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A STUDY ON IMPROVING THE ANXIETY, STRESS AND DEPRESSION LEVEL AMONG PSYCHOSOMATIC PATIENTS THROUGH COGNITIVE LANGUAGE THERAPY

Original scientific paper

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ABSTRACT

The psychosomatic condition affects the hippocampus, temporal role, and parietal lobes of the brain. People with Psychosomatic condition displays poor language skills, higher level of cognitive dysfunction, Memory disorders, Anxiety level, Depression, and stress level. Cognitive language therapy aids learners towards the improvement of anxiety, depression, and stress levels. The sampling method employed in the study is the purposive sampling method. DASS 21 was used to analyze the stress, anxiety, and depression levels before and after the intervention. Cognitive language therapy activities like chunking, embroidery, and identifying errors were given to the learners to reduce the impact of stress, anxiety, and depression among individuals with the psychosomatic condition. The paired t-test in SPSS was performed and from the study findings, it is concluded that the participants displayed a low to medium range of depression after the intervention of cognitive language therapy. Through paired samples test, the significance value for all three pairs (Depression, anxiety, and stress) is 0.000, which is lesser than 0.05. Hence, there is a considerable improvement in depression, anxiety, and stress levels among the participants with the psychosomatic condition as a result of cognitive language therapy intervention.

Keywords: Anxiety, Stress, Depression, cognitive therapy, Psychosomatic condition

INTRODUCTION

A psychosomatic illness is a psychological disorder that frequently has physical symptoms and leads to high patient anxiety and stress levels. The human body and its parts are vulnerable to Psychosomatic illness, as it affects the cardiac system, digestive system, Immune system, respiratory system and Physical symptoms. People with psychosomatic illness always feel anxious and stressed and prefer to be in medical attention. However, appropriate medical treatment and activities will aid in the betterment of anxiety and stress levels. According to Kurlansik and Maffei (2016), Psychosomatic illness is a prevalent disorder that affects people of all ages., children, adolescents, and adults. Its prevalence is believed to be between 5% and 7% of the general population, where females tend to affect more than men in the ratio of 10:1. Creed and Barsky (2004) identify that psychosomatic illness was more prevalent among primary care patients with diabetes, asthma, acute injuries, ulcers, and cancer diagnosis. The frequency of psychosomatic conditions was high among patients with "fibromyalgia, irritable bowel syndrome, and chronic fatigue syndrome" (Hauser, Bialas, Welsch, & Wolfe, 2015). Psychosomatic patients often get anxious and stressed about the medical symptoms and pain of the illness. People who experienced psycho-emotional distress,

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psychological disorders, erratic way of life, a problem in understanding and expressing emotions, loneliness or neglection during childhood, sexual abuse, drug addiction, and personality disorders were vulnerable to psychosomatic illness. The most common symptoms of Psychosomatic illness are sleeplessness, dizziness, severe aches, shortness of breath, skill allergies, headaches and indigestion issues (D'Souza & Hooten, 2022). Lacourt, Houtveen, and van Doornen (2013) identified the symptoms of psychosomatic patients into seven major categories (gastrointestinal symptoms, cognitive symptoms, respiratory symptoms, cardiac symptoms, musculoskeletal symptoms, physical fatigue symptoms, and physical symptoms) comprising 47 items. Psychosomatic patients usually have two to three bodily symptoms. Due to the symptoms and pain the individuals undergo, they are depressed and anxious. Appropriate medical treatment, medication, and antidepressants will help in managing the condition. Anxiety and depression were common among patients with psychosomatic conditions and physical ailments. Many researchers have confirmed the notion through periodical research. Hashiro and Okumura (1997) affirm that atopic dermatitis patients displayed displays a higher level of anxiety symptoms, depression symptoms and psychosomatic symptoms and were in three varying degrees (Mild symptoms, moderate symptoms and severe symptoms). They suggest that the patients must be treated with medical advice, medications, psychological therapies and psychological counseling. Wielgus et al. (2020) confirm the highly significant correlation between the anxiety level and psychosomatic symptoms during covid pandemic. A higher level of anxiety and psychosomatic condition is often associated with higher psychopathological symptoms. The research concludes that psychological balance, laxness and mindfulness will reduce the impact of psychosomatic symptoms and anxiety levels. Mckenna (1972) also reported that psychosomatic symptoms and anxiety levels were more prevalent among obese participants. The research concludes that obesity level has increased the anxiety level and elevated psychosomatic symptoms where obese people have taken a higher amount of food due to anxiety when compared to normal individuals. Mckenna concluded that Physical condition significantly impacts anxiety and psychosomatic condition. Abramson and Wunderlich (1972) reconfirm the above notion and conclude that obese individuals displayed a high level of anxiety and fear and showed disturbed eating

practices. Satsangi and Brugnoli (2018) also assert that psychosomatic symptoms and anxiety levels are relatively high among patients in palliative care, clinical hypnosis treatment and meditative training. According to Hindustan times (2022), anxiety level affects the heart and frontal lobe of the brain which eventually affects the central nervous system. Wientjes & Grossman (1994) also affirm that psychosomatic illness leads to anxiety, disturbed heart rate, and an over-reactive mind. Greene and Walker (1997) assert that psychosomatic symptoms, stress, and depression level were more prominent among adolescents. Wong and Fong (2015) confirm that a high level of anxiety proportionately increases the stress level among psychosomatic patients. They confirm that psychosomatic symptoms and anxiety were the mediating factors. Cognitive language therapy is defined as the psychological language-based treatment used to reduce the impact of psychological disorders, anxiety, depression, and stress disorders. Matsuoka et al. (2017) assert that "Cognitive behavioural therapy (CBT) has been applied for various problems, including psychiatric diseases such as depression and anxiety, and physical symptoms such as pain". Waring (1980) also concludes that cognitive therapy has improved chronic psychosomatic conditions among the individuals. Cognitive language therapy was used as psychiatric therapy to improve adolescent school students' speech and anxiety levels (Nnamani et al., 2019). The psychosomatic condition affects the hippocampus, temporal role and parietal lobes of the brain. Hence, people with Psychosomatic condition displays poor language skills, higher level of cognitive dysfunction, Memory disorders, Anxiety level, Depression and stress level. Cognitive language therapy aids learners towards the improvement of anxiety, depression and stress levels (Waring, 1980). The current study intends to analyze and improve the anxiety, depression and stress levels of the individuals who have psychosomatic condition through cognitive language therapy. The study employs the "Depression, Anxiety and Stress Scale DASS-21", which was devised by P. F. Lovibond and S. H. Lovibond (1995). "The depression, anxiety and stress scale" have 21 items ("7 items for depression, seven items for anxiety and seven items for stress"). Cognitive language therapy activities like chunking, embroidery, and identifying the errors were given to the individuals to decrease the level of anxiety, stress and depression among individuals with the psychosomatic condition.

METHOD

Samples and Sampling Method

The samples of the study were undergraduate late adolescent engineering students from the Vellore district. The criteria for selecting the samples were undergraduate students from urban engineering colleges, late adolescent learners, ESL learners with psychosomatic condition, and with smart phone accessibility. According to Kallakuri et al. (2018), mental and physical problems are three times more prevalent in metropolitan regions of India than in rural ones. Vellore has been categorized as one of the cities under Tamil Nadu. The Vellore district is regarded as having a weak educational system, according to a study from the Union Government published in 2021. In the state of Tamil Nadu, Vellore is ranked sixth in terms of educational backwardness. The sampling method employed in the study is purposive sampling method. Learners with the psychosomatic condition were selected as the samples from the population through Psychosomatic Symptom Questionnaire (PSQ) inventory by Tamara Lacourt et al. (2013), which has 47 items. Transitioning from childhood to adolescence is challenging for psychological development and memory enhancement (Khatoon & Roy, 2017). The World Health Organization claims that (WHO, 2021), one in seven late adolescent people has psychosomatic illnesses. Hence late adolescents were selected as the age group for the present study.

Objectives

The study aims to identify and improve the anxiety level, depression, and stress levels of participants who has psychosomatic condition through cognitive language therapy. The null hypothesis was formulated for the study based on the objectives and variables. H01: There is no significant change in the anxiety, stress, and depression levels among the participants with the psychosomatic condition as a result of cognitive language therapy intervention.

Method and Design of the Study

The method employed in the study is experimental. The duration of the intervention was eight weeks. The study employs both qualitative and quantitative research approaches. The psychosomatic Symptom Questionnaire was circulated to 320 late adolescent students from an urban engineering college in the Vellore district. One hundred sixty samples were selected as the study participants through Psychosomatic Symptom Questionnaire, as the samples displayed two to three psychosomatic symptoms. Consent was obtained from the samples before beginning the intervention. Prior permission has been obtained from P. F. Lovibond and S. H. Lovibond (1995) for using the 'Depression Anxiety Stress Scale (DASS)" inventory with 21 items to identify the depression, anxiety, and stress levels among the participants with the psychosomatic condition. DASS inventory was circulated to 160 participants as pre-study and post-study questionnaires to analyze the anxiety, stress, and depression levels of the participants before to and following the intervention. Pre-questionnaire and post-questionnaire scores were calculated through DASS rating scale (0,1,2,3). The scale scores must be multiplied by two, and the overall sum must be calculated. Based on the scores, depression, stress, and anxiety level will be dissented into five sets "normal, mild, moderate, severe, and extremely severe". If the DASS value of depression is above twenty-eight, it means highly severe, whereas if the DASS value of anxiety is above twenty, the individual has extremely severe anxiety. However, the stress condition is highly severe if the scores exceed thirty-four. Following interventions were applied to the selected participants. Cognitive language therapy was applied as an intervention for the selected participants for eight weeks. Cognitive language therapy like chunking, embroidery, the story is full of blanks, and identifying the error was given to the learners during the intervention. The researcher has created the android application and the Cognitive activities, pre-questionnaire, post-questionnaire, and materials were embedded in the application. The application was circulated to the selected participants. Cognitive language therapy has evaluative and analytical reading tasks and activities. A progressive test for thirty marks was conducted to analyze the scores of the samples. Four progressive tests were conducted.

Data collection and tool

The data was collected through the Psychosomatic Symptom Questionnaire (PSQ) and DASS-21. Prior permission has been obtained from both Tamara Lacourt (2013) and P. F. Lovibond and S. H. Lovibond (1995). The collected data was analysed using IBM SPSS software. The questionnaire's validity was tested using the Cronbach alpha method and Bivariate analysis. Pre-questionnaire and post-questionnaire data were analyzed using the tests like frequency

tests and descriptive statistics. A paired t-test was also carried out to find how the values varies in both pre-questionnaire and post-questionnaire.

Data Collection and Ethical consideration

Samples were selected for the study based on the GARP guidelines of the Indian University Grants Commission. The consent was obtained through Google Forms, which was sent to participants. Primary demographic data like name, email id, age, and institution name were obtained from the participants. The study was explained in detail to the participants on the beginning page of the Google form. The study participants have the freedom and right to withdraw from the research study. Data obtained from the participants were interpreted and analyzed anonymously and confidentially.

RESULTS AND DISCUSSIONS

PSQ was used to identify the individuals with the psychosomatic condition. The symptoms of patients with psychosomatic illnesses were divided into seven primary groups by Lacourt et al. (2013), a total of 47 items in each: gastrointestinal symptoms, cognitive symptoms, respiratory symptoms, cardiac symptoms, musculoskeletal symptoms, physical tiredness symptoms, and physical symptoms. The gastrointestinal symptoms are "upset stomach, abdominal pain or stomach pain, bowel cramps, and bloated stomach". The cognitive symptoms include, "difficulty concentrating, forgetfulness, having trouble paying attention, unclear or foggy thoughts, distracting thoughts, confusion or feelings of unreality". The respiratory symptoms

are "feelings of dyspnea, shortness of breath, inability to take a deep breath, sudden fast or deep breathing, and breathlessness". Cardiac symptoms include "chest pain, rapid heartbeat, pounding heart, tightness around the chest, irregular heartbeat, and painful stings in the heart area". Musculoskeletal symptoms are "muscle pain, pain in bones, pain in joints, back pain, pain in the neck, and stiffness of fingers, arms, or legs". Physical symptoms include "feeling low on energy, feeling tired, feeling exhausted, feeling physically weak, not feeling fit, and feelings of muscle weakness, excessive sweating, hot or cold flashes, dry mouth, headache, trembling of hands, arms, or legs, tingling feeling in fingers, arms, or legs, numb feeling somewhere in the body, nausea, fainting, having trouble swallowing, sore throat, rustling sound in ears, lump in the throat, dizziness" (Laucort, 2013). The reliability test was analyzed using the Cronbach alpha test. The test data were tabulated in Table 1. The Cronbach alpha coefficient value of psychosomatic symptom questionnaire is 0.876. The value is above 0.07; hence the data is reliable. Whereas the Cronbach alpha coefficient of the "Depression Anxiety Stress Scale (DASS)" Questionnaire is 0.925, which means the data is highly reliable. The questionnaire results show that over 32% of participants had two to three gastrointestinal symptoms. Over 24% of the participants displayed cardiac symptoms, and over 54% displayed breathing symptoms. Almost 42% of the participants displayed cognitive symptoms, 38% of the participants had musculoskeletal symptoms, 56% of the participants possessed cognitive symptoms, and 64% of the participants had physical symptoms.

Table 1. Reliability of the Questionnaire

Questionnaire	No. of Items	Cronbach Alpha Coefficient
Psychosomatic Symptom Questionnaire (PSQ)	47 Items	0.876
Depression Anxiety Stress Scale (DASS)	21 Items	0.925

The samples were selected based on the number of psychosomatic symptoms. One hundred sixty samples were selected for the study. Depression Anxiety Stress Scale (DASS) questionnaire was circulated to participants as a pre-questionnaire and post-questionnaire. Pre-questionnaire data has been tabulated in Table 2. In the DASS questionnaire, "item 1, item 6, item 8, item 11, item 12, item 14, and item 18 were categorised as stress categories. However, items like items

2, item 4, item 7, item 9, item 15, item 19, and item 20 were categorised as anxiety. Item 3, item 5, items 10, item 13, item 16, item 17, and item 21 were categorised as depression" (P. F. Lovibond & S. H. Lovibond, 1995). Table 2 presents the data of the pre-questionnaire data of the participants. N represents the total number of participants. From the table, it is very apparent that individuals with psychosomatic conditions had significant levels of anxiety,

depression, and stress. Over 107 participants affirmed that they find it challenging to stress down after a difficult situation, whereas over 90 participants affirmed that they tend to overreact to everyday situations. Almost 119 participants put forth that they often become nervous about the situation. However, over 96 participants confirmed that they often feel agitated about the situations happening in life and often find the situation very difficult to relax. Almost 120 participants affirmed that they feel intolerant towards the issues and situations. Over 84 participants accepted that they have unexplained fear. In the depression scale, as the responses mean value ranges from 1.73 to 2.04, it is concluded that the participants displayed a high range of depression. Over 90 participants affirmed

that they experience dry mouth, rapid breathing, trembling hands and difficulty breathing. Almost 103 participants confirmed that they often get panic feelings, and over 80 participants affirmed that they feel scared without any reason. The mean value of the anxiety scale ranges from 1.71 to 2.05. Hence it is evident that the participants displayed a considerable amount of anxiety level. Almost 100 participants affirmed that they hardly had a positive feeling and felt challenged to initiate doing daily activities. Over 106 participants concluded that they felt down-hearted, non-enthusiastic, worthless, and afraid about the situations in life. The mean value of the stress scale ranges from 1.75 to 2.22, which is indicated that the participants displayed high-stress levels.

Table 2. Descriptive statistics of Pre-questionnaire (DASS 21, N=160)

Items	Mean	Std.Dev	St. Error mean	Frequency			
				1	2	3	4
Depression Scale							
Item 1	1.83	1.09	.08682	21	24	51	56
Item 6	1.78	1.10	.08750	24	46	30	60
Item 8	2.01	0.86	.06752	8	33	68	51
Item 11	1.76	1.06	.08422	26	35	49	50
Item 12	1.84	1.07	.08530	20	47	31	62
Item 14	2.07	0.87	.06956	8	32	60	60
Item 18	1.73	1.15	.09107	37	21	49	53
Anxiety Scale							
Item 2	1.77	1.07	.08516	24	46	37	53
Item 4	1.90	0.87	.06936	8	46	60	46
Item 7	1.83	0.09	.08682	29	24	51	56
Item 9	1.78	0.10	.08750	24	46	30	60
Item 15	2.05	0.86	.06752	8	33	68	51
Item 19	1.71	0.12	.08918	34	28	47	51
Item 20	1.67	0.11	.08935	30	46	30	54
Stress Scale							
Item 3	2.01	0.89	.07093	11	30	65	54
Item 5	1.75	1.060	.08400	26	36	49	49
Item 10	1.88	1.063	.08452	20	48	33	59
Item 13	2.01	0.94	.06752	8	33	68	51
Item 16	2.00	1.11	.08844	29	12	48	71
Item 17	2.22	1.09	.08693	24	12	30	94
Item 20	2.21	0.94	.07439	16	9	60	75

Cognitive language therapy was engaged as a psychiatric therapy to reduce the level of stress, anxiety, and depression level of the participants. Activities like chunking, embroidery, the story is full of blanks, and identifying the error activities were given to the selected participants. The activities were given two times for eight weeks. The pre-progressive test was also conducted to give appropriate practice to the learners. The progressive test was conducted for 30 marks, and the mean value of the scores was displayed in the figure below. The first activity was chunking, where students were given forty

minutes to complete the activity. The successive activities were embroidery, the story is full of blanks, identify the error, and the second set of chunking, embroidery, the story is full of blanks and identify the error comprising eight activities. The mean value of the first progressive test was 21.7, whereas the mean value of the successive progressive test was 23, 25, 25, 26.3, 27, 27.2, and 27.56. The mean difference between the first and last progressive tests was approximately 6. Hence, from the findings of the data, it is established that there is a significant improvement in the values of cognitive language therapy.
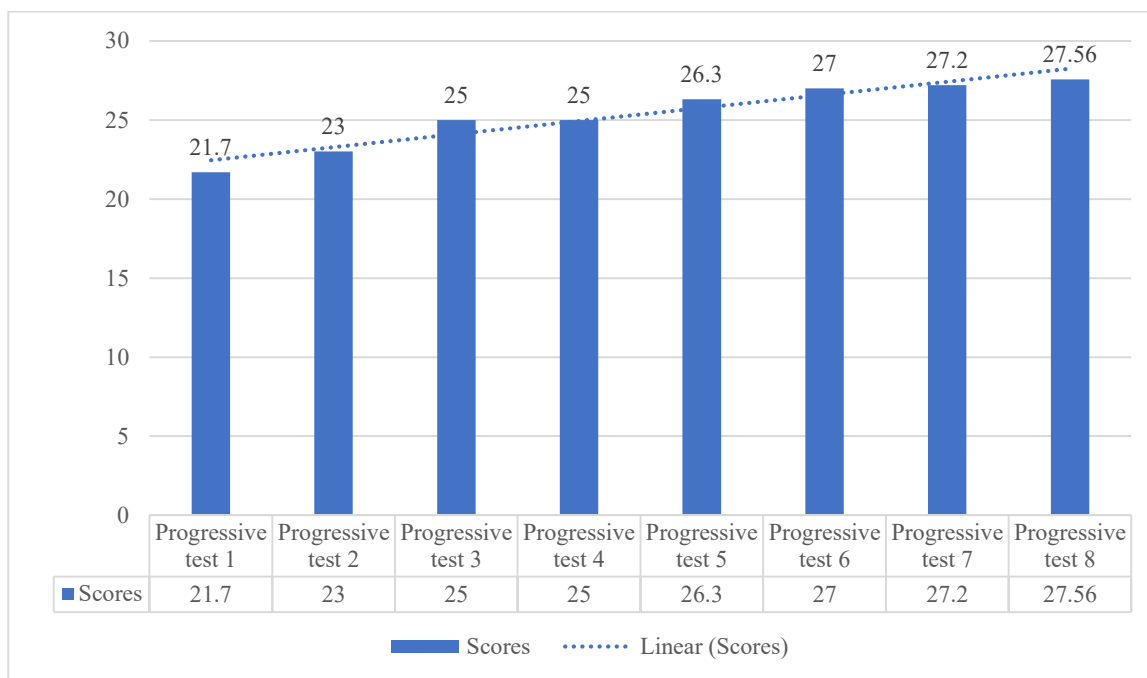
Figure 1. Cognitive Language Therapy Scores

After the eight-week intervention of the cognitive therapy, DASS 21 questionnaire was circulated as the post-questionnaire to analyze the impact of cognitive language therapy in improving depression, anxiety, and stress levels. From the table, it is very apparent that participants who have psychosomatic conditions had improved their anxiety, depression, and stress levels considerably after the intervention of cognitive therapy. Post-questionnaire data confirms that over 104 participants affirmed that they do not find it challenging to stress down after a difficult situation. In contrast, over 110 participants affirmed that they do not overreact to everyday situations but rather feel typical for daily situations. Almost 89 participants said they do not feel nervous about today's situation. However, over 99 participants confirmed that they do not feel restless about the situations happening in life and often find the situation very normal and tend to relax. Almost 93 participants affirmed that they tolerate the issues and situations. Over 103 participants denied the unexplained fear. In the depression scale, the responses mean value ranges from 0.6 to 1.1; hence it is concluded that the participants displayed a low to medium range of depression after the intervention of cognitive language therapy.

Over 50 participants affirmed that they still experience dry mouth, rapid breathing, trembling hands and difficulty breathing. Almost 126 participants confirmed that they do not often get panic feelings, and over 104 participants affirmed that they no more feel scared without any reason. The mean value of the anxiety scale ranges from 0.71 to 1.20; hence, the participants showed considerate improvement in their anxiety level. Almost 98 participants affirmed that they had developed positive feelings over nine weeks and felt motivated to initiate doing daily activities. Over 106 participants concluded that they felt enthusiastic and normal about life situations. The mean value of the stress scale ranges from 0.63 to 1.16, which is indicated that the participants displayed low to average stress levels. The participants' stress level has been reduced from high to moderate stress level due to the cognitive language therapy

Table 3. Descriptive statistics of Post-questionnaire (DASS-21, N=160)

Items	Mean	Std. Dev	St. Error mean	Frequency			
				1	2	3	4
Depression Scale							
Item 1	0.9	.97903	.07740	79	25	51	6
Item 6	0.825	.95529	.07552	77	46	25	12
Item 8	1.15	.96609	.07638	56	32	64	8
Item 11	0.9687	1.03049	.08147	76	24	49	11
Item 12	0.6812	.78003	.06167	82	47	31	0
Item 14	1.1688	.97272	.07690	55	32	64	9
Item 18	0.8688	.96558	.07634	82	21	53	4
Anxiety Scale							
Item 2	0.8375	.93760	.07412	75	46	29	10
Item 4	1.2	1.00189	.07921	54	33	60	13
Item 7	0.9062	1.00187	.07920	80	23	49	8
Item 9	0.7375	.85036	.06723	80	46	30	4
Item 15	1.1625	.97702	.07724	56	31	64	9
Item 19	0.825	.96185	.07604	85	23	47	5
Item 20	0.8062	.92142	.07284	77	46	28	9
Stress Scale							
Item 3	1.0938	.92347	.07301	59	29	70	2
Item 5	0.9	.94636	.07482	75	31	49	5
Item 10	0.7437	.83362	.06590	78	48	31	3
Item 13	1.162	.97702	.07724	56	31	64	9
Item 16	0.775	1.00908	.07977	96	11	46	7
Item 17	0.6038	.96140	.07624	109	12	31	8
Item 20	0.9062	1.02667	.08117	86	59	6	9

DASS 21 scores were calculated for the three pre- and post-questionnaire categories by multiplying the responses by two. The scores were categorised into pre-depression, pre-anxiety and pre-stress scores for pre-questionnaire. The post-questionnaire scores were categorised into post-depression, post-anxiety, and post-stress scores. Paired t-test was performed for the categorised scores. The paired samples statistics data were tabulated in Table 4. The mean scores of the pre-depression scale are 25.36. Whereas the mean value of the post-depression scale is 17.53. Hence, it is concluded that there is a significant difference in the mean scores of the depression scale. The mean value has considerably reduced in the post-depression scale, indicating that cognitive therapy significantly reduces depression levels. The mean value of the pre-anxiety scale is 18.38. Whereas, the mean value of the post-anxiety scale is 11.18. Hence, it is concluded that there is a significant reduction in the mean scores on the anxiety scale. The mean value in the post-anxiety scale has considerably reduced, indicating that cognitive therapy significantly reduces anxiety levels. The post-stress scale mean value is 20.20, comparatively less than the pre-stress questionnaire mean value of 30.60. the mean difference between the pre-stress scale value and the post-stress scale value is 10.40, indicating a significant reduction in the stress level due to cognitive language therapy. The learners have also affirmed that cognitive language therapy has significantly reduced stress, anxiety, and depression levels. Table 5 provides the statistical information of the paired sample test.

Table 4. Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre-Depression	25.3625	160	4.61810	.36509
	Post-Depression	17.5375	160	4.16920	.32960
Pair 2	Pre-Anxiety	18.3875	160	4.73710	.37450
	Post-Anxiety	11.1875	160	2.46277	.19470
Pair 3	Pre-Stress	30.6062	160	3.70636	.29301
	Post-Stress	20.2000	160	3.58333	.28329

Paired sample t-test was performed to analyze the differences in the pre-questionnaire and post-questionnaire data. The mean difference between the pre-depression and post-depression scale is 7.82500, and the t-value is 14.349. The significance value(p) is 0.000, which is less than 0.05, hence it is concluded that there is a significant difference in the p-value. The mean difference between the pre-anxiety and post-anxiety scale is 7.20000, and the t-value is 17.235. The p-value is 0.000, which is less than 0.05. The mean values significantly differ from pre-anxiety and post-anxiety values. In pair 3, the mean difference between the pre-stress and post-stress scale was 1.0406, and the t-value was 25.945. There is a significant difference in the mean value of the participants' stress levels, as indicated by the p-value of 0.000, which is less than 0.05. Through paired samples test, the significance value for all three pairs (Depression, anxiety, and stress) is 0.000, which is lesser than 0.05. Hence the formulated null hypothesis, there is no significant change in the depression, anxiety, and stress levels among the participants with the psychosomatic condition as a result of the cognitive language therapy intervention is rejected. The alternate hypothesis is accepted. The alternate hypothesis is a significant change in the depression, anxiety, and stress levels among the participants with the psychosomatic condition as a result of cognitive language therapy intervention.

Table 5. Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pre-Depression - Post-Depression	7.82500	6.89777	.54532	6.74800	8.90200	14.349	159	.000
Pair 2	Pre-Anxiety - Post-Anxiety	7.20000	5.28413	.41775	6.37495	8.02505	17.235	159	.000
Pair 3	Pre-Stress - Post-Stress	1.04062E1	5.07342	.40109	9.61410	11.19840	25.945	159	.000

DISCUSSION

The study's findings concluded that cognitive language therapy was found to be an effective method in improving anxiety, stress, and depression levels. Various studies (Marchand, 2012; Novaco, 1977; Li et al., 2020) has also confirmed that cognitive therapy has been found effective in reducing depression, stress, and anxiety level. In the present study, DASS 21 questionnaire mean value (both pre-questionnaire and post-questionnaire data) significantly varies in the three categories (stress, anxiety, and Depression) after the intervention of cognitive language therapy. Cognitive language therapy has reduced stress, anxiety, and depression among learners with psychosomatic condition. The paired difference test has also confirmed that cognitive language therapy was an effective treatment for the psychological disorder of participants with the psychosomatic condition. The results of the present study were also confirmed by many researchers (Matsuoka et al., 2017; Mazaheri et al., 2014; Ghazavi et al., 2016), who have employed cognitive therapy as a psychotherapeutic treatment for improving the psychosomatic condition of the participants.

Naqvi put forth that females had higher levels of depression when compared to males. The present study does not identify any gender difference in the level of anxiety, stress, and depression as stated by Naqvi, T. Z., Naqvi, S. S., and Merz (2005). Both genders displayed similarly varying levels of anxiety, stress, and depression. Seydel et al. (2013) identified that the psychosomatic condition and its related depression and stress varied based on age. In the present study, late adolescent learners displayed higher levels of anxiety, stress, and depression. The World health organization report also confirms that one in seven late adolescents have a psychosomatic illness. The pre-questionnaire findings suggested the learners with psychosomatic conditions displayed a high level of anxiety, depression, and stress. The calculation of the level was based on DASS 21 scale. Cognitive therapy based activities were given to the learners to engage themselves in doing the activity. After the eight-week intervention, DASS 21 is circulated. The findings of the post-questionnaire data have confirmed that the learners' depression, anxiety, and stress level has reduced from high to moderate and low. Learners have affirmed that cognitive language therapy has helped them engage, learn and analyze the text given. They have also affirmed that it has significantly improved their perception of memory and attention capabilities.

Limitations and Recommendation

The study is limited to the Vellore district and late adolescent learners. Research could also be carried out across districts, states, and countries to identify the anxiety and depression levels of individuals with the psychosomatic condition. Various psychotherapies like behavioural therapy and memory therapy could also be implemented to reduce the stress, anxiety, and depression levels of the participants. The psychosomatic condition affects the psyche through depression, stress, anxiety, and mental disorders. Detailed research could be done on other disorders and mental illnesses.

CONCLUSION

Participants with psychosomatic conditions displayed higher levels of anxiety, depression, and stress. However, psychosomatic patients develop mental illness from multiple physical symptoms. Appropriate medications could help them to resolve the physical symptoms. The study concludes that cognitive language therapy could be employed to reduce the mental illness of individuals with psychosomatic condition. Anxiety, depression, and stress were identified as the factors affecting individuals with the psychosomatic condition. Cognitive language therapy, like chunking and embroidery, was found to be effective activities in improving anxiety, depression, and stress levels of individuals.

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Conflicts of Interest
No conflicts of interest.

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