

Examining the Efficacy of the Unified Transdiagnostic Treatment on Social Anxiety and Positive and Negative Affect in Students

Khadijeh Roushani,^{1,*} Soodabeh Bassak Nejad,¹ Nasrin Arshadi,¹ Mahnaz Mehrabizadeh Honarmand,¹ and Ahmad Fakhri²

¹Department of Psychology, Shahid Chamran University of Ahvaz, Ahvaz, Iran

²Department of Psychiatric, Faculty of Medicine, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran

*Corresponding author: Khadijeh Roushani, PhD Student, Department of Psychology, Shahid Chamran University of Ahvaz, Ahvaz, Iran, E-mail: kh_roushani@yahoo.com

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Abstract

Background: Social anxiety is an extremely harmful disorder affecting many aspects of life and causes limited capability of encountering social situations among individuals.

Objectives: The purpose of this study was to examine the efficacy of the unified transdiagnostic treatment on social anxiety and positive and negative affect in students.

Methods: The statistical population of this study included all female undergraduate students with social anxiety in Ahvaz Jundishapur University of Medical Sciences. 32 female undergraduate students of medical sciences university of Ahvaz were selected among those with social anxiety score of 19 or more (cut-off score) through multistage random sampling method and were randomly placed in experimental and control groups. Social phobia inventory (SPIN) and positive and negative affect schedule (PANAS) were implemented on subjects of both groups before and after conducting the intervention. Unified transdiagnostic treatment was performed on the experimental group within 8 sessions of 90 minutes, but the control group received no intervention. Data were analyzed by multivariate covariance analysis.

Results: Results showed a significant difference between experimental and control groups in terms of social anxiety and negative and positive affect, and unified transdiagnostic treatment has reduced social anxiety and negative affect and also has increased positive affect in experimental group.

Conclusions: It may be concluded based on the results of this study that unified transdiagnostic treatment is effective on recovery of social anxiety and negative and positive affects among the students. Therefore, clinical therapists are advised to use this intervention.

Keywords: Unified Transdiagnostic Treatment, Social Anxiety, Positive and Negative Affect

1. Background

Social anxiety is a global phenomenon that may have different intensities at any time or in given individuals. When intensity of anxiety, avoidance, and disorder in function reaches a clinical rate, social anxiety may be diagnosed (1). Hence, the disorder is defined as follows: noticeable or intense phobia or anxiety about social situation under which the individual's behavior and function may be precisely evaluated by others (2). This disorder, as the third most prevalent psychiatric disorder placed after major depression and alcoholism (3), is an extremely harmful disorder affecting many aspects of life and creates numerous side-effects on the quality of social interactions, academic progress, and welfare (4). Various studies in Iran imply high degree prevalence of this disorder especially among women (5, 6) and epidemiologic studies among students also indicates high prevalence of this disorder among the students (7, 8). The main assumption of such individu-

als is that others are basically critical and they evaluate them negatively (9) and this attitude model would probably limit their confrontation with risky conditions such as joining their peer groups or being present in grave social events (10). Individuals with social anxiety tend to set low experiences and expressing themselves, and show less positive affect compared to non-anxious individuals (11) and do not use opportunities to follow those activities that may create positive affect (12). Besides assessing occurrence of positive events with less possibility and having a weak self-perception, these individuals also show a discrepancy between perceived social standards and their perceived social capabilities, and this causes the said individuals experience more negative affect.

Although different methods are proposed for treating this disorder, studies show that cognitive-behavioral interventions are more practical and effective. Cognitive-behavioral therapies include a set of interventions having

basic idea in common, that is cognitions leave a deep and causal effect on affections and behaviors, and hence, they would serve for permanence of psychiatric issues (13). One of the methods compiled in recent years among new evolutions in the field of cognitive-behavioral therapies, is transdiagnostic cognitive-behavior therapy (unified approach) brought by Barlow et al. (2011) (14) and has designed for individuals with emotional disorders, especially those with anxiety and temper disorders. Unified transdiagnostic intervention targets basic elements of mental harms and may be applied on disorders and issues with same and similar bases (15).

Results of studies made by Mohammadi (2011) and Lotfi, Bakhtiyari, Asgharnezhad & Amini (2014) on examining comparison between effectiveness of unified transdiagnostic treatment and cognitive therapies (CT) as well as cognitive-behavioral therapies (CBT) showed that unified transdiagnostic treatment is more effective compared to the aforesaid methods. Moreover, the results of their studies showed that unified transdiagnostic treatment improves individuals' affects (15, 16). In their study, Ornelas Maia, Nardi, & Cardoso (2015) showed that that unified transdiagnostic treatment compared to pharmacotherapy is more effective in treatment of anxiety and depression disorders among patients (17). Permanence of effects of unified transdiagnostic treatment on emotional disorders was also examined in a study conducted by Bullis, Fortune, Farchione & Barlow (2014) during 6, 12, and 18-month follow-up periods. Results of this study showed the first support for permanence of achievements obtained from extensive therapies followed by unified transdiagnostic treatment (18). Unified transdiagnostic protocol was applied by Ellard et al. (2010) on a heterogeneous sample of emotional disorders (including generalized anxiety disorder, social anxiety disorder, obsessive-compulsive disorder, panic disorder, PTSD and depression). Results of this study indicated effectiveness of this intervention (19). Results of a study made by Farchione et al. (2010) also showed that unified transdiagnostic intervention leads to considerable improvement in general symptoms of anxiety, depression and levels of positive and negative affections (20). In their study on examining efficiency of unified transdiagnostic treatment in reducing the intensity of symptoms among individuals with generalized anxiety disorder accompanied by comorbid emotional disorder, Abdi, Bakhshi & Mahmoud Alilou (2013) showed that transdiagnostic intervention reduces intensity of therapy targets (worry, negative affect, generalized anxiety symptoms, comorbid emotional disorder, and function harm) (21). Also effectiveness of unified transdiagnostic treatment on negative affection as well as negative reaction to emotions was examined in a study by Sauer-Zavala et al. (2012). Re-

sults of their study showed unified transdiagnostic intervention has decreased the frequency of negative emotions and reactivity to emotions (22). With regards to above-mentioned points and regarding that transdiagnostic protocols including unified transdiagnostic protocol of Barlow group have been designed to target cognitive and behavioral processes in a wide range of psychological disorders.

2. Objectives

The present study seeks to answer this question: Is unified transdiagnostic intervention effective on social anxiety and negative and positive affects among students?

3. Methods

The statistical population of this study included all undergraduate female students with social anxiety symptoms in Ahvaz Jundishapur University of Medical Sciences. At first, according to Krejcie and Morgan table, 300 students were examined by social anxiety inventory through multistage random sampling method in order to select the sample in this study. To do so, two faculties (paramedical and health care) were randomly selected out of 4, 3 fields of study were selected in each faculty, and 3 classes were selected for each field. Social Phobia Inventory (SPIN) were handed out among female students in each class. Among 300 students, 113 out of them achieved score 19 and more (cut off point value is determined based on Connor et al.'s study) (23). 83 students of them carried out clinical interview through structured clinical interview for DSM-IV disorders (SCID). According to the results of the interview and considering the criteria of inclusion (majoring as BA students, studying at third semester or above, being between 20-35 years old, having social anxiety score of 19 or above, being female and interested in participating intervention sessions) and exclusion (taking psychiatric medicines and psychedelics, having other mental disorders, enrolling in psychotherapy within the past 6 months and 3 absences during intervention sessions), 61 students approved to have social anxiety symptoms and the rest were excluded from sampling process. Finally, 32 students with social anxiety symptoms were selected through simple random method (by lottery) and were randomly divided into two groups of 16 as experimental and control groups. After explaining the study and its conditions, receiving written informed consent from subjects, and implementing pretest, interventions were carried out on the experimental group collectively during 8 weekly sessions of 90 minutes, while the control group did not receive any

treatment. After completion of the intervention process, posttest (SPIN and PANA) was carried on both groups. Regarding that 3 absences during the sessions were among exclusion criteria, therefore data belonging to 2 individuals from experimental group subjects and 1 individual from control group were not included in the final analysis and ultimately, data belonging to 29 individuals from experimental group (14) and control group (15) were statistically analyzed. The summary of sessions is provided below.

3.1. Content of Therapeutic Intervention

3.1.1. Session 1

Motivation enhancement: Intervention structure, process, and model were introduced in this session. Also intervention logic and purpose (in order to increase the rate of participation and maintain the individual's motivation for treatment engagement) were presented.

3.1.2. Session 2

Psychoeducation: This session included psychoeducation about the nature and function of emotions.

3.1.3. Session 3

Emotional awareness training: This session was held to increase non-judgmental, present-focused of their emotional experiences and learning observation of emotional experiences (emotions and responses to emotions), especially using mindfulness techniques.

3.1.4. Session 4

Correction of cognitive appraisals: Reciprocal influence between thoughts and emotions, identification of automatic maladaptive appraisals, and common thinking traps and cognitive reappraisal and increasing flexibility were considered in this session.

3.1.5. Session 5

Identifying patterns of emotion avoidance: Concept of emotion avoidance and types of emotion avoidance strategies and its effects on emotional experiences and also awareness about paradoxical effects of emotion avoidance were described.

3.1.6. Session 6

Examining emotion-driven behaviors (EDBs): Familiarity and identifying Emotion-Driven Behaviors and understanding their effect on emotional experiences, identifying maladaptive EDBs, and creating inconsistent behaviors and emotional exposure were examined in this session.

3.1.7. Sessions 7 and 8

Interceptive and situational emotional exposures: These sessions focused on awareness and tolerance of physical sensations, exposure to both internal (including physical sensations) and external emotional triggers and helping the individuals to increase their tolerance of emotions and create new contextual learning. At the end, in order to relapse prevention, the individuals were encouraged to use therapeutic techniques to improve progression in reaching short-term and long-term goals.

3.2. Instruments

3.2.1. Social Phobia Inventory (SPIN)

This questionnaire is a self-rating tool that includes 17 items, consisted of three sub-scale of fear (6 items), avoidance (7 items), and physiologic arousal (4 items). Every item of this questionnaire is scored according to Likert's 5-degree scale "not at all = 0, a little bit = 1, somewhat = 2, very much = 3, extremely = 4". The reliability of this questionnaire has been ranging from 0.78 to 0.89 and the internal consistency with alpha coefficient in a group of normal individuals for the whole scale is 0.94, and 0.89, 0.91, and 0.8 for sub-scales of fear, avoidance, and physiologic arousal respectively (23). Validity and reliability of this questionnaire was calculated for a non-clinical sample in Iran. Alpha coefficient of this questionnaire was 0.94 for the whole scale, and 0.94, 0.93, and 0.93 for factors of phobia, complaint, and avoidance respectively (24). Also, in the current research the reliability of the questionnaire was calculated by the method of Cronbach's Alpha, with the result of 0.71.

3.2.2. Positive and Negative Affect Schedule (PANAS)

This scale is a self-measuring tool of 20 items designed for measuring two temperament dimensions of PA and NA (25). Each sub-scale has 10 items rated on a five-point scale "ranging from never = 1 to very much = 5". Reliability with inner compatibility coefficients method was reported to be 0.87 for NA and 0.88 for PA (26), and reliability of 8-week test-retest within different time tables was 0.68 for PA and 0.71 for NA. Moreover in terms of validity, correlations between these sub-scales with some measurement tools measuring structures related to these affects - such as anxiety and depression - have been reported to be high (26). Results from a study made by Bakhshipoor and Dejkam (2005) on 255 students with depression and anxiety disorders approved two-factor structure of positive and negative affects inventory, and coefficients of Cronbach's alpha was calculated 0.87 for both sub-scales (27). Also in the present study, reliability of this tool was calculated by Cronbach's alpha as being 0.85 for positive affect and 0.90 for negative affect.

3.2.3. Structured Clinical Interview for DSM-IV Disorders (SCID)

SCID is a structured interview used to fulfill research and medical needs in diagnosis of mental disorders of axis I and II in DSM (28). SCID-I is administered in a single session and takes about 45 to 90 minutes to be completed. The reliability and feasibility of the Persian version of this diagnostic tool were already determined as fair to good for most diagnostic categories ($\kappa > 0.6$) (29). SCID-II was also compiled for diagnosing personality disorders. It contains 119 yes/no questions and its completion takes less than 20 minutes. The content validity of Persian version has been approved by some psychological professors (30) and its reliability through test-retest with a one week interval was 0.87 (31).

4. Results

4.1. Descriptive Findings

Table 1 shows the mean and standard deviation of the social anxiety and positive and negative affect at the experimental and control groups in pretest and posttest stage.

Leven test was used to examine homogeneity of the variable's variance. Results of this test are shown in Table 2.

As shown in the results of Table 2, there is no significant difference between variances of social anxiety and positive and negative affect scores. That means that the presumption of equity among variances of scores in test and control groups is confirmed.

Also, the assumption of homogeneity of regression slopes is a key factor in covariance. In this study, equality existed between covariate variables (social anxiety and positive/negative affect pretests) and dependent variables (social anxiety and positive/negative affect posttests) at all factor levels (experimental and control groups). Moreover, an insignificant interaction was observed between dependent and covariate variables. Therefore the assumption of homogeneity of regression gradient was also approved.

4.2. Findings Related to Study Hypotheses

Table 3 shows the result of multivariate analysis of covariance (MANCOVA) on posttest scores along with controlling pretests of dependent variables of the study (Social anxiety and positive and negative affect).

Contents of Table 3 show that there is a significant difference between experimental and control groups in terms of at least one dependent variables. One-way analysis of covariance in the MANCOVA text on dependent variables (social anxiety and positive and negative affect) was made to examine the point of difference. Results of this analysis are shown in Table 4.

As observed in Table 4, there is a significant difference between the subjects of experimental and control groups in terms of social anxiety ($F=16.85$, $P=0.0001$), positive affect ($F=71.76$, $P=0.0001$), and negative affect ($F=100.92$, $P=0.0001$). In other words, unified transdiagnostic treatment reduced social anxiety and negative affect, and increased positive affect in experimental group compared to the control group.

5. Discussion and Conclusion

The first finding of the present study showed that unified transdiagnostic intervention reduces social anxiety among experimental group students compared to the control group. This finding is in line with the results of similar studies (16-19). Clark and Wells (1995) believe that individuals with social anxiety alter their attention to their within when facing social threats, and they begin self-monitoring and full self-observation (32) and since they evaluate their function under social situations, and evaluate their function even when there is a difference in their real function compared to non-anxious individuals, they try to avoid situations under which they might be evaluated by others (33). Therefore, they passively avoid challenging events and new situations. This leads to permanence of their fear about social situations. In unified transdiagnostic treatment, the possibility of direct challenge with beliefs, assumptions, and expectations of the clients is provided by strategy of cognitive re-appraisal and it helps individuals to alter their negative beliefs through paying attention to alternative interpretations and testing evidences supporting or rejecting their automatically negative thoughts. Also this therapy helps patients correct their evaluations about danger of physical sensations related to anxiety and social situations by confrontation strategies under two forms of interceptive and situation-based emotion exposures (14). Thus, cognitive re-appraisal and repeated confrontations with fearsome situations without applying any type of emotion avoidance strategies (including subtle behavioral avoidance, cognitive avoidance and safety signals), sets individuals free from strict thinking patterns, so that they would no more consider themselves victims of inner or outer threats and therefore would have no more fear about being under social situations.

The second finding of this study indicating effectiveness of unified transdiagnostic intervention on positive and negative affections of the students has also been considered, and results showed that transdiagnostic intervention would reduce negative affection and increase positive affection among the students of experimental group compared to those from the control group. Findings of this study are in line with those of similar studies (15, 16, 20-22).

Table 1. The Mean and Standard Deviation of the Social Anxiety and Positive and Negative Affect at the Experimental and Control Groups in Pretest and Posttest Stage

Variable	Group	N	Pre-test		Posttest	
			Mean	SD	Mean	SD
Social Anxiety	experimental	14	30.5	6.85	21.21	10.61
	control	15	27	8.41	29.21	8.51
Positive Affect	experimental	14	27.5	7.29	36.57	8.06
	control	15	29.46	4.45	29.86	4.8
Negative Affect	experimental	14	30.71	6.83	21.35	6.46
	control	15	28.6	6.31	29.46	6.36

Table 2. Levene's Test of Equality of Error Variances

Variable	F	df1	df2	Sig.
Social Anxiety	0.496	1	26	0.487
Positive Affect	2.597	1	26	0.119
Negative Affect	0.523	1	26	0.476

Table 3. Multivariate Analysis of Covariance (MANCOVA)

	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Pillai's trace	0.85	41.3	3	21	0.0001	0.85
Wilks' lambda	0.14	41.3	3	21	0.0001	0.85
Hotelling's trace	5.9	41.3	3	21	0.0001	0.85
Roy's largest root	5.9	41.3	3	21	0.0001	0.85

Table 4. One-Way Analysis of Covariance in the MANCOVA Text

Dependent Variable	Sum of Squares	df.	Mean Square	F	Sig.	Partial Eta Squared
Social anxiety	887.96	1	887.96	16.85	0.0001	0.42
positive affect	527.36	1	527.36	71.76	0.0001	0.75
negative affect	654.99	1	654.99	100.92	0.0001	0.81

Regarding cognitive-behavioral models of social anxiety disorder (9, 32, 34), emotions and behaviors related to social anxiety due to cognitions, especially beliefs and assessments that individuals maintain in social situations and in relation with them. Studies have shown that individuals with social anxiety view themselves as being socially inept or undesirable, probably more than non-anxious ones and they see others as being critical evaluators who hold unreachable or overly rigid standards for social performance and find themselves undesirable in every aspect repeatedly (35-38). Indeed, these individuals see a difference between their ability and their self-worth and they think they are in the middle of all problems (39).

These beliefs are in turn, followed by increased automatic arousal, increased negative affect and decreased positive affect (39, 40). In unified transdiagnostic approach, emotional experience and response to emotions are considered the main pillar of treatment, and treatment sessions teach patients that all emotions are necessary, no matter if they are positive or negative, even those that might be undesirable and unpleasant, and that the therapy objective is not to remove them, but to identify, tolerate, and coping with them (14). Results of studies made by Farchione et al., (2012) and Ellard et al., (2010) also show that this therapeutic protocol plays a role in increasing positive affect and decreasing negative affect because of involving the

patients in reducing behavioral patterns caused by emotions and replacing them with joyful behaviors (19, 20). Therefore, understanding the adaptive nature of emotions and increasing emotional awareness and special attention paid by unified transdiagnostic treatment to emotions, are among factors that may lead to effectiveness of this intervention on positive and negative affects of the individuals.

It is noteworthy that since the present study was conducted on undergraduate students, therefore generalization of its results to the students of other education systems must be handled with care. Also, this study has only been conducted on girls, therefore enough care must be paid in generalizing them to boys too.

Finally, it is recommended for future studies to examine this intervention on different samples such as children and elderly and in different levels such as school and families. Regarding that the sample of the present study was only consisted of girls, it is recommended to make future studies on boys as well. It is also recommended to use this method more aiming at preventing formation of emotional disorders.

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