numerous smaller stressful life situations may trigger mild to severe levels of anxiety in

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individuals. Defense mechanisms such as repression and denial have shown to be worthwhile in this situation since they provide humans with a reprieve from such a state of affairs.

In a study (Waqas et al, 2015), anxiety and depression were shown to be extremely common among a sample of medical students. Higher academic scores were linked to moderate anxiety and a low level of depression. Furthermore, academic performance, anxiety, and depression levels were all found to be strongly linked to ego defense mechanisms.

Yet another study explored the relationship dynamics between 3 variables, namely: defense mechanisms, trait anxiety, and the need for approval among undergraduates. According to the same study, different patterns of correlations were observed for male and female participants. For females, a positive correlation was found between trait anxiety and those defense styles that operated by directing anger towards oneself and others in addition to a negative correlation between trait anxiety and defenses like denial, repression, rationalization, and intellectualization. In contrast, no significant relations were found between defenses and trait anxiety among males. (Lobel et al, 2016)

Finally, to investigate the association between ego defense mechanisms and specific diagnoses and negative feelings, researchers studied ego defense mechanisms in adolescent psychiatric inpatients and healthy adolescents. All psychiatric patients were distinguished from controls (healthy adolescents) by several defenses. While anger was found to be significantly correlated with projection, displacement, and regression, anxiety was correlated with displacement, reaction formation, and undoing. Finally, denial was discovered to have a negative correlation with depression. (Offer et al, 2000).

The purpose of this study is to look into the dynamic relationship between defense mechanisms and the level of anxiety among adolescents.

Ego defense mechanisms

“Defense mechanisms are psychological strategies that are unconsciously used to protect a person from anxiety arising from unacceptable thoughts or feelings.” (Freud, 1894). Moreover, “Defense mechanisms are patterned feelings, thoughts, or behaviors that are relatively involuntary and arise in response to perceptions of psychic dangers. They are designed to hide or alleviate the conflicts or stresses that give rise to the anxiety signal.” (Vaillant, 1986; Wastell, 1999). The word "defense mechanism" is used to characterize not only an unconscious intrapsychic process but also behavior that is aimed to reconcile internal drive with external pressures, whether consciously or unconsciously. (Bond, 1986). A number of theories can assist us in not just tracing the origin of defense mechanisms, but also in enhancing our understanding of them. These include:

Three levels of consciousness: Behavior and personality, according to Freud (1905), are the result of a persistent and unique interaction of opposing psychological forces operating at 3 levels of consciousness: conscious, preconscious, and unconscious. While our conscious mind consists of the thoughts, feelings, desires that we are aware of at present; our unconscious mind consists of mental activity that we are unaware of but has the ability to influence our judgments, feelings, or behavior. (Wilson, 2004). It consists of sexual and aggressive desires and impulses that have the inherent capability to act as possible sources of psychological conflict.

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Lastly, our mind also has its 'middleman' popularly known as the preconscious or subconscious mind which is responsible for mediating between our conscious and unconscious mind. It contains all the information that can be recalled only if we consciously put in some amount of effort to recall it. (Freud, 1924)

Freud (1915) claimed that the conscious mind is represented by the tip of the iceberg that extends above the water. Though the conscious mind is only the "tip of the iceberg," the bulk of the iceberg resides underneath the water, reflecting the unconscious forces that influence human behavior.

Structure of personality: Freud (1923) later went ahead to divide personality into three separates but interacting structures: id, ego, and superego.

The id is a storehouse of our instinctual energy, primitive needs as well as sexual and aggressive desires come into the picture. It operates on the 'pleasure principle' i.e. the notion that immediate needs should be met. The ego also assumes a crucial role as its watchful disposition moderates the id by focusing on seeking a suitable way to gratify a person's needs. Lastly, the superego performs an important role in reminding us of our morals and ethics.

Anxiety and defense: The dynamics of personality involve a never-ending battle between the impulses and urges of the id, which seek release, and the ego and superego's counter forces, which seek to suppress them. Anxiety arises when the ego is confronted with out-of-control urges or environmental dangers: Anxiety, like physical discomfort, acts as a warning signal, motivating the ego to address the issue at hand. Anxiety can often be reduced by engaging in realistic coping strategies such as problem-solving. However, when realistic techniques fail to alleviate anxiety, the ego may fall back on defense mechanisms, which are unconscious mental operations that reject or distort reality.

Three major categories of defense mechanisms are commonly noted: immature, neurotic, and mature (Bond, 1986). While the immature defenses are preoccupied with controlling raw impulses and the neurotic defenses develop a preoccupation with all-important others; the mature defenses get preoccupied with the creative expression of one's self. (Bond, 1986; Freud, 1936).

Before the age of 15, healthy persons normally have immature defenses. These defenses are employed to alleviate stress caused by the threat of interpersonal intimacy, or the threat of interpersonal intimacy loss. As a person matures or as interpersonal interactions improve, these defenses typically change. Some examples of immature defenses are projection, passive-aggression, acting out, isolation, devaluation, autistic fantasy, denial, displacement, dissociation, splitting, etc. (Vaillant, 1986).

Neurotic defenses are found in healthy people aged three to ninety, in neurotic diseases, and in the regulation of acute stress. These shields are utilized to alter private feelings or instinctual expressions. Examples of neurotic defenses include undoing, pseudo altruism, idealization, and reaction formation (Vaillant, 1986).

Individuals who are between the ages of 12 and 90 have mature defenses. Individuals can integrate reality, interpersonal relationships, and private sentiments using these defenses.

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Users with mature defenses may return to a less mature form when under stress. Some examples include sublimation, humor, anticipation, and suppression (Vaillant, 1986).

Anxiety

“Anxiety may be defined as apprehension, tension, or uneasiness that stems from the anticipation of danger, which may be internal or external.” (DSM,1980). The American Psychiatric Association (1994) defines anxiety as “the anticipated anticipation of a future danger or negative event, accompanied by feelings of dysphoria or physical symptoms of tension.” The aspects that are at risk may come from both the internal and external surroundings. Lastly, the Italian Treaty of Psychiatry (2002) refers to anxiety as “an emotional state with an unpleasant content, associated with a condition of alarm and fear that arises in the absence of real danger and which, however, is disproportionate to any triggering stimuli.”

Sigmund Freud (1926) proposed 3 types of anxieties: realistic anxiety, neurotic anxiety, and moral anxiety. Realistic anxiety refers to the notion that there are genuine dangers or threats that exist in the outside world. Moral anxiety arises from the fact that all of us, as an individual, are aware of the social expectations and moral code of ethics, and based on the personal standard which we have established, we would feel guilty for doing or not doing something. Finally, the threat posed by the id, which tends to break through the ego's control framework, is thought to be the cause of neurotic anxiety.

According to a study (Colovic et al, 2016), only the use of immature defense mechanisms distinguishes "pure" anxiety disorders from "pure" depressive disorders. These defenses could thus be utilized to distinguish amongst anxiety and depressive disorders, as well as to identify which manifestation (anxiety or depressive disorders) is prominent at a certain treatment phase. Yet another study proved that a highly creative group of people had more anxiety than a group of people who had a relatively low level of creativity. In addition, the high-creative group used a broader variety of defenses than the low-creative group. (Carlsson, 2010).

Furthermore, features of the threatening stimuli and scenario greatly impact the strength of specific reactions, resulting in very consistent defensive patterns under controlled conditions and showing a fundamental distinction between fear-related and anxiety-related defenses. Some of the behavioral variability seen in anxiety disorders could also be due to evolved/unconditioned defense mechanisms. (Blanchard & Blanchard, 2008).

Purpose

The purpose of this study is to comprehend and analyze the correlation between the type of defense mechanisms (neurotic, immature, and mature) employed by adolescents and their level of anxiety.

Hypothesis

There will be no significant relationship between anxiety and ego defense mechanisms.

METHODOLOGY

Sample

A total of 50 people (25 males and 25 females) residing in the metropolitan cities of Delhi and Bangalore participated in the above research. The age range of the participants was 12-18 years.

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Measures

- Defense Style Questionnaire (DSQ-40): DSQ-40 as given by Andrews, Singh, and Bond (1993), a shortened version of the DSQ-88 scale, consists of a total of 40 questions, each rated on a 9-point scale with extremes of 'Strongly disagree' and 'Strongly agree.' This scale is utilized for placing the various defense mechanisms employed by people in 3 main categories: Mature, Immature, and Neurotic.
- State Trait Anxiety Inventory: STAI as given by Spielberger (1977), consisted of two parts (Form Y-1 and Form Y-2), each consisting of 20 questions which were rated on a 4-point scale with extremes of 'not at all' and 'very much so.' This scale indicates the intensity of feelings of anxiety. Additionally, it distinguishes between state anxiety (brief anxiety that occurs in certain situations) and trait anxiety (a general predisposition to perceive events as threatening).

Procedure

Prior to administering the above-mentioned standardized psychological tests to the participants, they were well informed about the purpose of the research. The respondents filled the questionnaires by the means of Google forms. They were thanked for their valuable contribution to the research as well as their cooperation.

Analysis of data results

The mean and standard deviations were calculated for the localized normative group as shown in the table below:

Table 1- Descriptive table (shows N, Mean and Standard deviation of variables)

	Mature defenses	Immature defenses	Neurotic defenses	Anxiety
N	50	50	50	50
Mean	48.8	120	47.3	108
Standard deviation	9.56	21.6	9.18	10.2

Additionally, the correlation between all the variables that this research focuses upon was also calculated as presented in the table below:

Table 2- Showing correlation of all variables

	Mature defenses	Immature defenses	Neurotic defenses	Anxiety
Mature defenses	—			
Immature defenses	0.116	—		
Neurotic defenses	0.310*	0.305*	—	
Anxiety	-0.215	-0.053	-0.132	—

DISCUSSION OF RESULTS

The results have proven that there significant positive correlation exists between mature defense mechanisms and neurotic defense mechanisms ($r = +0.310$, $p < .05$) as well as between immature defense mechanisms and neurotic defense mechanisms ($r = +0.305$, $p <$

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.05). Furthermore, the above research has also shown how a negative correlation, though not a significant one, exists between all categories of defense mechanisms and the level of anxiety. The level of anxiety however reduces as one adapts to the usage of mature defenses as opposed to neurotic and immature defense mechanisms (the strongest negative correlation exists between anxiety and mature defense mechanisms). As an outcome, the results of this study confirm the null hypothesis, which states that there will be no significant relationship between anxiety and ego defense mechanisms.

Immature defenses were found to have a positive correlation with maladaptive personality domain scores, whereas mature defenses were found to have a positive connection with improved personality functioning. Different defense techniques also appeared as important predictors of the maladaptive personality characteristics included in the alternative DSM-5 personality disorder model. Defense patterns are central to personality and its disorders, and they show that an increase in immature defenses and a decrease in mature defenses has a negative impact on personality development. (Granieri et al, 2017).

The findings of Carvalho et al (2019) revealed expressive differences ($d > 1.0$) between mature, neurotic, and immature defense mechanism groups, with pathological personality traits being more common in people who use less mature defense mechanisms (i.e., neurotic and immature), according to the IDCP (Dimensional Clinical Personality Inventory), which includes distinct personality profiles for each group.

Additionally, according to Nam et al (2019), Immature defenses were deployed more frequently by the maladjusted group than by the control group. The defense patterns `did not alter depending on the diagnosis. More identification and rationalization were utilized by the control group, which were regarded as immature defenses. More somatization, regression, and avoidance were used by the momentarily maladjusted group.

CONCLUSION

Overall, there was a link between neurotic and immature defense mechanisms, as well as neurotic and mature defense mechanisms, in the aforesaid study. These positive substantial associations between immature and neurotic defense mechanisms, as well as neurotic and mature defense mechanisms, may have simply arisen as a result of the adolescents' high level of usage of them. However, the study found a negative (but not statistically significant) correlation between all types of defense systems and adolescent anxiety. This explains why defense mechanisms aren't the most important component in determining one's anxiety level. The kind of defense mechanisms, on the other hand, does have an impact on anxiety, as when a person develops a mature defense system vs a neurotic or immature one, anxiety levels decrease.

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Conflict of Interest

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