



EFFECT OF COGNITIVE BEHAVIOUR THERAPY IN THE MANAGEMENT OF ANXIETY AMONG NURSING COLLEGE STUDENTS.

By

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ABSTRACT

Anxiety is an emotion, which is characterised by an unpleasant state of inner turmoil and it includes subjectively unpleasant feelings of dread over anticipated events. Anxiety is a feeling of uneasiness and worry, usually generalized and unfocused as an overreaction to a situation. The aim of the present study is to find out the effect of cognitive behaviour therapy in the management of anxiety among Nursing college students. Anxiety impairs academic, family and vocational life. Once it is identified at an early stage, students can be helped in the management of anxiety through intervention. The objective of the study is to find out the efficacy of cognitive behaviour therapy in the management of anxiety. Spielberger uses State – Trait Anxiety Index to find out the level of anxiety among college students. 120 Nursing college students with anxiety are allotted randomly to control and experimental group, 60 students in each group, with 30 boys and 30 girls. Experimental group is exposed to cognitive behaviour therapy for one month. Spielberger uses State - Trait Anxiety Index to assess the level of anxiety among Nursing college students. Results show that there is an extremely significant difference ($p > .0001$) existing in the performance. Experimental group is lower ($p < .0001$) than the control group in the management of anxiety through intervention. Experimental group Nursing college students are faster

($p > .0001$) than the control group in the management of anxiety through intervention. Experimental Nursing college girl students are faster ($p > .0001$) than the control boys in the management of anxiety through intervention. Follow-up assessment shows that there is a sustenance of psychological well-being even after six months of therapeutic intervention. Practicing cognitive behaviour therapy regularly helps to maintain psychological well-being, leading to success in the academic and family life. Cognitive behaviour therapy is less time consuming, more economical and one of the best techniques of management of anxiety among Nursing college students.

KEYWORDS: State – Trait Anxiety Index, cognitive behaviour therapy, nursing college students, boys and girls, psychological wellbeing, success in academic, family and vocational life

INTRODUCTION

The word “Anxiety ” is derived from the Latin word “Anxious” which means “to choke ” Leary (1982) defines anxiety as a cognitive – effective response characterized by physiological arousal. Anxiety includes feeling of threat, excessive worry, tremors, twitchy sensations, nervousness, sleeping difficulties and inability to concentrate.

Symptoms of anxiety include feeling of threat, excessive worry, tremors, twitchy sensations and nervousness, aching and sore muscles, restlessness, sleeping difficulties, inability to concentrate, irritability, feeling of uneasiness characterized by irritability, palpitations, dry mouth, tension and feeling of impending doom. Anxiety disorders are such as panic disorder, social anxiety disorder, obsessive compulsive disorder and post-traumatic stress disorder.

Students from both developed and developing countries have reported significant anxiety among medical and allied health sciences students. Medical college is recognized to be a stressful environment by itself, which may have a negative effect on student’s varied areas of life including academic performance, physical and mental health (Yen Yee, L., & Yusoff, M. S., 2013).

Anxiety, among students before examinations, helps them to prepare well. Anxiety at workplace, before a presentation, is instrumental in helping to gather data and make a lucid presentation. But when anxiety becomes overwhelming and disturbs day-to-day life and affects the logic and reasoning abilities, then it becomes a disorder, which needs to be addressed immediately (Anbarau & Dr Chandramohan, 2014).

Students in colleges are facing more emotional, social and behavioural problems. There has been a great concern regarding the mental wellbeing of the students. Students in developed countries are likely to face more difficulties because of poor socioeconomic backgrounds (Turki Alotaibi, 2015).

College students have anxiety about exams, which represent the final step before graduation and starting a working life. Individuals react to anxiety differently. The stressors are not the same for all the individuals. Anxiety is also accompanied by other problems such as stress, mood disorders, depression, poor appetite (increased or decreased intake of food), suicidal ideation, substance abuse and guilt proneness, losing interest in activities, which is perceived as interesting and fun earlier by an individual. Ignoring anxiety leads to great distress for the individual. It causes uneasiness, stress, anger, frustration and irritation. It leads to low self-esteem, forgetfulness, resentment, aggression and inability to focus, which makes an individual feel as though he/she has no control over self. Individuals with anxiety usually complain of anger, lack of confidence, guilt, throwing temper-tantrums, inability to express clearly, repetitive thoughts and feeling of impending doom.

Anxiety affects mental health and the quality of academic life among students. Badpa et al., (2019) study the effect of mindfulness based cognitive behaviour therapy focussing on anger management regarding anxiety among 30 male junior high school students, studying at high schools at Chabahar. Students are randomly allotted to control and experimental group, 15 students in each group, expose to 10 sessions of mindfulness based cognitive behaviour therapy. The results indicate that mindfulness based cognitive behaviour therapy decrease anxiety among school students.

Cognitive behaviour therapy is a type of psychotherapeutic treatment that helps people learn how to identify and change destructive or disturbing thought patterns that have a negative influence on an individual's behaviour and emotions. Cognitive behavioural therapy focuses on changing the automatic negative thoughts that can contribute to and worsen emotional difficulties, depression and anxiety. Cognitive behavior therapy is a well-known and well-established therapeutic approach. Cognitive behaviour therapy is an effective, problem oriented, short - term, cost effective, evidence-based approach. Cognitive behaviour therapy - oriented anger management is effective in reducing anxiety among nursing college students

Review of worldwide literature reveals that cognitive behaviour therapy is useful in the management of anxiety symptoms among nursing college students (Nikpor, et al., 2021; Abirgu, et al., 2020; Farsinejad, et al., 2019; Hamidi, et al., 2019; Leslie, et al., 2019; Nikhil Chaudhary, 2019; Pesaribu & Zarfiel, 2019; Cooper, et al., 2017; Saiyeda Mohammed Mohammed 2017; Whisker, et al., 2017; Yen & Jeon, 2015; Twamley, 2014; Mayo - Wilson, 201; Koehler, et al. 2012; Steffan et al., 2012; Shailaja, et al., 2009; Sisemore & Oakland, 2008; Vamin & Helsey, 2007; Cicerone, et al., 2005; Flinnery – Schroeder & Kendal, 2000; Rawson, et al., 1999; Mukundan, 1996 and Marks, 1979).

PURPOSE OF THE STUDY

Some nursing college students have visited Department of Psychiatry, Psychology Department Causality with anxiety, relating to academic and family problems. The author is interested in studying the prevalence of anxiety among nursing college students because anxiety impairs academic, family and vocational life performance among nursing college students. Nurses are expected to assume responsibility for the protection and improvement of mental health patients because of their counseling, psychotherapy and research roles. One of the psychotherapeutic fields that psychiatric nurses can participate is cognitive behavioral therapy. The aim of the present study is to find out the effect of cognitive behaviour therapy in the management of anxiety among nursing college students. Anxiety impairs academic, family and vocational life of nursing college students. The objectives of the study are to find out the effect of cognitive behavior therapy in the management of anxiety among nursing college students and to find out the gender differences, if any, between boys and girls, in the management of anxiety through intervention. Hence, the present study is undertaken in this direction.

TOOL USED FOR THE TESTING

Spielberg (1979) has developed the State Trait Anxiety Index to assess the level of State and Trait anxiety of an individual. Short details of the psychological test are given below:

STATE – TRAIT ANXIETY INDEX

This test consists of two forms and they are **STAI - State Anxiety Index** and **STAI - Trait anxiety index**. **STAI - State Anxiety Index** helps to assess immediate feelings of the students at the time of taking a test, which are transitional, situational and also called as surface anxiety.

STAI - Trait anxiety index helps to assess the feelings for the past two years to understand, if the symptoms are inborn, inherited and also called as source anxiety. Each index consists of 20 statements, which usually takes 10 minutes to complete the test

SCORING :Standard scoring procedure is adapted.

SAMPLING DESIGN

500 nursing college students, age ranging from 19 - 23 years, studying at various nursing colleges around Nagercoil, Kanyakumari district, are chosen for the present study. To match the group in experimental design, State Trait Anxiety Index is used to assess the level of anxiety among nursing college students. 500 nursing college students are given the State - Trait Anxiety Index. Out of 500 students, 300 students are normal and asymptomatic 200 college students are suffering from anxiety. Out of 200 students, 120 nursing college students with anxiety symptoms are allotted randomly to control and experimental groups, 60 in each group, 30 boys and 30 girls, for the final study.

RESEARCH DESIGN

This research is an experimental research study, which involves matched group research design principles. The research is conducted in three phases. In phase one, preliminary formalities and administration of the test is done. In the second phase, intervention in the form of cognitive behaviour therapy, is conducted. In the third phase, posttest phase, the experimental group is exposed to the test one month after the therapy, later the students are assessed to see the sustenance effect six months after the intervention, follow-up, are taken care off.

RESULTS AND DISCUSSION

The findings of the study are discussed on Tables 3-8 and Figures 3 and 4 Bar Diagram

Table 3

State – Trait Anxiety Index Mean Percentile Rank of control Nursing college students (n=60) Vs. experimental (n=60) Nursing college students over training

STATE TRAIT ANXIETY INDEX		
PARAMETERS	CONTROL	EXPERIMENTAL
State anxiety Percentile Rank	65	0.63
Trait anxiety Percentile Rank	66	0.33

Table 4

ANOVA: State – Trait Anxiety Index mean State anxiety Percentile Rank control nursing college students (n=60)
Vs. experimental students (n=60) over three phases of training

Parameters	Sum of Square	df	Mean Square	F- Value	P - Value
Pretest	0 1274.933	1 119	0 21.98	0	NS
Posttest	61632.15 998.83	1 119	61632.15 17.22	3578.89	p>.0001
Follow-up	59409.06 914.87	1 119	59409.06 15.77	3766.36	p>.0001

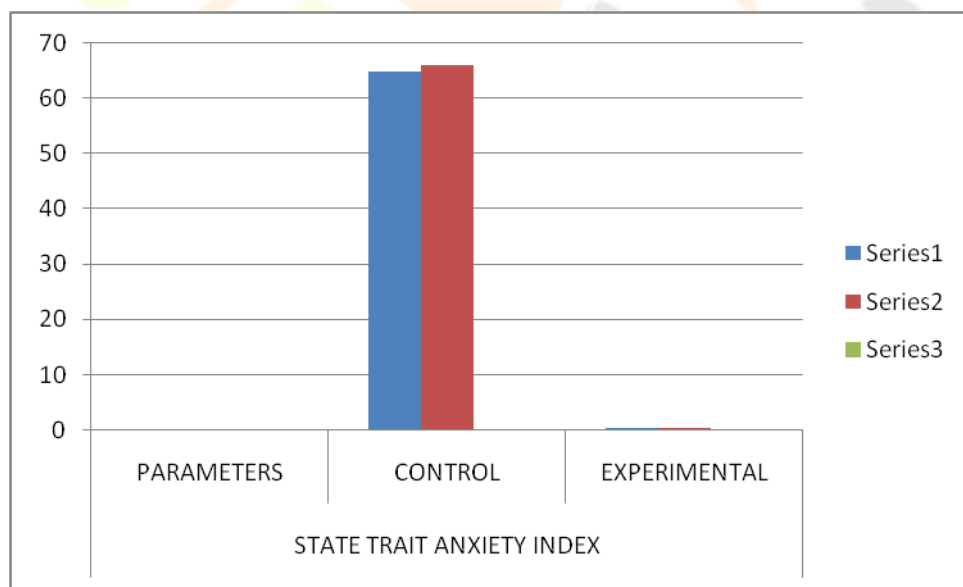


Figure 3: Bar Diagram shows State – Trait Anxiety Index mean State Percentile Rank of control Vs. experimental group over three phases of training

Tables 3- 4 and Figure 3 Bar Diagram show State – Trait Anxiety Index State anxiety Percentile Rank mean raw scores of control nursing college students Vs. experimental students over three phases of training. It

is seen from the table that control nursing college students and experimental students are high on State anxiety during pretest. Calculated F - Value (0) is lower than the tabular value, hence, the sample selected for the study is a homogeneous sample. Both the group of nursing college students are suffering from state anxiety.

Posttest and follow up analysis reveal that experimental nursing college students are low on State – Trait Anxiety Index State anxiety Percentile rank mean raw scores, compared to the pretest. Calculated posttest F- value (3578.89) and follow up F - value (3766.36) are higher than the tabular value, hence, there is an extremely significant difference ($p > .0001$) existing in the performance. Experimental nursing college students are lower ($p < .0001$) than the control students. Experimental nursing college students are faster in the management of State anxiety than the control group through intervention.

With the intervention, the experimental nursing college students are low on State – Trait Anxiety Index State anxiety Percentile rank mean raw scores than the control students. This may be due to regular practice of cognitive behaviour therapy. They are capable of controlling their negative, bitter, past unpleasant events and remain emotionally well balanced. Experimental group nursing college students are lower ($p < .0001$) than the control students on State anxiety through intervention. Nursing college students are free from the State anxiety and psychologically wellbeing through intervention.

Hypothesis stated “Ha Cognitive behaviour therapy is effective in the management of State anxiety among nursing college students” is accepted. Cognitive behaviour therapy helps nursing college students in the management of state anxiety.

The findings of the present study is corroborated with the research works of Nikpor, et al., 2021; Abirgu, et al., 2020; Farsinejad, et al., 2019; Hamidi, et al., 2019; Leslie, et al., 2019; Nikhil Chaudhary, 2019; Pesaribu & Zarfiel, 2019; Cooper, et al., 2017; Saiyeda Mohammed, 2017; Whisker, et al., 2017; Yen & Jeon, 2015; Twamley, 2014; Mayo - Wilson, 201; Koehler, et al. 2012; Steffan et al., 2012; Shailaja, et al., 2009; Sisemore & Oakland, 2008; Vamin & Helsey, 2007; Cicerone, et al., 2005; Flnnery – Schroeder & Kendal,

2000; Rawson, et al., 1999; Mukundan, 1996 and Marks, 1979. They delineated the fact that cognitive behaviour therapy is effective in the management of anxiety.

Table 5

State – Trait Anxiety Index mean Trait Percentile Rank of control nursing college students (n=60) Vs. experimental (n=60) students over control Vs. experimental phases of training

LEVEL OF ANXIETY		
PARAMETERS	CONTROL	EXPERIMENTAL
State anxiety Percentile Rank	65	0.63
Trait anxiety Percentile Rank	65	0.50

Table 6

ANOVA: State – Trait Anxiety Index Trait anxiety Percentile rank mean raw scores of control nursing college students (n=60) Vs. experimental students (n=60) over three phases of training

Parameters	Sum of Square	df	Mean Square	F - Value	P - Value
Pretest	0 1524.6	1 29	0	0	NS
Posttest	62210.4 1030.53	1 29	62210.4 17.77	3501.29	p>.0001
Follow up	62339.27 776.47	1 29	62339.27 13.397	4656.57	p>.0001

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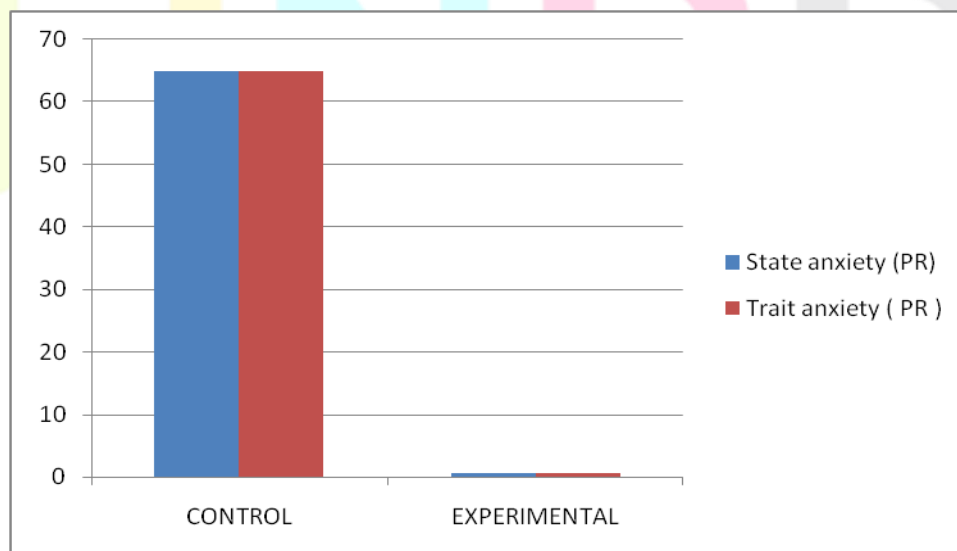


Figure 4: Bar Diagram shows State – Trait Anxiety Index Trait anxiety Percentile rank mean raw scores of control nursing college students Vs. experimental students over three phases of training

Tables 5 and 6 and Figure 4 Bar Diagram show State – Trait Anxiety Index Trait anxiety Percentile Rank mean raw scores of control nursing college students Vs. experimental students over three phases of training. It is seen from the table that control nursing college students and experimental students are high on State – Trait Anxiety Index mean Trait anxiety during pretest. Calculated F - value 0) is lower than the tabular value, hence, the sample selected for the study is a homogeneous sample. Both the group of nursing college students are suffering from trait anxiety.

Posttest and follow up analysis reveal that experimental nursing college students is low on State – Trait Anxiety Index Trait anxiety Percentile rank mean raw scores, compared to the pretest. Calculated posttest F-value (3501.29) and follow up F - value (4656.57) are higher than the tabular value, hence, there is an extremely significant difference ($p > .0001$) existing in the performance. Experimental nursing college students are lower ($p > .0001$) than the control students on State – Trait Anxiety Index Trait anxiety Percentile rank mean raw scores. Experimental nursing college students are faster in the management of Trait anxiety through intervention.

With intervention, the experimental than the control group are lower than the control students on Trait anxiety. This may be due to regular practice of cognitive behaviour therapy. They are capable of controlling their negative thinking, bitter past unpleasant experiences and remain emotionally well balanced. Experimental nursing college students are lower ($p < .0001$) than the control group on Trait anxiety through intervention. Nursing college students are free from Trait anxiety and psychologically wellbeing through intervention.

Hypothesis stated “ H_a Cognitive behaviour therapy is effective in the management of Trait anxiety among nursing college students” is accepted. Cognitive behaviour therapy helps nursing college students in the management of trait anxiety.

The findings of the present study is corroborated with the research studies of Nikpor, et al., (2021), Abirgu, et al., (2020), Farsinejad, et al., (2019), Hamidi, et al., (2019), Leslie, et al., (2019), Nikhil Chaudhary (2019), Pesaribu & Zarfiel, (2019), Cooper et al., (2017), Saiyeda Mohammed Mohammed (2017), Whisker, et al., (2017), Yen & Jeon, (2015), Twamley (2014), Mayo – Wilson (2013), Koehler, et al., (2012), Steffan et al., (2012), Shailaja, et al., (2009), Sisemore & Oakland, (2008), Vamin & Helsey, (2007), Cicerone, et al., (2005), Flinnery – Schroeder & Kendal, (2000), Rawson, et al., (1999), Mukundan, 1996 and Marks, 1979. They delineated the fact that cognitive behaviour therapy is one of the most successful methods in the management of anxiety among college students.



Comparison of Gender differences*Table 7*

State – Trait Anxiety Index Percentile rank mean raw scores of control nursing college students boys (n=30) Vs. experimental girl students (n=30) over control Vs. experimental phases of training

COMPARISION OF GENDER DIFFERENCES		
FACTORS	CONTROL	EXPERIMENTAL
Males State Percentile Rank	65	0.63
Females State Percentile Rank	65	0.43
Males Trait Percentile Rank	65	0.50
Females Trait Percentile Rank	65	0.43

Table 8

ANOVA : State – Trait Anxiety Index Mean trait anxiety Percentile Rank control nursing college student boys (n=30) Vs. experimental girls (n=30) over three phases of training

Parameters	Sum of Square	Df	Mean Square	F - Value	P - Value
Pretest	22.53 199.33	1 29	22.53 1.64	0.39	NS
Posttest	132.3 115.87	1 29	132.3 3.2	34.25	p>.0001
Follow up	64.53 136.33	1 29	64.53 2.58	14.1	p>.0001

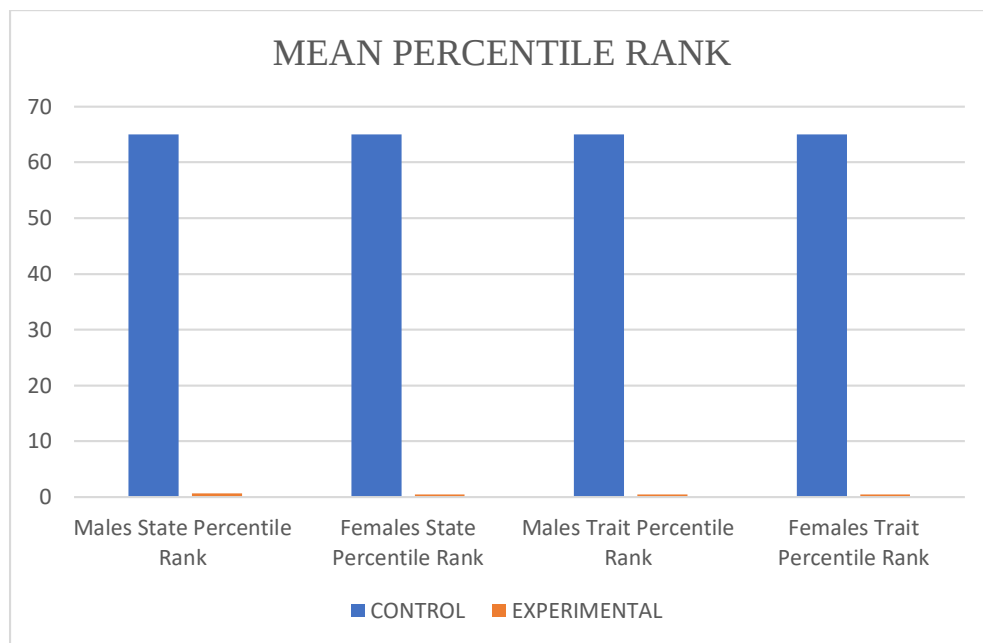


Figure 6 : Bar Diagram shows State – Trait Anxiety Index state anxiety Percentile Rank of control nursing college boys Vs. experimental girls are control Vs. experimental phases of training

Tables 8 and Figure 6 Bar Diagram show State – Trait Anxiety Index State anxiety mean Percentile Rank of control nursing college boys Vs. experimental girls over three phases of training. It is seen from the table that control nursing college boys and experimental girls are high on State – Trait Anxiety Index State anxiety mean percentile rank, during the pretest. Hence, the sample selected for the study is a homogeneous sample. Both the groups of nursing college students are high on state anxiety

Posttest and follow up analysis reveal that experimental nursing college girl students are low on State – Trait Anxiety Index State anxiety Percentile rank mean raw scores, compared to the pretest. Calculated posttest F- value (34.25) and follow up F - value (14.1) are higher than the tabular value, hence, there is an extremely significant difference ($p > .0001$) existing in the performance. Experimental nursing college girl students are faster ($p > .0001$) than the control boys in the management of state anxiety through intervention.

With the intervention, the experimental nursing college girl students are low on State – Trait Anxiety Index State anxiety Percentile Rank mean raw score than the control group. This may be due to regular practice of cognitive behaviour therapy. They are capable of controlling their negative thoughts free from anger and

remain emotionally well balanced. Experimental nursing college girl students are lower ($p<.0001$) than the control boys on state anxiety Percentile rank mean raw scores through intervention.

Hypothesis stated “ H_a Boys are faster in the management of State anxiety than girls through cognitive behaviour therapy” is rejected. In fact, girls are faster than the boys in the management of State anxiety. Nursing college girl students are low on state anxiety than the boys.

Table 9

State – Trait Anxiety Index Trait Anxiety Percentile Rank mean raw scores of control nursing college boys (n=30) Vs. experimental girls (n=30) over control Vs. experimental phases of training

COMPARISION OF GENDER DIFFERENCES		
FACTORS	CONTROL	EXPERIMENTAL
Males State Percentile Rank	65	0.63
Females State Percentile Rank	65	0.43
Males Trait Percentile Rank	65	0.50
Females Trait Percentile Rank	65	0.43

Table 10

ANOVA : State – Trait Anxiety Index Trait Anxiety Percentile Rank mean raw scores of control nursing college boys (n=30) Vs. experimental girls (n=30) over three phases of training

Parameters	Sum of Square	df	Mean Square	F - value	P – Value
Pretest	22.53 199.33	1 29	22.53 1.64	0.39	NS
Posttest	132.3 115.87	1 29	132.3 3.2	34.25	$p>.0001$
Follow up	64.53 136.33	1 29	64.53 2.58	14.1	$p>.0001$

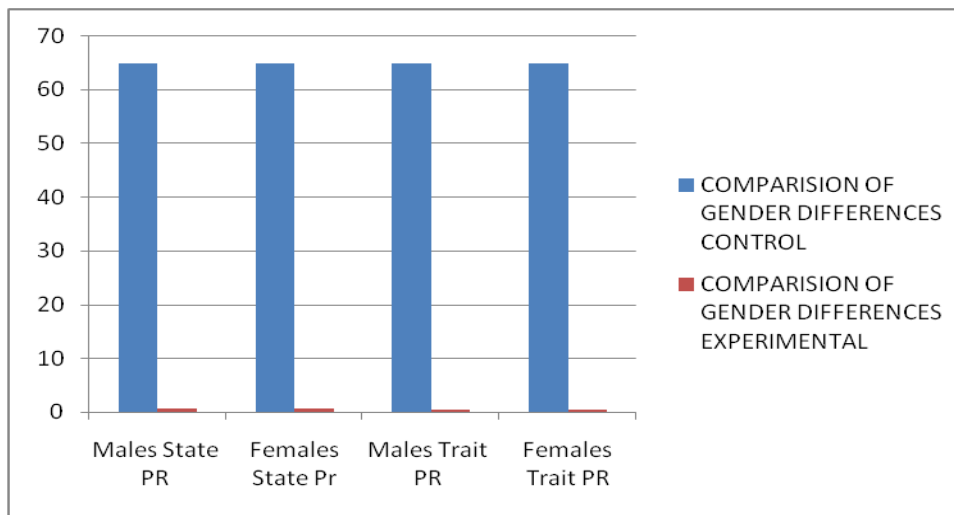


Figure 7: Bar Diagram shows State – Trait Anxiety Index Trait anxiety Percentile Rank mean raw scores of control nursing college boys Vs. experimental girls over control Vs. experimental phases of training

Tables 9-10 and Figure 7 Bar Diagram show nursing college students State – Trait Anxiety Index Trait anxiety Percentile Rank mean raw scores of control nursing college boys Vs. experimental girls over three phases of training. It is seen from the table that control nursing college boy students and experimental girls are high on Trait anxiety during pretest. Calculated F- value (0.39) is lower than the tabular value, hence, the sample selected for the study is a homogeneous sample. Both the nursing college students are high on trait anxiety.

Posttest and follow up analysis reveal that experimental nursing college girls are low on State – Trait Anxiety Index Trait anxiety Percentile Rank mean raw scores, compared to the pretest. Calculated Posttest F- Value (34.25) and Follow - up F - Value (14.1) are higher than the tabular value, hence, there is an extremely significant difference ($p > .0001$) existing in the performance. Experimental nursing college girls students are faster ($p > .0001$) than the control boys in the management of trait anxiety through intervention.

With the intervention, the experimental group nursing college girl students are lower ($p < .0001$) than the control boy students on State – Trait Anxiety Index mean trait anxiety Percentile Rank. This may be due to regular practice of cognitive behaviour therapy. They are capable of controlling their negative thoughts, free from anger and remain emotionally well balanced. Experimental group girls are lower ($p < .0001$) than the control group boys on trait anxiety after intervention.

Hypothesis stated “Ha Boys are fast in the management of Trait anxiety than girls through cognitive behaviour therapy” is rejected. In fact, girls are faster than the boys in the management of trait anxiety symptoms. Nursing college girl students are low on trait anxiety than the boys.

SUMMARY AND CONCLUSIONS

This study intended to explore the extent to which cognitive behaviour therapy facilitates Nursing college students to reduce anxiety and enhance psychological wellbeing. Anxiety is experienced by everyone in different situations of day-to-day life. A minimum level of anxiety is required for operational efficiency of an individual. Once, it exceeds the limit, it affects the psychological wellbeing. Nursing college students will face problems such as lack of attention and concentration, low on cognitive functions due to high anxiety and more responsibility in taking care of the clients for 24 hour. Practicing cognitive behaviour therapy regularly balances the biochemical changes taking place in the brain, which helps in the management of trait anxiety through intervention.

FINDINGS OF THE STUDY

The findings of this investigation indicates that the cognitive behaviour therapy aimed at mitigating anxiety and enhancing psychological wellbeing among Nursing college students is successful in achieving its perceived intent. Anxiety among experimental nursing college students is significantly reduced in response to the intervention, from the pretest phase to the posttest phase. There is a marginal increase in the performance of the nursing college students subsequent to withdrawal of the intervention after six months at the follow up phase. Nursing college students can sustain the psychological wellbeing even for a long duration after intervention. Significant difference is observed are reported and discussed. Experimental group registered a significant reduction on the level of anxiety after the intervention. Experimental group nursing college girl students are faster than the control boys in the management of anxiety. Cognitive behaviour therapy has facilitated the nursing college students in the management of anxiety. Further, it also enhances the level of psychological well-being experienced by the nursing college students. Based on the results of the study and key

findings, it would be appropriate to arrive at reasonable conclusions, regarding the effects of the intervention on the level of anxiety among nursing college students.

CONCLUSIONS

From the findings, it can be concluded that:

- Experimental nursing college students are successful in the management of anxiety after practicing cognitive behaviour therapy
- Improvements are much higher in the experimental nursing college students than the control nursing college students
- Experimental nursing college girl students are better than the control boys
- Sustenance of psychological wellbeing is noticed among experimental nursing college girls. Cognitive behaviour therapy is the best method of therapeutic intervention for the sustenance of psychological wellbeing for longer duration among nursing college students, indicating that the real learning takes place
- Cognitive behaviour therapy enables positive outlook and positive emotional state as assessed through psychological test
- Of all the techniques, practicing cognitive behaviour therapy is one of the best therapeutic techniques in the management of anxiety. It is less time- consuming and more economical way of maintaining psychological well-being among nursing college students

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Date:

Place:

