

THE ROLE OF DEFENSIVE MECHANISMS AND EMOTIONAL REGULATION IN ALEXITHYMIA

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ABSTRACT: Alexithymia that emotional problem at their shows both level emotional and cognitive functioning and recognized the inability or failure to explain or identify the emotion. The aim of performing the present study clarify role of defense mechanisms and emotion regulation in alexithymia. This research is a descriptive type correlation and done using a sample of 250 individuals who were selected by stratified random sampling. In the present study used (TAS_20) Toronto Alexithymia Scale-20, (DSQ) Defense Style Questionnaire and (ERQ) Emotion Regulation Questionnaire then The data were analyzed using multiple regression analysis. Analysis results showed that the components defensive mechanisms, developed defense style as negative and immature defense styles as positive predict alexithymia and Component of emotional regulation, emotional suppression as positive predict alexithymia. The defense mechanisms and practices emotion regulation is necessary in the prediction and treatment of persons with alexithymia.

KEYWORDS: Alexithymia, Defensive Mechanisms, Emotional Regulation.

INTRODUCTION

The term Alexithymia is a Greek word which was not means (Alex) the word (thymus) is emotional ([Larsen et al., 2003](#)). This word have been known and introduced as [Sifneos, \(1972\)](#) firstly Alexithymia is a problem that shows itself in the level of emotional and cognitive functioning and is characterized by inability or failure to explain or identify emotion ([Moriguchi et al., 2006](#)) and its outstanding features are the difficulty in identifying and describing subjective feelings, limited capacity for imagination and direction of the externally oriented or explicit thinking ([Taylor et al., 1997](#)). The main features of emotional inability are: the inability to recognize and verbal descriptions of personal emotion, poverty of symbolic thinking that limit the detection of attitudes, feelings, desires and drives, disability in employment feelings as symptoms of emotional problems, thinking about the facts surrounding the least significant reduction of recalling dream, difficulty in distinguishing between emotional states and bodily sensations, dry and formal appearance, lack of emotional expression on face, limited capacity for empathy and self-awareness ([Tull et al., 2005](#)). Some researchers have studied about the Temporal Stability of the Alexithymia and

considered to this structure as a fixed personality trait that reflects a deficit in the cognitive processing of emotional information ([Taylor, 2000b](#), [Martinez-Sanchez et al., 1998](#)). In contrast to this approach ,some researches are doubtful about temporal instability of emotional and have introduced it not as an attribute the outcome of personal inability ([Honkalampi et al., 2010](#)). Based on this approach, emotional instability is merely a simple mechanism to protect yourself against emotional distress associated with harmful situations ([Besharat and Shahidi, 2011](#)). Some theories also confirm the theory of Alexithymia as an unconscious defense against stress ([Haviland et al., 1988](#); [Zeitlin and McNally, 1993](#)). Studies by [Taylor and Bagby, \(2000a\)](#) illustrates extreme use of certain defense mechanisms such as denial or revocation that leads to keep out undesirable emotions from awareness which causes disability in the cognitive processing of emotional information or Alexithymia.

Defense mechanisms, is an involuntary cognitive operations that occur in the unconscious mind ([Soldz and Vaillant, 1998](#)) and acted as to reduce cognitive dissonance and to minimize sudden changes in internal and external reality by

influencing on how the act of perception threatening events (Vaillant, 1994). The main difference between defense mechanisms are coping styles, involuntary and unconscious defense mechanisms (Zoccali *et al.*, 2008). Defense mechanisms expressed by Freud for the first time and he believed that person uses it for releasing from the desires, impulses and disturbing thoughts of defense mechanisms as a tool to modify and distort reality (Zeigler-Hill *et al.*, 2008). Among proposed theories by Freud's, defense mechanisms, has the main role in nearing the psychoanalytic approach to experimental work, and was the first psychoanalytic concept that recognized official in diagnostic and statistical manual of mental disorders in fourth edition (Soldz and Vaillant, 1998). Defense mechanisms in DSM-IV (Anonymous, 1994) have been proposed to protect as an automatic mental processes of the individual against anxiety and internal and external factors that are causing stress. George conducted the first clinical studies about psychological profiles that obtained from individual interviews and questionnaires and put defense mechanisms on mature or immature defenses and had believed that all people use them regardless of their psychological damage (Blaya *et al.*, 2006). It can be say that several different classifications have been proposed for defense mechanisms in the literature. One of these divisions considers defense mechanisms as a range of mature to immature and divided them as three groups of mature, neurotic and immature (Martini *et al.*, 2004). It is assumed that defense styles are involved in the formation of Alexithymia.

Meanwhile, Alexithymia considered as a disorder of emotion regulation. In other words, researchers have argued that Alexithymia represents a defect in processing emotion regulation and it can be considered as a disorder in emotion regulation (Taylor, 1994). Emotion regulation is a process that adjusted to achieving social acceptance and it is related to response to internal and external demands on the states of physical and psychological regulation (Hwang Jung, 2006).

In other word, Alexithymia and emotion regulation have shown similar pattern about problems that are in relation to both physical and mental health problems such as high blood pressure, heart disease, depression and sleep disorders (Ditto and Byrne, 2005; Bauermann *et al.*, 2008; Bamonti *et al.*, 2010). The studies also found that direct forms of emotion regulation problems such as rejection, emotional response, lack of emotional clarity, Problems with impulse control and the ability to restrict the use of

styles, settings and emotional excitement in people are significantly different in normal subjects (Pandey *et al.*, 2012).

According to Gross model (Gross, 2001), emotion regulation strategies, including all conscious and unconscious strategies, which is used to increase, maintain or reduce component of emotional, cognitive, behavioral and emotional response (Gross, 2002) and has mentioned to the ability to understand emotions, experience and express emotions adjustment (Gross, 1998). The present study is an attempt to regulate the relationship between defense mechanisms and emotional excitement with Alexithymia. This is the main question of whether the defense mechanisms of emotion and emotion regulation ability to predict unspoken emotion or not?

METHODS

The present study was descriptive correlational research. The statistical population was of all students in Azerbaijan Shahid Madani University, Tabriz University, Tabriz PNU. 340 students who were randomly selected and stratified according to Morgan sampling. After selecting them, the Revised NEO Personality Inventory scales selection (NEOPI-R) NEO and somatization Questionnaire (PHQ-15) administered. In order to observe the ethics of research and subjects' rights, both orally (before running) and writing (mentioned in the first part of the questionnaire) was noted»"The information requested in this questionnaire is purely for research purposes and for your Sure, except for age and sex determination, it does not mention the name and other personal details. "16". Subjects due to incomplete responses to the questionnaire were excluded from the statistical analysis and thus the final sample of the study was reduced to 324 male and female students.

2.1. Instruments

Emotion Regulation Questionnaire (ERQ): It made by Gross and John (Gross and John, 2003) and has 10 items and has two subscales that include: emotional suppression and b) reassessing emotion. Reassessing emotion is a strategy in which the emotional effect on a change in the position of thinking will change that situation. Suppression of emotional expression is strategies in which the conscious behavior, emotional expression is inhibited and people who experienced re-assess emotions have more positive emotions and express than people who experience Suppression of emotional (Gross, 1998). Internal consistency obtained by Cronbach's alpha coefficient for the

factor of emotional suppression and reassessing emotion was 0.73 and 0.75, respectively (Ahmadi, 2012). Alpha calculated for emotional repression and reassess are 65/0 and 72/0 in the present study.

Farsi version of the Toronto Alexithymia Scale (FTAS - 20): This is a 20 item questionnaire developed by Bagby et al., (1994) and measures three aspects of alexithymia including difficulty in identifying and describing emotions and concrete thinking. Participants respond to each item on a five point likert scale ranging from 1 = disagree completely to 5 = agree completely. An overall score for alexithymia is calculated by adding the scores for the three subscales. The psychometric properties of the TAS - 20 has been confirmed in several studies (Palmer et al., 2004; Pandey et al., 1996; Parker et al., 2003) The FTAS - 20 has been analyzed by Besharat, (2007). Cronbach's alphas of 0.85, 0.82, 0.75 and 0.72 were reported for overall alexithymia and its three subscales (identifying and describing emotions and concrete thinking) respectively which indicates appropriate internal consistency. Furthermore, test retest reliability of the questionnaire using 67 participants after a four week interval yielded correlations for overall alexithymia and its subscales ranging from $r = 0.80$ to $r = 0.87$. Concurrent validity of the questionnaire was established by calculating correlation coefficients between the FTAS - 20 and scales measuring emotional intelligence ($r = -0.80, p < 0.001$), psychological well being ($r = -0.78, p < 0.001$) and psychological distress ($r = 0.44, p < 0.001$). Confirmatory factor analysis reiterated the existence of the three components of alexithymia (Besharat, 2007b).

The Defense Style Questionnaire (DSQ): This is a 40 item questionnaire developed by Andrews et al., (1993) measuring three categories of defense mechanisms which may be used by respondents. The Farsi version of this questionnaire was translated and back translated by Besharat et al., (2001). The 40 items measure three styles labeled mature, immature and neurotic.

Respondents respond to each item on a nine point Likert scale ranging from "Completely Agree" to "Completely Disagree". The Mature defense style includes defense mechanisms of sublimation, humour, anticipation and suppression. The Neurotic defense style includes defense mechanisms of undoing, pseudoaltruism, idealization and reaction formation. The Immature defense style includes the following defense mechanisms: projection, passive aggression, acting out, isolation, devaluation, autistic fantasy, denial, displacement, dissociation, splitting, rationalization and somatization. Cronbach's alphas of 0.75, 0.73 and 0.72 were reported for the three defense styles of mature, neurotic and immature respectively. Furthermore, test retest reliability of $r = 0.81$ was reported after a four week interval in 30 subjects.

RESULTS

Before examining the contribution of predictor variables of Alexithymia in regression model, the simple correlation between variables was examined. As shown in Table (1) among components of the defense mechanisms, developed defensive style have significant negative relations with Alexithymia and neurotic and immature styles have a significant positive relationship Alexithymia And among the components of emotion regulation, emotional suppression and reassessing emotional have significant negative relationship with Alexithymia.

Also developed defensive style has a significant positive relationship with reassessing emotional and has a significant negative relationship with and immature defense styles and neuroticism has a significant negative relationship with reassessing emotional and immature defense styles has a significant negative correlation with reassessment and significant negative correlation with suppression.

Table 1: Simple Correlation of defense styles components and emotion regulation with Alexithymia

Elements	M	SD	1	2	3	4	5	6
Alexithymia	58.06	10.88	1					
developed defense style	40.57	7.79	**0.31	1				
Neuroticism defense styles	43.43	9.67	**0.25	**0.28	1			
immature defense styles	1.08	21.23	**0.43	**0.29	**0.20	1		
Emotional suppression	16.86	4.23	**0.41	-0.18	0.10	**0.13	1	
Reassessment	26.39	6.26	**0.27	**0.24	-0.04	-0.11	**0.42	1

*P<0.05

**P<0.01

To investigate which variables of emotion regulation and defensive emotional regulation, is predictive of Alexithymia, regression analysis were used.

Data in Table (2) shows the multiple correlation for the regression model is $MR=0.59$ and its square, it means correlation coefficient is equal to $R^2=0.34$ and the coefficient corrected is equal

to 0.33. In other words, 0.20 of changes in emotion regulation (emotional suppression) and components of defensive style (mature and immature) is explained. Also, reassessing

emotion and neurotic defense styles don't have any meaningful contribution in predictors of Alexithymia.

Table 2: Regression analysis for predicting Alexithymia through defense styles and emotional regulation components

Variable	Indicator									
	B	β	T	P	R	2 R	2 R Δ	E.S	F	P
Model					0.59	0.34	0.33	8.90	18.89	0.0001
developed defense style	0.20	0.13	2.81	0.043						
Neuroticism defense styles	0.12	0.08	1.24	0.21						
immature defense styles	0.16	0.32	5.03	0.001						
Emotional suppression	0.77	0.30	4.43	0.001						
Reassessment	-0.13	0.07	1.10	0.27						

Predictor variable: defensive mechanisms, emotional regulation

Criterion variables: Alexithymia

DISCUSSION

The present study aimed to determine the contribution of defense mechanisms and emotion regulation in predicting Alexithymia. The findings show Components of mature defensive style negatively and immature defense styles positively have meaningful relationship with Alexithymia and they are consistent with other studies ([Parker *et al.*, 1998](#); [Wise *et al.*, 1991](#); [Helmes *et al.*, 2008](#)).

For justifying the significant positive relationship between immature defense style, and Alexithymia, it can be noted that Alexithymia perspective that suggests as an unconscious defense against stress, So, in other words, we can say that when the defensive style of a person is immature, in stressful times has been used denial, revocation and neglect styles that are as a kind of immature styles ([Besharat, 2007a](#)) and characteristic of these immature defense style are repression or to keep out undesirable emotions from conscious part that causes inability in cognitive processing of emotional information that leads to the inability to regulate emotion or unspoken emotional ([Taylor and Bagby, 2000a](#)). In justifying the negative relationship of mature defensive style with unspoken emotional, it can be explained that using mature defense mechanisms, in turn, increases the interaction between productivity and the capacity to manage one's emotional ([Besharat, 2007a](#)).

The most important mature defensive styles are sublimated, the realistic forecasts and humor that none of these methods attempt to suppress emotions or lack of experience ([Parker *et al.*, 2003](#)). In addition, mature defensive style makes a positive impact on perceptions and regulates emotional experience and emotion ([Haan, 1977](#)) and this led to better manage emotional experiences and ways to express emotions.

Other variables associated with alexithymia in the present study were to examine the emotional adjustment. The obtained results

show that the components of emotion regulation, emotional repression, have a significant contribution to the prediction of Alexithymia and these findings are aligned with the findings of [Kessler *et al.*, \(2010\)](#) and [Connelly and Denney, \(2007\)](#). In explaining the relationship between emotional suppression and Alexithymia, it can be mention that emotional suppression causes disorder in identifying and describing emotions by people that are the basic features of Alexithymia ([Connelly and Denney, 2007](#)) Moreover, experimental evidence suggests that people with Alexithymia indirectly tend to suppress emotional and this trend is likely due to the problems that these people have in regulating their emotions ([Bekendam, 1997](#)). Finally it can be stated that emotional repression makes people with Alexithymia able to identify their emotions. This is caused to create disruption in showing emotions in social situations.

In addition, the study was limited in selecting samples among the students and assigned to a specific geographic region, and this problem causes that there should be more cautious in generalizing the results to the all members of society. In the end, it is recommended that, if possible, in future studies, clinical samples that are suffering from somatoform disorder will be examined.

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