RESEARCH ARTICLE

EFFECTIVENESS OF BEHAVIORAL THERAPY ON ANXIETY TOWARDS ACADEMY ACHIEVEMENTS AMONG EARLY ADOLESCENTS.

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Abstract

Background: Anxiety disorders in school-aged adolescents are associated with increased rates of depression, adverse mental health and life course outcomes. Study objective was to assess the effectiveness of behavioral therapy on anxiety towards academy achievements among 50 early adolescents at selected schools in Pondicherry.

Methods: Pre experimental one group pre-test & post-test research design is adopted for the study. The level of anxiety was measured through pre-test questionnaire and the effectiveness level of anxiety was measured through posttest questionnaire. Paired t test and Chi-square test was done for statistical significance.

Results: Overall 76% were mild and 24% had moderate level of anxiety towards academy achievements among early adolescents. The paired ‘t’ test value of t = 8.541 were statistically highly significant. The religion were statistically significant(p<0.05) in pre-test of the level of anxiety and The gender, socioeconomic status and stage performance in school annual day were statistically significant(p<0.05) Post-test of the level of anxiety.

Conclusions: The Intervention on Behavioral therapy the researcher in order to reduce the level of anxiety regarding anxiety towards academy achievements among early adolescents.

Introduction:

Epidemiological community studies consistently show that anxiety disorders are the most prevalent psychiatric disorders during childhood and adolescence, with a global point prevalence of any anxiety of 6–7% and 20–30% having met criteria for an anxiety disorder at some point by early adulthood .Across the lifespan, anxiety is approximately twice as common among females as among males. Congruent with the observations of high-risk developmental periods for first onset of different anxiety disorders, reports on individual anxiety disorders show that prevalence estimates vary with age such that separation anxiety disorder is common among children and rare among adolescents, with the opposite being true for social anxiety, panic disorder, and agoraphobia.

Adolescence is the period of transition. Depressive disorders often start at a young age; they reduce people's functioning and often are recurring. India contributes 21% of adolescent’s population in the world. One out of six
children affected with mental disorder. Early Indian community based studies reported the prevalence rate of psychiatric disorders among children ranging from 2.6% to 35.6%.

Educational anxiety is a kind of anxiety which relates to the imminent danger from the environment of the educational institutions together with teacher and certain subjects like Chemistry, Physics for numerical, Mathematics, and English to some extent for some north Indian states. It is a mental sensitivity of uneasiness or distress in response to school or college circumstances that is perceived negatively. Academic anxiety is totally not a bad thing. However, it is true that a high level of anxiety interferes with concentration and memory which are critical for day to day academic performance and success, however it is also true without any anxiety, and majority of us would lack the enthusiasm and motivation to study for exams, do everyday homework or write any research papers.

Statement Of The Problem:
A study to assess the effectiveness of behavioral therapy on anxiety towards academy achievements among early adolescents at chevalier sellane government higher secondary schools in Pondicherry.

Objectives:-
1. To assess the level of anxiety towards academy achievements among early adolescents.
2. To assess effectiveness of behavioral therapy on anxiety towards academy achievements among early adolescents.
3. To associate the effectiveness of behavioral therapy on anxiety towards academy achievements among early adolescents with their selected demographic variables.

Research Methodology:-
Research methodology is a way to solve the problems systematically. It indicates the general pattern of organizing the procedures for gathering the valid and reliable data for the purpose of investigator. This chapter deals with methodology adopted to assess the effectiveness of behavioral therapy on anxiety towards academy achievements among early adolescents at selected schools in Pondicherry. This chapter deals with the research approach, research design, setting, population, sample, sampling technique, selection and development of tool and data collection techniques and plan for data analysis.

Research approach:
Research approach is the basic procedure for conducting the study. A quantitative research approach is adopted for this present study.

Research Design:
Pre experimental one group pre -test & post -test research design is adopted for the study.

| GROUP            | PRE – TEST                                      | INTERVENTION                                    | POST -TEST                                      |
|------------------|------------------------------------------------|------------------------------------------------|------------------------------------------------|
| EXPERIMENTAL     | Assessment of anxiety towards academy achievements among early adolescents | Intervention on Behavioural therapy among early adolescents | Effectiveness on anxiety towards academy achievements among early adolescents |

Population:
The population is referred to as a group of all the elements like individuals or objects that are available in the same geographical area. The target population for this study comprises of early adolescents.

Sample:
Sample is a selected proportion of the defined population. It is a subset of a population. The study sample consists of early adolescents in selected schools in, Pondicherry who fulfill the inclusion criteria.

Sample Size:
Sample size is the number of subjects involved in the study. Sample size consists of 50 early adolescents.
Sampling technique:
Sampling technique is defined as the process of selecting a group of people or the other elements with which conduct a study. Convenient sampling technique is used for the present study.

Setting of the study:
The study was conducted in chevalier sellane government higher secondary school at Pondicherry.

Sample selection criteria:
Inclusion criteria:
Age group of 15-17 years
Early adolescents who are present at the time of data collection.

Exclusion criteria:
Early adolescents who are all having co-morbid disease.
Early adolescents who are not willing to participate in this study.
Early adolescents who are not known Tamil and English language.

Study variables:
A variable is measurable or potentially measurable component of an object or even that may fluctuate in quantity and quality or that may be different in quality and quantity from one individual object or event to another individual object or event of the same general class. Two types of variables are identified in this study. They are as follows. Independent variable and Outcome variable.

Description Of Tool:
The tool used for this study is a standardized tool, and the tool consists of 2 sections namely,

Section A:
variables, it consists of 2 sub divisions such as,

Demographic Variables:
Age, educational status, religion, area of living, type of family and family income.

Section B:
Modified Hamilton anxiety rating scale (ham-a) to assess the anxiety towards academy achievements among early adolescents.

Results Of The Study:-
Section a: description of the demographic variables.

Table 1: Frequency and Percentage wise Distribution of Demographic Variables among early adolescents.
(N=50)

| Sl. NO | DEMOGRAPHIC VARIABLES | FREQUENCY (N) | PERCENTAGE (%) |
|--------|-----------------------|---------------|----------------|
| 1 | Age (in years) | | |
| | 10-11 years | 0 | 0 |
| | 11-12 years | 2 | 4 |
| | 12-13 years | 21 | 42 |
| | 13-14 years | 27 | 54 |
| 2 | Gender | | |
| | Male | 29 | 58 |
| | Female | 21 | 42 |
| 3 | Educational status | | |
| | 6th | 0 | 0 |
| | 7th | 0 | 0 |
| | 8th | 50 | 100 |
| | 9th | 0 | 0 |

4 Socio economic status
Table 1:
Frequency and Percentage wise Distribution of Demographic Variables among early adolescents. Out of the 50 early adolescents who were interviewed, Majority of the early adolescents 27 (54%) of study population were in the age group between 13-14 years. Most of the early adolescents 29 (58%) were belongs to male in gender. All the early adolescents 50 (100%) were belongs to 8th standard. Majority of the early adolescents were belongs to average level of socioeconomic status 44 (88%). Most of the early adolescents 45 (90%) were belongs to Hindu religion. Half of the early adolescents were joint family 25 (50%). Majority of the early adolescents father occupation were belongs to daily worker 32 (64%). Majority of the early adolescents were living in rural area 38 (76%) and Most of them comes under More than 5 times in attend the stage performance in school annual day 20 (40%).

| Level       | Number | Percentage |
|-------------|--------|------------|
| Poor        | 2      | 4          |
| Average     | 44     | 88         |
| High        | 4      | 8          |

| Religion   | Number | Percentage |
|------------|--------|------------|
| Hindu      | 45     | 90         |
| Christian  | 2      | 4          |
| Muslim     | 2      | 4          |
| others     | 1      | 2          |

| Type of family | Number | Percentage |
|----------------|--------|------------|
| Joint family   | 25     | 50         |
| Nuclear family | 25     | 50         |

| Father Occupation   | Number | Percentage |
|---------------------|--------|------------|
| Government sector   | 7      | 14         |
| Private sector      | 11     | 22         |
| Daily worker        | 32     | 64         |

| Area of living | Number | Percentage |
|----------------|--------|------------|
| Urban          | 12     | 24         |
| Rural          | 38     | 76         |

| How Many times did you attend the stage performance in your school annual day | Number | Percentage |
|-----------------------------------------------------------------------------|--------|------------|
| More than 2 times                                                           | 16     | 32         |
| More than 5 times                                                           | 20     | 40         |
| Just once                                                                   | 11     | 22         |
| Not at all                                                                  | 3      | 6          |

Fig 1: Percentage distribution of gender among early adolescents

Fig 1: Percentage distribution of gender among early adolescents.
Section B: assessment of the level of anxiety towards academy achievements among early adolescents.

Table 2: Frequency and percentage wise distribution of Pre-test and post-test of level of anxiety towards academy achievements among early adolescents. (N = 50)

| LEVEL OF ANXIETY | PRE TEST | POST TEST |
|------------------|----------|-----------|
|                  | Frequency (N) | Percentage (%) | Mean Standard | Frequency (N) | Percentage (%) | Mean Standard |
| Socio economic status | | | | | | |
| Poor | 4% | 88% | | | | |
| Average | 8% | 88% | | | | |
| High | 8% | 88% | | | | |
| Religion | | | | | | |
| Hindu | 90% | 10% | 20% | 40% | 60% | 80% | 100% |
| Christian | 4% | 4% | 2% | | | | |
| Muslim | 4% | 4% | 2% | | | | |
| others | 2% | | | | | | |
| Attend the stage performance in your school annual day | | | | | | |
| More than 2 times | 32% | 40% | 22% | 6% | | | |
| More than 5 times | | | | | | | |
| Just once | | | | | | | |
| Not at all | | | | | | |
Table 2: Frequency and percentage wise distribution of Pre-test and post-test of the level of anxiety towards academy achievements among early adolescents. In pre-test, Majority of the early adolescents 43 (86%) had moderate level of anxiety and 7 (14%) had severe level of anxiety. The mean and standard deviation of the level of anxiety towards academy achievements among early adolescents in pre-test is (23.0±5.771). In post-test, Majority of the early adolescents 38 (76%) had mild level of anxiety and 12 (24%) had moderate level of anxiety. The mean and standard deviation of the level of anxiety towards academy achievements among early adolescents in post-test is (14.4±7.396).

![Pre-test and post-test of level of anxiety towards academy achievements among early adolescents](image)

**Fig 5:** Frequency and percentage wise distribution of Pre-test and post-test of level of anxiety towards academy achievements among early adolescents.

Section c: Evaluate the effectiveness of behavioral therapy on anxiety towards academy achievements among early adolescents.

Table 3: Comparison of the Pre-test and post-test of the level of anxiety towards academy achievements among early adolescents, (N=50).

| SL. NO | COMPARISON OF LEVEL OF ANXIETY TOWARDS ACADEMY ACHIEVEMENTS | MEAN | STANDARD DEVIATION | ‘t’ VALUE | ‘p’ VALUE |
|--------|---------------------------------------------------------------|------|---------------------|----------|----------|
| 1      | Pre-test                                                     | 23.0 | 5.771               | 8.541    | .001**   |
|        | Post-test                                                    | 14.4 | 7.396               |          |          |

**-p < 0.001 highly significant**

Table 3: Shows that, the mean score of effectiveness in the pre-test was 23.0 ± 5.771 and the mean score in the post-test was 14.4 ± 7.396 respectively.
The calculated paired ‘t’ test value of \( t = 8.541 \) shows statistically highly significant difference between Comparison of the Pre-test and post-test level of anxiety towards academy achievements among early adolescents respectively.

**Fig 6:** Comparison of the Pre-test and post-test level of anxiety towards academy achievements among early adolescents.

**Section d:** associate the level of anxiety towards academy achievements among early adolescents with their selected demographic variables.

**Table 4:** Association between the Pre-test of the level of anxiety towards academy achievements among early adolescents with their selected demographic variables. (N=50)

| SL. NO | DEMOGRAPHIC VARIABLE | PRE-TEST LEVEL OF ANXIETY | \( X^2 \) | df | p-value |
|--------|-----------------------|---------------------------|----------|----|---------|
|        |                       | MODERATE                  | SEVERE   |    |         |
| 1      | Age (in years)        |                           |          |    |         |
|        | 10-11 years           | 0                         | 0        | 2.97 | 2 | 0.226  |
|        | 11-12 years           | 2                         | 100      | 0   | 0       |
|        | 12-13 years           | 16                        | 76.2     | 5   | 23.8    |
|        | 13-14 years           | 25                        | 92.6     | 2   | 7.4     |
| 2      | Gender                |                           |          |    |         |
|        | Male                  | 23                        | 79.3     | 6   | 20.7    |
|        | Female                | 20                        | 95.2     | 1   | 4.8     |
| 3      | Educational status    |                           |          |    |         |
|        | 6\textsuperscript{th} | 0                         | 0        | 0   | 0       |
|        | 7\textsuperscript{th} | 0                         | 0        | 0   | 0       |
|        | 8\textsuperscript{th} | 43                        | 86       | 7   | 14      |
|        | 9\textsuperscript{th} | 0                         | 0        | 0   | 0       |
| 4      | Socio economic status |                           |          |    |         |
|        | Poor                  | 2                         | 100      | 0   | 0       |
|        | Average               | 37                        | 84.1     | 7   | 15.9    |
|        | High                  | 4                         | 100      | 0   | 0       |
| 5      | Religion              |                           |          |    |         |
|        | Hindu                 | 40                        | 88.9     | 5   | 11.1    |
|        | Christian             | 1                         | 50       | 1   | 50      |
|        | Muslim                | 2                         | 100      | 0   | 0       |
The table 4 depicts that the demographic variable religion had shown statistically significant association Pre-test of the level of anxiety towards academy achievements among early adolescents with chi-square value of ($\chi^2=8.93$, d.f.=3) at p<0.05 level.

The other demographic variables had not shown statistically significant association with Pre-test of the level of anxiety towards academy achievements among early adolescents.

Table 5:- Association between the Post-test of the level of anxiety towards academy achievements among early adolescents with their selected demographic variables (N=50)

| SL. NO | DEMOGRAPHIC VARIABLE | POST-TEST LEVEL OF ANXIETY | X^2 | df | p-value |
|--------|----------------------|-----------------------------|-----|----|---------|
|        |                      | MILD | MODERATE |     |     |         |
|        |                      | N    | %        | N   | %    |         |
| 1      | Age (in years)       |      |          |     |     |         |
|        | 10-11 years          | 0    | 0        | 0   | 0    |         |
|        | 11-12 years          | 2    | 100      | 0   | 0    |         |
|        | 12-13 years          | 18   | 85.7     | 3   | 14.3 |         |
|        | 13-14 years          | 18   | 66.7     | 9   | 33.3 |         |
| 2      | Gender               |      |          |     |     |         |
|        | Male                 | 19   | 65.5     | 10  | 34.5 |         |
|        | Female               | 19   | 90.5     | 2   | 9.5  |         |
| 3      | Educational status   |      |          |     |     |         |
|        | 6th                  | 0    | 0        | 0   | 0    |         |
|        | 7th                  | 0    | 0        | 0   | 0    |         |
|        | 8th                  | 38   | 76       | 12  | 24   |         |
|        | 9th                  | 0    | 0        | 0   | 0    |         |
| 4      | Socio economic status|      |          |     |     |         |
|        | Poor                 | 2    | 100      | 0   | 0    |         |
|        | Average              | 35   | 79.5     | 9   | 20.5 |         |
|        | High                 | 1    | 25       | 3   | 75   |         |
| 5      | Religion             |      |          |     |     |         |
|        | Hindu                | 33   | 73.3     | 12  | 26.7 |         |
|        | Christian            | 2    | 100      | 0   | 0    |         |
|        | Muslim               | 2    | 100      | 0   | 0    |         |
|        | others               | 1    | 100      | 0   | 0    |         |

*-p < 0.05 significant
The table 5 depicts that the demographic variable gender, socioeconomic status and stage performance in your school annual day had shown statistically significant association Post-test of the level of anxiety towards academy achievements among early adolescents with chi-square value of ($\chi^2=4.16$, d.f=1) ($\chi^2=6.63$, d.f=2) and ($\chi^2=8.46$, d.f=3) at p<0.05 level.

The other demographic variables had not shown statistically significant association with Post-test of the level of anxiety towards academy achievements among early adolescents.

**Discussion:**

In the current study, the effectiveness of behavioral therapy on anxiety towards academy achievements among 50 early adolescents were investigated and analyzed. In pre-test, Majority of the early adolescents (86%) had moderate level of anxiety and (14%) had severe level of anxiety. The mean and standard deviation of the level of anxiety towards academy achievements among early adolescents in pre-test is (23.0+5.771). In post-test, Majority of the early adolescents (76%) had mild level of anxiety and (24%) had moderate level of anxiety. The mean and standard deviation of the level of anxiety towards academy achievements among early adolescents in post-test is (14.4+7.396). This result was supported by Praveena Daya A (2018) prevalence of anxiety was 86.5% and Anxiety ($p$ value = 0.005) were significantly observed more among 10th class students when compared with other classes\(^7\).

The calculated paired ‘t’ test value of $t = 8.541$ shows statistically highly significant difference between Comparison of the Pre-test and post-test level of anxiety towards academy achievements among early adolescents respectively. Hence a hypothesis (H1) is accepted. In case of administration of Intervention on Behavioral therapy among early adolescents the result shows that most of them change the anxiety, severe level to mild level regarding anxiety towards academy achievements.

The demographic variable religion had shown statistically significant association Pre-test of the level of anxiety towards academy achievements among early adolescents with chi-square value of at p<0.05 level. The other demographic variables had not shown statistically significant association with Pre-test of the level of anxiety towards academy achievements among early adolescents.

The demographic variable gender, socioeconomic status and stage performance in your school annual day had shown statistically significant association Post-test of the level of anxiety towards academy achievements among early adolescents with chi-square value of ($x^2=4.16$, d.f=1) ($x^2=6.63$, d.f=2) and ($x^2=8.46$, d.f=3) at p<0.05 level. The other demographic variables had not shown statistically significant association with Post-test of the level of anxiety towards academy achievements among early adolescents. Hence hypothesis (H2) is accepted at the level of p<0.05. This result was supported by Chinawa AT et al (2018) statistical significant association between sex and general anxiety ($\chi^2=30.121$, $p<0.001$)\(^8\).
Conclusion:-
A study to assess the effectiveness of behavioral therapy on anxiety towards academy achievements among early adolescents at selected schools in Pondicherry. The findings of the study revealed that out of 50 early adolescents, In post-test, Majority of the early adolescents 38 (76%) had mild level of anxiety and 12 (24%) had moderate level of anxiety. The Intervention on Behavioral therapy the researcher in order to reduce the level of anxiety regarding anxiety towards academy achievements among early adolescents.

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