

A STUDY TO IDENTIFY THE INCIDENCE OF SOCIAL ANXIETY AMONG ADOLESCENTS AND ASSESS THE EFFECTIVENESS OF JACOBSON'S PROGRESSIVE MUSCLE RELAXATION (JPMR) TECHNIQUE ON SOCIAL ANXIETY AMONG ADOLESCENTS IN A SELECTED SCHOOL OF NEW DELHI

¹*Mary Menu Ekka, ²M. Jibanlata Devi and ³Arshi Anjum Khan

¹Student, Holy Family College of Nursing, New Delhi.

²Associate Professor, Holy Family College of Nursing, New Delhi.

³Assistant Professor, Holy Family College of Nursing, New Delhi.

Received date: 14 April 2022

Revised date: 04 May 2022

Accepted date: 24 May 2022

*Corresponding Author: Mary Menu Ekka

Student, Holy Family College of Nursing, New Delhi.

ABSTRACT

A Pre-experimental study was conducted among adolescents of selected School, New Delhi. The study aims to identify the incidence of social anxiety among adolescents and assess the effectiveness of Jacobson's Progressive Muscle Relaxation (JPMR) Technique on social anxiety among adolescents. The objectives of the study were: To identify the incidence of social anxiety among the adolescents, to find the association between social anxiety and selected demographic variables, to assess the effectiveness of Jacobson's Progressive Muscle Relaxation Technique on social anxiety in terms of anxiety score, to find the relationship between social anxiety and its associated factors (parental strictness, parental conflicts, peer rejection, teacher's strictness). Quantitative research approach was adopted for the present study. The study was conducted in two phases, the study design used for Phase -I was descriptive survey and Phase-II was pre-experimental one group pre-test post-test design. In Phase-I 200 adolescents were enrolled for the study using purposive sampling technique and 74 adolescents were identified with social anxiety with the help of Liebowitz Social Anxiety Scale (LSAS) and structured questionnaire related to social anxiety and its associated factors. 50 adolescents were selected using simple random technique (lottery method) in Phase-II of study. Jacobson's Progressive Muscle Relaxation Technique was administered for 30 mins for 4 consecutive days to adolescents with social anxiety. Post-test was administered on 5th day using Liebowitz Social Anxiety Scale (LSAS). The study results revealed that out of 200 adolescents 6(3%) had severe social anxiety, 50(25.5%) had marked social anxiety, 18(9%) had moderated social anxiety and 126(62.5%) had no social anxiety. The calculated 'z' score value found to be 23.587 which was greater than the table value (2.009) indicates the intervention of Jacobson's Progressive Muscle Relaxation Technique was effective on reducing the social anxiety among adolescents.

KEYWORDS: Social Anxiety, Adolescents, Jacobson's Progressive Muscle Relaxation Technique, Effectiveness.

INTRODUCTION

Anxiety, one of the common feelings of our society arises from chaos and confusion which is prevalent in our world. Fears of the unknown and conditions of ambiguity offer a perfect breeding ground for anxiety to take root and grow. Low levels of anxiety are adaptive and can provide the motivation required for survival. It becomes problematic when the individual is unable to prevent the anxiety from escalating to a level that interferes with his ability to meet basic needs.^[1]

Once largely neglected by the medical community, social anxiety disorder, is now gaining an increased attention and recognition as a serious but a treatable condition.

In India the prevalence of overall psychiatry morbidity (depression, conduct disorder, social anxiety and panic disorder) among adolescents has varied from 12 to 16.5 per cent (12-13). In the context of social anxiety very few studies have been conducted in India. Chhabra et al. conducted a study to assess the prevalence of social phobia in school-going adolescents in an urban area and

it was found that the prevalence rate be 10.3%, in which 5% belonged to the moderate category, 4.3% to be marked 0.7% to the severe phobia in adults. Female showed a higher incidence of social phobia when compared to males and in the age group of 14-15 years had a higher incidence of social phobia than those aged 16-17 years.^[2]

REVIEWS OF LITERATURE

Giri Aliva, (2019)^[3] Conducted a quasi-experimental study aimed to evaluate the effect of Jacobson's Progressive Muscle Relaxation exercise on anxiety among children diagnosed with leukaemia admitted in selected hospital of Cuttack. The objective of the study was to assess the level of anxiety among leukaemia diagnosed children, to assess the effect of Jacobson's Progressive Muscle Relaxation exercise on anxiety and to determine the association between the level of anxiety with selected demographic variable. Total 40 children participated in the study which was selected by purposive sampling. In experimental group (65%) had moderate anxiety in pre-test & in post-test (90%) had mild anxiety whereas, in control group in pre-test (75%) had moderate anxiety & in post-test (85%) had moderate anxiety. The researcher concluded that the finding of the study revealed that Jacobson's Progressive Muscle Relaxation exercise is effective in reducing anxiety.

F.B.G. Seema, G. Kumar Venkatesh, (2017)^[4] conducted a study to investigate the relationship and gender differences between self-esteem and social anxiety in adolescent students. The sample consists of 200 adolescent students (100 males, 100 females) in the age range of 16 to 18 years, taken from various colleges in Bangalore City. Rosenberg Self-esteem scale (Rosenberg, 1965) and Social Phobia inventory (Conner et al., 2000) were applied to assess self-esteem and social anxiety of participants. The studies showed that self-esteem was negatively correlated with social anxiety in adolescent students. The findings of result also showed the social anxiety did prevail more in female adolescents rather than male adolescents.

Problem Statement

A study to identify the incidence of social anxiety among adolescents and assess the effectiveness of Jacobson's Progressive Muscle Relaxation (JPMR) Technique on social anxiety among adolescents in a selected school of New Delhi.

MATERIALS AND METHOD

Research approach: Quantitative Approach
 Research Design: Phase I- Descriptive Survey Design
 Phase II- Pre-Experimental One Group Pre-test Post-test Design
 Setting: St. Mary's Public School
 Study Population: Adolescents between 13-16 years of age

Sample: Adolescents (13-16) Years of age studying in 8th standard of selected school of New Delhi.
 Sample Size: Phase-I 200 Adolescents
 Phase-II 50 Adolescents with Social Anxiety
 Sampling Technique: Phase-I Purposive Sampling
 Phase-II Simple Random Sampling
 Data collection: Socio Demographic Variable
 Liebowitz Social Anxiety Scale
 Structured Questionnaire Related to Social Anxiety and Its Associated Factors

Description of Tool

Section I: Demographic variables of the adolescents and of parents

The first part of the tool consists of 13 items of demographic variables seeking personal information regarding age, gender, class, type of family, birth order, number of siblings, habitat, age of father, age of mother, education of father, education of mother, occupation of father and occupation of mother.

Section II: Liebowitz Social Anxiety Scale (LSAS).

Liebowitz Social Anxiety Scale is a self-report has an interview format. It contains 24 items; 12 items are social interaction and other 12 items are performance situations. Each item is assessed for fear level and the avoidance level on a Likert type scale.

Section III: Structured questionnaire related to social anxiety and associated factors.

It contains 25 statements which consists of the thoughts and personal experiences facing in their daily lives.

RESULTS

Section I- Description of demographic variables (Phase-I)

Majority of them 118(59%) belonged to the age group of 15-16 years and the rest 82(41%) belonged to the age group of 13-14 years. More than half of the adolescents 123(61.5%) comprised of females and the rest 77(38.5%) were males. 136(68%) belonged from nuclear family, 58 (29%) were from joint family and 6 (3%) were from extended family.

109 (54.5%) adolescents were the first born or the only born in the family, 64 (32%) were the middle born and rest 27 (13.5%) were the last born in the birth order. 104 (52%) adolescents had 2 siblings, 57 (28.5%) had one sibling, 35(17.5%) had no siblings whereas the rest only 4(2%) had 3 and above.

Section II-Findings related to the assessment of incidence of social anxiety among adolescents (Phase-I)

The frequency and percentage distribution of the adolescents according to their social anxiety scores from the Liebowitz Social Anxiety Score that out of 200 adolescents a total of 74 were identified with social anxiety. Amongst it, 6 (3%) were having severe social anxiety, 50 (25.5%) were identified with marked social

anxiety, 18 (9%) were having moderate social anxiety and the rest 126 (65.5%) had no anxiety.

Out of 74 adolescents identified with social anxiety 50 adolescents were then selected by simple random sampling and was selected for the Phase-II of the study.

Section I- Description of the variables (Phase-II)

Distribution of demographic variables of selected adolescents identified with social anxiety and of their parents in Phase-II.

This section describes the demographic variables of 50 adolescents. Out of 50 adolescents 22(44%) belong in the age group of 13-14 years and the majority 28 (56%) belong to 15-16 years, 30(60%) adolescents comprised of females and the rest 20(40%) were males. Out of 50 adolescents, 38(76%) belong from a nuclear family, 9(18%) were from joint family and 6(3%) were from extended family. Half of the sample adolescents 25(50%) were first born or the only born in the family, 18(36%) were the middle born and the rest 7(14%) were the last born in the birth order. Most of the sample subjects of adolescents 31(62%) were having 2 siblings, 12 (24%) were having one sibling whereas 7(14%) had no siblings.

The demographic variables of the parents of the adolescents depicted that out of 50, the age of the father of 25 adolescents (50%) belong in the age group of 41-45 years, 20 (40%) were from age group of 36-40 years, 2 (4%) were from age group of 30-35 years, 1 (2%) were from 46 and above age group and the rest 2 (4%) of the adolescent's fathers had expired. Out of 50, mothers age of 32 (64%) adolescents was between 36-40 years, 12 (24%) were from the age group of 41-45 years, 5 (10%) were in the age group of 30-35 years, none of them were from 46 and above and the rest 1 (2%) of the adolescent's mothers had expired. The educational status

of the parent's, which depicted that majority of fathers of the adolescents i.e., 45 (90%) had done their senior secondary school education and the remaining 3 (6%) were from middle school. 46 (92%) of the mothers of adolescents were having senior secondary school education and the rest 3 (6%) were from the middle school.

The occupation of parents of these adolescents, revealed of the fathers 19 (38%) were working in government sector, 13 (26%) were self-employed or had own business, 15 (30%) were engaged in private sector and only 1 (2%) was unemployed. 36 (72%) of the adolescents' mother were homemaker, 9 (18%) were working in private sector and the rest 4 (8%) were in the government sector.

Section II- Association between pre-test social anxiety scores and demographic variables (Phase-II)

The computed chi-square value presenting the association of social anxiety with the selected demographic variables i.e., age, type of family, birth order and number of siblings. The calculated chi-square value was significant at 0.05 level, $P < 0.05$ which showed association between gender and social anxiety respectively, but was not significant with the other demographic variables. This shows that social anxiety is independent of the other variables other than gender.

SECTION III- Findings related to the adolescents with social Anxiety scores

This section describes the social anxiety test scores of selected adolescents. The data presented that out of 50 adolescents 37(74%) had marked social anxiety, 10(20%) had mild social anxiety and 3(6%) had severe social anxiety. None of the adolescents had very severe anxiety.

Section IV- Findings related to the effectiveness of Jacobson's Progressive Muscle Relaxation Technique

Scores	Frequency	Mean	Mean difference	Standard deviation	z-test score
Pre-test	50	69.34	37.6	6.360	23.587
Post-test	50	31.74		9.317	

*df (49) = 2.009; p value < 0.05 level of significance

The difference between the mean pre-test and post-test social anxiety scores revealed that the mean and the standard difference of post-test social anxiety score was 31.74 and 9.317 respectively. This indicates that the post-test social anxiety score was consistently less than pre-test score. The pre-test and post-test social anxiety score was analysed by using "z" score test. The computed "z" value ($z=23.587$) was higher than the table value ($z= 2.009$) at 0.05 level of significance. There was a significant difference in mean anxiety scores before and after administration of Jacobson's Progressive Muscle Relaxation Technique at 0.05 level of significance was accepted. It was therefore inferred that there was a significant difference in mean anxiety scores before and after administration of Jacobson's Progressive

Muscle Relaxation Technique at 0.05 level of significance.

Section V- Relationship between Social Anxiety among Adolescents and its Associated Factors.

Associated factors	r value	p value	Correlation	Significant
1. Parental strictness	0.168	0.243	weak positive correlation	Not significant
2. Parental conflicts	0.159	0.270	weak positive correlation	Not significant
3. Peer rejection	-0.197	0.174	negative correlation	Not significant
4. Teachers' strictness	-0.137	0.342	negative correlation	Not significant
5. Troubled with appearance	0.083	0.566	weak positive correlation	Not significant

*Level of significance p value<0.05

It was observed that there was a weak positive correlation between social anxiety and parental strictness, parental conflicts and troubled with appearance and negative correlation between peer rejection and teachers' strictness. None of the associated factors related to social anxiety were significant at 0.05 level of significance. Hence, null hypothesis is accepted. It was inferred that there was no significant relationship between social anxiety and its associated factors (parental strictness, parental conflicts, peer rejection, teacher's strictness) at 0.05 level of significance.

DISCUSSION

The goal of the study was to identify the incidence of social anxiety and to assess the effectiveness of Jacobson's Progressive Muscle Relaxation Technique in reducing social anxiety.

The study was done in two phases, where in Phase-I of the study the investigator identifies the incidence of social anxiety among adolescents and in Phase-II of the study administers and assess the effectiveness of Jacobson's Progressive Muscle Relaxation Technique among adolescents in reducing social anxiety. The findings of the study revealed that in the Phase- I of the study out of 200 adolescents 74 were identified with social anxiety. Among them, 6(3%) were having severe social anxiety 50(25.5%) were identified with marked social anxiety and 18 (9%) were having moderate.

In the Phase-II, 50 adolescents were taken for the study by simple random sampling (lottery method). Out of which (6%) had severe social anxiety, 37(74%) had marked social anxiety and 10(20%) had moderate social anxiety. These findings of the study support the exploratory study which was conducted by Mehtilia Khyati in Ahmadabad to find out the frequency, demographic and phenomenological characteristics of social anxiety disorder, family related factors, academic impairments and comorbidity of depression among adolescents. Four hundred and twenty-one adolescents in a high school were assessed for social anxiety and depression and associated factors with academic impairments using Social Anxiety Inventory Scale, Brief Patient Health Questionnaire and questionnaire on factors associated with social anxiety disorder. The result showed that 54(12.8%) adolescents had social anxiety. The most common manifestations were avoiding giving speeches, performing or giving talk in front of audience,

being centre of attention and speaking up at a meeting. Most of these manifestations of social anxiety disorder were equally found among boys and girls.^[5]

The present study revealed an association between gender and social anxiety respectively as studies have shown that both adolescent girls and boys are associated to it. The study findings supported by a similar study which was conducted by Annette M. La Greca; Social Anxiety Among Adolescents: Linkage with Peer Relations and Friendships to examined associations between adolescents' social anxiety and their peer relations, friendships, and social functioning. The findings revealed that girls reported more social anxiety than boys and social anxiety was more strongly linked to girls' social functioning than boys. Specifically, adolescents with higher levels of social anxiety reported poorer social functioning (less support from classmates, less social acceptance), and girls with higher levels of social anxiety reported fewer friendships, and less intimacy, companionship, and support in their close friendships. These findings suggest the importance of social anxiety for understanding the social functioning and close friendships of adolescents.^[6]

Similar results also support the study done by F.B.G. Seema to investigate the relationship and gender differences between self-esteem and social anxiety in adolescent students. The sample consists of 200 adolescent students (100 males, 100 females) in the age range of 16 to 18 years, taken from various colleges in Bangalore City. The studies showed that self-esteem was negatively correlated with social anxiety in adolescent students. The findings of result also showed the social anxiety did prevail more in female adolescents rather than male adolescents.^[7]

In the present study it was observed that the mean post-test social anxiety score was significantly lower than the mean pre-test social anxiety scores after the administration of Jacobson's Progressive Muscle Relaxation Technique which was significant at 0.05 level of significance. This finding supports an exploratory study which was conducted in Udupi, Karnataka on 193 high school adolescents comprising social anxiety disorder. The studies revealed that Jacobson's Progressive Muscle Relaxation Technique was effective in reducing moderate to severe social anxiety in adolescents.^[8]

Another study which supported the effectiveness of Jacobson's Progressive Muscle Relaxation Technique in the present study, was done among adolescents in adolescents girls studying in a school of Kashipur, Uttarakhand. Quasi-experimental study was conducted to assess the effectiveness of Jacobson's Progressive Muscle Relaxation Technique on social anxiety adolescent girls where total of 271, were screened for social anxiety, among them 68 adolescents were found to have social anxiety, which was categorized as Mild, Moderate and Severe on the basis of anxiety scores Adolescent girls were divided into experimental (30) and control group (30), Jacobson's Progressive Muscle Relaxation Technique was administered for 10 days. The results revealed that there was significant decrease seen in the Post-test social anxiety scores of the adolescent girls after the administration of the Jacobson's Progressive Muscle Relaxation Technique as $p < 0.01$ at 0.05 level of significance.^[9]

The present study revealed that there was no significant correlation between the social anxiety and associated factors, but have shown a weak positive correlation between social anxiety and parental strictness, parental conflicts and troubled with appearance. To this there are findings have shown a strong relationship to support the proposition of parental acceptance-rejection theory. Adolescent's perception of a warm and accepting quality in the relationship with their parents is remarkably important to maintain their healthy psychological adjustment because their security and other emotional and psychological states are dependent on it.^[10]

CONCLUSION

It was a two-phase study, in Phase-I adolescents were identified with social anxiety which came out to be 74, out of these only 50 adolescents were selected through simple random sampling to which Jacobson's Progressive Muscle Relaxation Technique was administered to the adolescents to assess the effectiveness on the level of social anxiety.

The study on the topic concluded that the social anxiety level was found to be effective after Jacobson's Progressive Muscle Relaxation Technique was administered among adolescents.

It revealed that there was a significant relationship only between social anxiety and gender, but no significant relationship between the other demographic variables.

The results from the study suggests that Jacobson's Progressive Muscle Relaxation Technique is effective in reducing the level of social anxiety.

RECOMMENDATIONS

The study can be conducted in other schools, colleges and professional institutes to assess the incidence and prevalence of social anxiety.

The same study can be replicated on a larger sample so that the findings can be generalized to a wider population.

Comparative studies can be done to compare the identification of social anxiety in Urban and Rural population.

A similar study can be conducted by different research designs.

REFERENCES

1. Mary C. Townsend, Karyn Morgan; *Psychiatric Mental Health Nursing: Concepts of Care in Evidence-Based Practice*, 2017. <http://www.books.google.co.in>
2. Prevalence of Social Phobia in school-going adolescents in an urban area. *Delhi Psychiatry Journal*, 2009; 12(1): 1.
3. Giri Aliva. Effect of Jacobson's Progressive Muscle Relaxation Exercise on Anxiety among Children Diagnosed with Leukaemia Admitted in Selected Hospital of Cuttack, *International Journal of Health Sciences and Research*, 2019; 9(2): 151-155.
4. F.B.G. Seema, G. Kumar Venkatesh. Prevalence of Social Phobia among School Going Adolescents; *The International Journal of Indian Psychology*. December, 2016; 4(1): 2349-3429.
5. Mehtalia Khyati, Vankar K.G. Social Anxiety in Adolescents. *Indian Journal of Psychiatry*, 2004; 46(3): 221-227.
6. Annette M. La Greca; Social Anxiety Among Adolescents: Linkage with Peer Relations and Friendships; *Journal of Abnormal Child Psychology*, 1998; 26(2): 83-94.
7. Seema G. B. and Venkatesh Kumar G, Self-esteem and social anxiety in adolescent students, *Indian Journal of Positive Psychology*, 2017; 3: 435-438.
8. Febu Elizabeth Joy, Tessy Teresa Jose, Asha K Naya. Effectiveness of Jacobson's Progressive Muscle Relaxation (JPMR) Technique on social anxiety among high school adolescents in a selected school of Udupi district, Karnataka. *Nitte University Journal of Health Science*, 2014; 4(1): 2249-7110.
9. Nair Unnikrishnan Harikrishnan. Academic Stress, Parental Pressure, Anxiety and Mental Health among Indian High School Students; *International Journal of Psychology and Behavioural Sciences*, 2015; 5(1): 26-34.
10. Annette M. La Greca; Social Anxiety Among Adolescents: Linkage with Peer Relations and Friendships; *Journal of Abnormal Child Psychology*, 1998; 26(2): 83-94.