

## Study of alexithymia among people with low distress tolerance compared to non-clinical sample

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### Abstract

**Background:** Alexithymia is a personality construct described as an asymptomatic clinical disability to identify and describe individual feelings. Individuals with alexithymia have difficulties regarding distress tolerance. The present research aimed at studying alexithymia among people with low distress tolerance in comparison to non-clinical sample.

**Methods:** The study population consisted of all male employees working for General Education Office of Kermanshah Province, Iran. A total of 300 individuals from among these employees were selected based on Morgan table using multistep clustering method. Demographic data questionnaire, Toronto alexithymia scale, and distress tolerance questionnaire were used for data collection.

**Results:** Mean (SD) score for tolerance, attracting, Assessment and Regulation were 7.3 (2.74), 8.4 (3.20), 16.8 (4.99), and 6.7 (2.63), respectively, in the normal group and 22.54 (6.07), 17 (4.28), 30.67 (6.65), and 30.50 (74.6) in the group with low distress tolerance. independent t-test showed that low distress tolerance group had significantly higher score regarding tolerance, absorption, evaluation, and regulation in comparison with the normal group ( $P < 0.001$ ).

**Conclusion:** Findings of the present study can help psychologists and counsellors to pay more attention in alexithymia among people with Low Distress Tolerance to help them for better adaptability and confrontation ability against life difficulties such as distress, and ultimately for better health.

**Keywords:** Alexithymia; Affective Symptoms; Distress tolerance; Emotions; Personality

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### Introduction

Alexithymia has been a familiar concept as "no words for feeling" in psychiatry and psychosomatic medicine since it was first termed by Sifneos (1). Alexithymia is a personality construct described as an asymptomatic clinical disability to identify and describe individual feelings, characterized by affective awareness disorder, social attachment disorder, and interpersonal

relationship disorder. One of the characteristics assigned to individuals with Alexithymia is their difficulty with distress tolerance. It is believed that such a disability to regulate emotions, which makes the individuals prone to get physical and psychological symptoms, is also observed in people with low distress tolerance. Distress may be the result of cognitive or physical processes but manifests in an emotional state often

characterized by action tendencies to alleviate the emotional experience.

Distress tolerance is considered a meta-emotion construct that consists of one's evaluations and expectations of experiencing negative emotional states in respect to 1- tolerability and averseness, 2- appraisal and acceptability, 3- tendency to absorb attention and disrupt functioning, and 4- regulation of emotions, specifically, the consequent strength of action tendencies to either avoid or immediately attenuate the experience (2). People with low distress tolerance get involved in behavioral disorganization due to the wrong effort to cope with their negative emotions. They seek to relieve themselves emotionally by doing destructive behaviors. This strategy appears to be an appropriate practice, especially for those with low distress tolerance (3). Distress tolerance is among typical structures that need to be studied in the field of affective disorders like alexithymia.

As an important structure in development, distress tolerance has led to new insights about onset and persistence of psychological damages as well as prevention and treatment (4). Various definitions have been provided for emotional distress, the best of which defines it as the disability to embrace experiences with totally annoying and discomfiting excitements. This concept indicates how people respond to negative effects (5). Although derangement may be the product of physical and cognitive processes, it is represented emotionally, often characterized by the tendency to do something in order to get rid of that emotional experience, which is conceptualized as a super-emotional state, being regarded not as an emotional state but as a trait (6). In fact, distress tolerance is a concept indicating individual differences, pointing to the capacity of experiencing and resisting emotional discomfort. The previous studies have established the relationship between low derangement tolerance and such factors as substance

abuse, alcoholism and also some psychological disorders like anxiety, depression, and suicide (7).

Other investigations considered mood alexithymia as being associated with disability to evaluate and express emotions. The following are some characteristics possessed by individuals with low derangement tolerance: first, such people pay all their attention to the derangements they suffer because they underestimate their own abilities to cope with emotions, second, they do not admit the presence of excitement, embarrassment, and derangement, and third, they make efforts to avoid negative emotions and to relieve experienced negative ones promptly. It should be noted that if these individuals cannot relieve such emotions, they get deranged, with their performance being reduced considerably (8). Therefore, the present research was aimed at studying alexithymia among people with low distress tolerance in comparison to non-clinical sample.

## Methods

The current research was done following a post-event (causal-comparative) method. Research population consisted of all male employees working for General Education office of Kermanshah Province, Iran. First, a list of all the education department districts of Kermanshah city in the year 2014 was provided, and three districts were randomly selected. Then, a sample of 300 individuals was selected based on Morgan's table using multi-step clustering method in two separate steps. The criteria for entering the research process included a minimum age of 20 and maximum of 60 years of age and having the diploma certificate. After distributing demographic data questionnaire, distress tolerance inventory, and Toronto Alexithymia Scale and then excluding 11 incomplete questionnaires, 86 persons were diagnosed with low distress tolerance who were finally included in the study. In the next step, considering demographic variables,

86 of normal people (normal distress tolerance) were matched and entered into the research process.

#### *Demographic data questionnaire*

The demographic data was collected using a researcher-made self-administrating questionnaire including questions on sex, age, marital status, and education. In order to observe individual privacy, questionnaires were distributed anonymously.

#### *Toronto Alexithymia Scale (TAS-20)*

Made by Bagby et al., and revised in 1994, this scale is a 20-item self-evaluation inventory with 3 dimensions of difficulty with identifying feeling (DIF) (7 items), difficulty describing feelings (DDF) (5 items), and Externally-Oriented Thinking (EOT) (8 items): on dimension of DIF, individuals evaluate their feelings and distinction between feelings and physical senses, On dimension of DDF, respondents can express their feeling verbally, and EOT subscale addresses individuals focusing on external experiences when they deal with their own and others internal feelings. This instrument evaluates participants' responses on a 5-point standard Likert scale ranging from completely agree (1) to completely disagree (5) with total scores in the range of 20-100. Items 10, 5, 4, 19, and 18, are scored inversely because of their negative directions relative to alexithymia. Based on the scale scoring (TAS-20), scores above 60 indicate alexithymia while those below 52 indicate low Alexithymia. This test was reported to have good internal consistency with 0.81 Cronbach's Alpha as well as good re-test reliability of 0.77, which was specified through testing in a three-week interval (9, 10). Besharat et al. standardized the questionnaires by administering them among 709 students (416 females and 293 males) in Tehran University. He reported 0.74 and 0.72 for the validity indices of the scales in Iranian sample using split-half and retest and also reported the reliability index to be 0.85. He respectively reported Intraclass correlation coefficient of 0.87, 0.85, 0.84, and 0.80 for alexithymia and the

three subscales of difficulty identifying feelings, difficulty describing feelings, and externally oriented thinking (11).

#### *Distress Tolerance Scale (DTS)*

This scale has 15 items, with its 4 subscales of emotional distress tolerance being absorbed by negative emotions, subjective estimation of distress and regulating efforts to relieve distress, measuring distress tolerance on the basis of individual's ability to tolerate emotional distresses, subjective evaluation of distresses, and levels of attention to negative emotions, in case of occurring distressful situation, and taking proper steps to relieve them. Simons et al obtained alpha coefficients of 0.72 for Tolerance subscale, 0.82 for Appraisal subscale, 0.78 for Absorption subscale, 0.70 for Regulation subscale, and 0.82 for total distress tolerance scale (12). The study conducted by Azizi showed that alpha coefficients for Tolerance, Absorption, Appraisal, and Regulation subscales were 0.75, 0.77, 0.70, and 0.75, respectively. The test-retest correlation coefficients with two months interval for Tolerance, Absorption, Appraisal, and Regulation subscales as well as the total scale were 0.71, 0.69, 0.77, 0.73 and 0.79, respectively ( $P < 0.001$ ). The correlation coefficient of DTS with problem-focused, emotional-focused, less useful, and insufficient coping with stress were found to be: 0.21, -0.27, -0.33, and -0.19; respectively (13).

The data was analyzed using IBM SPSS Statistics for Windows, Version 19.0. Armonk, NY: IBM Corp. running independent t-test. The current study is part of a research project approved by the Ethics Committee (7/5/5116/p dated 94/7/20) in Kermanshah University of Medical Sciences.

## **Results**

Descriptive findings of the study are illustrated in Table 1.

As shown in Table 2, for all variables, normal group obtained lower scores in distress tolerance scale in compared with the low distress tolerant group. Also, we

used independent t-test to see whether such differences are significant or not; the result are given in Table 2.

As given in Table 3, the alexithymia in normal group was  $50.7 \pm 7.22$ , but in the group with low distress tolerance, the value calculated for alexithymia was  $64.2 \pm 7.98$ . The means and standard deviations of Feelings description problem, Feelings identification problem, and Eternally-oriented thinking are given in this table and in group with low distress tolerance. The amounts of all these three components are more than those in the normal group.

**Discussion**

The present article aimed to study the alexithymia in low distress tolerance in low distress tolerance patients compared with non-clinical individuals. The results showed that the disorder in describing feelings, identifying feelings, thoughts turned to the surface, alignment, assessment, absorption, and tolerability have a significant relationship with alexithymia.

Table 1. Demographic information of the participants in two normal and low distress tolerance groups

Variables		Normal N (%)	Low distress tolerance N (%)	Total N (%)
Age group	20-30	18 (20.9)	15 (17.4)	33 (19.2)
	30-40	32 (37.2)	36 (41.9)	68 (39.6)
	40-50	32 (37.2)	31 (36)	63 (36.7)
	50-60	4 (4.7)	4 (4.7)	8 (4.5)
Education	Primary school	4 (4.7)	4 (4.7)	8 (4.6)
	Middle school	17 (19.8)	15 (17.4)	32 (18.6)
	Diploma	16 (18.6)	17 (19.8)	33 (19.1)
	Associate	13 (15.1)	15 (17.4)	28 (16.3)
	Masters	28 (32.5)	25 (29)	53 (30)
Marital status	Bachelor and higher	8 (9.3)	10 (11.7)	18 (10.4)
	Married	55 (64)	60 (70)	115 (67)
	Single	31 (36)	26 (30)	57 (33)

Table 2. Mean and standard deviation distress tolerance score in both normal and low distress tolerance groups and independent t-test for comparing variables of tolerance, absorption, evaluation, and regulation

	Group	Mean±SD	t	df	95% CI	P
Tolerance	Normal	7.3±2.74	-21.17	170	-16.65_-13.81	<0.001
	Low distress tolerant	22.5±6.07				
Absorption	Normal	8.4±3.20	-14.78	157.2	-9.67_-7.39	0.057
	Low distress tolerant	17±4.28				
Evaluation	Normal	16.8±4.99	-30.36	170	-25.25_-22.16	<0.001
	Low distress tolerant	30.6±6.65				
Regulation	Normal	6.7±2.63	-15.36	157.6	-15.56_12.01	0.05
	Low distress tolerant	30.5±6.74				

Table 3. The mean and standard deviation of alexithymia in both normal and low distress tolerance groups (independent t-test)

Alexithymia	Normal Mean±SD	Low distress tolerant Mean±SD	t	P
Feelings description problem	11.2±3.42	15.9±4.71	11.37	0.001
Feelings identification problem	17.8±4.24	21.9±4.07	9.48	0.001
Eternally-oriented thinking	21.6±3.18	26.3±3.96	9.32	0.001
Total	50.7±7.22	64.2±7.98	18.24	0.001

The results of the present study are in line with those of the study carried out by Azizi et al. (14) indicating that people with the problem of identifying emotions make an effort to get rid of it. People with low distress tolerance show their tolerance as emotion. As these emotions are negatively charged and annoying, these individuals try to get rid of it. Taylor et al. showed, however, that alexithymia is the disorder in emotion regulation or the inability to process emotional information and excitement regulation; the person becomes confused and helpless both emotionally and cognitively when emotional information in the cognitive processing are not well understood and evaluated (15). This inability affects individual's emotions and knowledge (8). In this case, facing stressful events leads to psychological damage. Simoon et al. observed that people with low distress tolerance have less potential, capacity, and resistance to emotional distress. They are aware of the fact that they cannot tolerate their inability and feel that others are better able to cope with negative emotions; as a result; they feel ashamed of their inability to tolerate negative emotions. Given the lack of perceived coping ability and inability to manage disturbing emotions, people try to avoid experiencing negative emotions. If the avoidance is not obliged, then he might be experiencing emotional distress. If such adverse solutions are not helping, it most likely will focus all their energy on their emotions which eventually will disrupt their function. When the emotional information cannot be perceived and evaluated in cognitive processing, people become cognitively and emotionally disorganized and the

frustration and the inability may impair their emotions and cognitions. These people, due to their lack of emotional awareness and cognitive inability to process their feelings, are usually unable to identify, understand, or describe their emotions and have limited ability to cope with stressful situations. Also, those with emotional alexithymia have a limited ability to cope with stressful situations and when dealing with a traumatic event get emotionally distressed because of the inability to regulate and manage emotions. Also, in the present study, we observed a significant difference in alexithymia between people with low distress tolerance and non-clinical ones, which is consistent with findings reported in similar studies (15-21).

Considering the role of emotional deficit in people with alexithymia and approval of the fact that the ability to effectively express emotions can lead to better compatibility and ability to deal with life's problems, including confusion and distress and ultimately better health, it can be stated that the present research could pave the way for further studies to investigate the bad regulation variable of emotion in people with alexithymia. It is recommended that other researches consider the presence of women in order to determine the presence or absence of gender differences. Since the present study was done on a typical employee case, it is recommended that care be taken while generalizing the results. Findings of the present study can help psychologists and counselors to pay more attention to alexithymia among people

with low distress tolerance to help them for better adaptability and confrontation ability against life difficulties such as distress, and ultimately better health.

#### *Conflict of interest*

Authors declare no conflict of interests.

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