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Gayathri Mantra and Social Skills Training for Social Anxiety, Stress, Self Concept, and Well Being among School Students with Learning Difficulties

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Abstract--*Gayathri Mantra is a four verse poem that was mentioned in epics of Hinduism and has been further researched for its lasting effect on mind and body. Here an attempt is being made to combine the healing effects of Gayathri mantra along with Social Skills Training for benefitting the often ignored psychological issues such as Social Anxiety, Self Concept and Well Being faced by school students with Learning Difficulties.*

Objectives

The major objectives of the study are to understand the level of Social Anxiety, Stress, Self concept and Well being among school students with learning difficulties. An effort to improve the Self concept, Well being and to reduce the level of Social Anxiety and Stress experienced using an intervention of Social Skills Training along with the chanting/listening of Gayathri Mantra with simple Breathing Exercises.

Method

The Liebowitz Social anxiety Scale (Liebowitz M R, 1987) was used to pretest the Social Anxiety levels. The Perceived Stress Scale for Children (White, B P, 2014) was used to study the stress levels of students. The Self Concept Questionnaire (SCQ, Saraswat, R.K) was used to pretest the self concept and the WHO Well Being Scale was used to pretest the well being among 80 school students of the age group 10 to 17 years. This group was then randomly divided into 2 groups of 40 members each, hence 40 students in the Experimental Group and 40 students in the wait list Control Group. This was followed by an intervention of Social Skills Training Module and the chanting/listening of Gayathri Mantra for a duration of two months. A post test was conducted and the results analyzed. A follow Up study was also conducted after two months.

Results and conclusions

The SPSS 21 version was used to analyze obtained data. Analysis showed that the intervention of Social Skills Training and Gayathri Mantra was effective in reducing the Social Anxiety and Stress levels of the Experimental Group. Also post intervention, an improvement especially in the Self Concept was observed in the students of the experimental Group. The Well being level also shows improvement. These results were found to be maintained during the follow up study. It can be effectively concluded that the intervention of Social Skills

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Training with Gayathri Mantra is effective in reducing Social Anxiety and Stress among students with Learning Difficulties. Also the intervention helps to improve Self Concept and Well Being among the student.

Key Words-- *Gayathri Mantra, Social Anxiety, Stress, Self Concept, Well Being, Social Skills Training.*

I. INTRODUCTION

Gayathri Mantra is a four verse poem that has been mentioned extensively in epics of Hinduism and has been further researched for its lasting effect on mind and body. Gayathri Mantra is a supposedly powerful Mantra that has been known to have effective benefits for the utterer. This is a simple verse that is as follows:

"Om Bhur Bhuva Swaha,
Tat Sa Viturva Renyam
Bhargo Devasya Deemahi
Diyo Yona Prajothayat…."

The meaning of this powerful verse is such, "The light of the sun illumines all the three worlds namely Bhu log, Bhuvar log and Suvar Log. I mediate upon that highly effulgent light. Let that light kindle and illumine my intellect too." (The Speaking Tree, Satya Narayanan, 2016).

This is a highly revered mantra from the Rig Veda, created by Sage Vishwamitra, dedicated to Savithri, the deity of the five elements of Nature. This particular mantra is special because it does not confirm to a particular religion. There is mention of an illumination that brightens the intellect.

Moreover, any rhythmic chanting is beneficial in improving one's attention and concentration. "Rhythm formulas that involve breathing at six breaths per minute induce favorable psychological and possibly physiological effects." (Bernardi L; Sleight P, and others, 2001).

Due to this irreligious quality of this mantra, and its rhythmic benefits, it was decided to use this mantra for this study. Any form of rhythmic chanting or even listening to such chanting of rosaries or prayers has a calming effect and induces relaxation.

Here an attempt is being made to combine the healing effects of Gayathri mantra along with Social Skills Training for benefitting the often ignored psychological issues such as Social Anxiety, Self Concept and Well Being faced by school students with Learning Difficulties.

Today's world is highly competitive. In a country like India, where academic achievement is given great importance, the condition of students who have Learning Disability, or are Slow Learners or just some learning difficulties is a matter of great concern. Students who face academic failure are generally labeled as "failures" in all other aspects of life and are continuously looked down upon. Many such children do not taste any success in any other aspect of their lives. They are generally prohibited from indulging in their hobbies and spend all their waking time studying and trying to cope up with their ever pending academic work. Such monotonous work at which they already face a difficulty, becomes a vicious circle where the absence of respite works only to further frustrate them. Their sense of well being drops drastically. Students who face difficulties in Learning face excessive academic stress which also leads to a feeling of inferiority. In practice, it is seen that many such students facing learning difficulties

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have a poor self confidence level; they start doubting their capabilities and continuously doubt themselves and start feeling helpless. These children generally put in huge volume of time in completing their academic backlog and having a poor relaxation activity works like a vice gripping them further. Such a success less life causes many students to undergo depression and anxiety.

Social Anxiety Disorder (SAD) is often called Social Phobia. Social Anxiety is defined as "An anxiety disorder characterized by an intense, irrational fear of one or more social or performance situations in which the individual believes that he or she will be scrutinized by others." (ICD 10, 2019) Any exposure to situations that are social in nature (especially involving strangers) immediately stimulates or provokes an intense anxiety response characterized by extreme fear or apprehension of social interactions or overall social situations in general.

DSM-V defines Social Phobia as "marked or intense fear or anxiety of social situations in which the individual may be scrutinized by others and this situation interferes significantly with routines, occupational (academic) functioning, social activities, and relationships." (American psychiatric Association, 2013) Though it is a "devitalizing psychological condition which is treatable, it remains undetected and hence untreated often. Individuals will have disrupted social interactions, a reduced quality of life, , poor daily social functioning, and poor treatment adherence for any other medical or psychiatric conditions." (Valente, S .M, 2002)

Generally Social Anxiety experienced in childhood is marked by extreme shyness. As they grow up into adolescents, the shyness becomes intense and does not remain just shyness, but is characterized by severe panic in anticipation of a social situation. Also the adolescent starts avoiding social situations and tries to stay in the background and goes to extreme steps to avoid drawing attention to self. The adolescent with Social Anxiety Disorder tend to have trouble with.,

- Speaking to people
- Making Eye contact with people
- Talking to strangers
- Eating in front of other people
- Going to functions or parties
- Going outside their comfort zone
- Initiating any type of contact with people
- Initiating Conversations
- Entering rooms filled with people
- Attending Interviews
- Being the center of attention
- Afraid of being asked any question

The socially anxious person is generally fearful and reacts by avoiding the situation totally or at least keeping the interaction to a bare minimum. They have a comfort zone like their rooms, houses, very few people who understand them and try to follow strict routines and avoid unwanted attention from anybody outside their comfort

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zone. They build their lives in a strict tight circle and fear any outside influence. They have an overwhelming anxiety or fear of,

- Making a fool of themselves in public
- Being humiliated by others
- Being the center of attention
- Offending others as they consider that they cannot converse properly

Generally the Socially anxious person faces many problems. The physical symptoms are.

- Restlessness
- Shortness of breath
- Palpitations
- Dry throat
- Dizziness or lightheadedness, may result in blackouts
- Stomach disturbances and many more.

Psychologically they face numerous symptoms like.,

- Negative thinking
- Poor Self-esteem
- Prone to Depression
- High Sensitivity or emotionality
- Insecurity

The underlying causes of Social anxiety may be.,

- Childhood Trauma
- Neglecting parents/ Overcritical/ Authoritarian Parenting
- Bullying/ Teasing
- Childhood Abuse
- Broken Families
- Any Health Condition
- Disability of any type

Many of the students who face Learning Difficulties are subjected to ridicule and feel awkward and embarrassed as a result of which fail to forge healthy social relationships. Due to this, they also face Social anxiety when among strangers or even among their peer group. A depreciating sense of Self Worth and low Self- Efficacy account for many of their psychological issues further lowering their sense of Well Being.

Such scenario calls for drastic change. To have a problem in learning does not mean that a child is unable to perform well in other aspects of his/her life. Keeping in mind, “All work and No play makes Jack a dull boy”, this research entails to induce social skills training and also the calming effects of reciting Gayathri mantra as a respite to

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children with academic difficulties and improve their sense of well being and help remove negative effects such as Social anxiety, and Stress.

II. REVIEW OF LITERATURE

In a study Dr James Hartzell, (2018) a neuroscientist and researcher reported that the brain's massive grey matter density and cortical thickness was found to increase in those who had learnt and routinely recited the Sanskrit texts for the past decade. For the study, Dr Hartzell, who coined the term, 'The Sanskrit Effect', compared the brains of 21 male participants with those of 21 professional Vedic Sanskrit Pandits who had memorized the Yajurveda *Saṃhitā* text and trained since childhood to memorize, recite and master the exact pronunciation of the ancient texts. It was found that grey matter density and thickness of the cerebral cortex increased in the brains of the Vedic Sanskrit Pandits as compared with the other male participants.

Another study conducted by Hartzell, Nath and Chatterjee (2018) at the National Brain research Centre (NBRC), Haryana, 42 volunteers were tested and it was reported that that the cerebral cortex were thicker and the hippocampus regions were more pronounced in the subjects who recited Sanskrit Mantras daily for over 7 years than the other subjects, thus proving the significance of reciting mantras for better brain functions.

Kalamangalam and Ellmore (2014) conducted a similar study using vedic pundits in Houston. They studied a group of Hindu Vedic Priests who orally recited spontaneously many mantras regularly. The researchers demonstrate the increase in thickness of the cortex in the prefrontal lobe and temporal lobe.

Perry, Polito and Thomson(2016) in a study aimed to find if the chanting of "Om" for 10 minutes in a day is beneficial for improving attention, positive mood and increased feelings of social cohesion, compared the effects in experienced and inexperienced chanters. The results indicate that positive affect and altruism increased in vocal chanters rather than silent chanters or listeners. Also among experienced chanters, silent chanting was found to be equally effective in increasing altruism. The study indicated that chanting has a positive effect on social cognition and mood of an individual.

Dwivedi and Singh conducted a study to evaluate the significance of "Om" in knowing oneself better. They reported that chanting of the "Om" mantra on a very regular basis helps to restore the physical, mental, spiritual and emotional balance of the body. Moreover, it develops intuition, enhances creativity, and improves one's work performance. Chanting of the 'Om" Mantra regularly brings clarity to the mind and increases self awareness among other significant wellness concepts.

In a study by Sharma and Singh (2014) on the effect of chanting mantras as powerful coping strategies for educational stress among 200 adolescents from senior secondary school students belonging to Shimla, it was reported that, the experimental (Chanting mantras) group benefitted significantly from chanting mantras than the control (non chanting) group. A significant long term effect was observed in the follow up study also.

Om Meditation is very effective in Stress management as suggested by a survey research conducted by Harne, Tahseen, Hiwale,., & Dhekekar, (2019). This study is based on Neuroimaging studies, EEG Studies and other methods of research. Also this paper suggests that Om meditation is effective in healing the negative facets' of anxiety and depression.

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In an Ayurvedic attempt to study the effect of the Gayathri mantra on Manas Prakurthi and stress, Sharma (2018) reported that the triveni of the Gyathri Mantra improves the Satva Guna and hence leads one to Spiritual enlightenment and illumination. Aspects such as Fearlessness and endurance, and courage to fight that are characteristics of Rajas and Tamas Gunas respectively are also enhanced. Thus it was reported that the gayathri leads a person towards total social well being.

Dudeja(2017) in a study that scientifically analyzed the Mantra based Meditation techniques and its beneficial effects, concluded that mantra based meditation is highly effective in relaxation and it helps the person who practicesgive more oxygen to the brain, and hence reduce the heart rate, and blood pressure, get an effective cure for many ailments,

Burke, Lam, Stussman, & Yang, (2017) in a study on the patterns and prevalence of use of mindfulness, mantra and spiritual meditation among adult population in the United States, used an interview based survey method with 34,525 participants concluded that Meditation is a valuable tool to improve mental health, regularization of self-behaviour, and medical care for an individual.

Ratnani I J et al (2017) in a study among 290 medical undergraduate students reported that Social Anxiety Disorder is very prevalent in general population usually starts during adolescence age and it significantly affects educational attainment, poor wages, poor family relationship, increase risk of depressive disorder, and significantly impairs quality of life of individuals. The frequency of Social Anxiety Disorder is roughly 11.37% in the people who participated in the study. Participants with Social Anxiety are more likely to be experiencing poor quality of life and depression and also vice versa. Participants with poor social supports have more symptoms of social anxiety.

Pontillo etal (2017) in a research on the presence and prevalence of Social Anxiety among clinically high risk adolescents, found that anxiety, especially social anxiety, is positively correlated to the severity and the intensity of the psychotic symptoms present in the tested adolescent. In another study on 201 patients, it was reported that women showed more social anxiety and also more depression than men. The results support that those participants who are high risk category for developing psychosisalso experience social anxiety and depression, this is particularly seen among women. Screening a help-seeking population with anxiety and depression may be highly beneficial in detecting the patients who are at high risk for developing psychosis.(Reitdijk ,J et al,2013)

Social anxiety and social phobia is significantly associated with drinking alcohol, social support, and the student's status of living as reported in a study reported by Mekuria.K, etal, (2017).Among female students, the chances of experiencing social anxiety and/or social phobia were thrice more than that of the male students. The community's measure and perceptionof politeness and shyness as a measure of the predominant and important cultural norm may have had a very high effect on the social phobia levels of female students.

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Stein ,M.B (2001) researched the Social Anxiety Disorder and the risk of experiencing Depression in a Adolescents and Young Adults and he reported that Social anxiety disorder experienced during adolescence orduringyoung adulthood is one of the important predictor of experience of depressive and anxiety disorders subsequently. Moreover, the presence of a co morbid Social Anxiety Disorder along with Depression in adolescents has a more intensely malignant course in the subsequent depression disorder.

Mehtalia, K and Vankar, G. K. (2004) in a study in India among adolescents, found a prevalence of 12.8% for Social Anxiety. The most general manifestation of SAD was to avoid giving speeches in public. SAD was experienced equally among both the genders, and was associated with difficulty in coping with academics, concerns about one's weight, lack of intimacy with parents, having less friends, and being treated a little differently from siblings.

Hedman E, etal, (2013) in a study on Guilt and Shame along with Social Anxiety Disorder: reported that Cognitive Behavior Therapy was highly effective in treating the guilt and shame that is often associated with Social anxiety Disorder. This study was conducted among 72 adolescents.

In a study on Health science students studying the effects of ethnicity on Social Anxiety Disorder and its association with Depression, and Substance Abuse, Jager, P.D and others (2014) found that Ethnicity was definitely one of the contributory factor in experiencing Social Anxiety Disorder and there was a significant association between Social Anxiety, depression and also Substance Abuse among adolescents.

Baker, 2003; Lee, Keough, & Sexton (2002) reported that males and females experience stress differently and frequently show differences in how they experience, perceive and handle the stressful events of one's life (Burke & Weir, 1978). Differences and variations in the understanding and perception of stress has been positively correlated with the gender differences and the social connectedness (Baker, 2003; Lee et al., 2002). Male students who have a low level of social connectedness described that they have a more negative perception and appraisal of the campus life than the female students (Lee et al., 2002). The researchers had reported that probably because males are more independent, whereas female students are more relationship oriented and hence interdependent. Yet, the concept of social connectedness was increasingly correlated with appraised and perceived level of stress for both male and female students (Lee et al., 2002).

An extract on statements given by a 15 year old with social anxiety:

"I live in constant fear. In school, I know the answer to the questions the teacher asks, but never have the nerve to raise my hands or call out the answer. Even when I am called out to read out or answer a question, I feel like my throat has gone totally dry, my tongue sticks to my mouth and refuses to move, My heart pounds and I feel as though I am going to faint, dizzy and sick. I don't want to go out, talk to people like my classmates. They think I am weird, but I avoid all of them."

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III. METHOD

The major Objectives of the study were to

- To determine the effect of Social Skills Training and Chanting/ listening of Gayathri Mantra on Social Anxiety, Stress, Self Concept and Well Being of the student with Learning Difficulties

The Hypothesis for the present study were as follows:

1. There is a significant difference in Social anxiety, Stress, Self Concept and Well Being between the Pretest and Post test Phases
2. There is a significant difference of Social Anxiety, of the student with Learning Difficulties in the Pretest, Post Test and Follow Up Phases.
3. There is a significant difference of Stress of the student with Learning Difficulties in the Pretest, Post Test and Follow Up Phases.
4. There is a significant difference of Self Concept of the student with Learning Difficulties in the Pretest, Post Test and Follow Up Phases.
5. There is a significant difference of Well Being of the student with Learning Difficulties in the Pretest, Post Test and Follow Up Phases.

The tools used for this research were as follows;

The Liebowitz Social anxiety Scale (Liebowitz M R, 1987) was used to pretest the Social Anxiety levels. The Perceived Stress Scale for Children (White, B P, 2014) was used to study the stress levels of students. The Self Concept Questionnaire (SCQ, Saraswat, R.K) was used to pretest the self concept and the WHO Well Being Scale was used to pretest the well being among 80 school students of the age group 10 to 17 years. All of them were assessed on Liebowitz Social anxiety Scale. This test has 24 items of which, there are 13 items to measure fear of performance situations and 11 items to measure fear of social interaction. The six subscales that can be measured are fear of social interaction, avoidance of social interaction, fear of performance, avoidance of performance. We also get a total Fear Score, total Avoidance Score and a total LSAS Score.

Each item is measured on a Likert-type scale, where no fear or avoidance is scored 0to severe fear or avoidance being scored 3. Liebowitz states that total LSAS scores may be interpreted as a score of 55 to 65 can be interpreted as moderate level of social anxiety, score of 65 to 80 as marked level of social anxiety, score of 80 to95 severe level of social anxiety and finally a score of 95 and above can be interpreted as very severe social anxiety.

The Perceived Stress Scale for Children (White, B P, 2014) was used to study the stress levels of students. This test consist of 14 items which are pictorial and concerns their regular life. The items comprise real life events in a student's life which may arouse stress.

The Self Concept Questionnaire that was developed by Saraswat. R .K was used for this research. This Questionnaire consists of 48 items.The self-concept inventory provides six separate dimensions of self-concept, viz., Physical, Social, Intellectual, Moral, Educational and Temperamental Selfconcept. It also gives a total self-concept score. The operational definitions of self-concept dimensions measured by this inventory are :

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1. Physical dimension—Individuals' view of their body, their health, their physical appearance and overall strength.
2. Social dimension—Individual's sense of self worth especially in social interactions.
3. Temperamental dimension—Individuals view of their prevailing emotional condition or predominance of a particular kind of emotional reaction.
4. Educational dimension—Individual's view of themselves in relation to school , academics, teachers and extracurricular activities.
5. Moral dimension—Individual's estimation of their moral worth; their perception of their right and wrong activities.
6. Intellectual dimension -. Individuals' awareness of their intelligence and their capacity of problem solving and judgments.

The WHO Well Being Scale consists of 5 items which help to measure the general well being. Each of the items consists of a five point rating scale. The scores range from 0 to 25. The WHO-5 was initially presented at a WHO meeting in Stockholm in February 1998 as part of a project on the measurement of well-being in primary health care patients.

All the above 4 tests were administered to 80 school students of the age group 10 to 17 years. This group was then randomly divided into 2 groups of 40 members each, hence 40 students in the Experimental Group and 40 students in the wait list Control Group. This was followed by an intervention of Social Skills Training Module and the chanting/listening of Gayathri Mantra for a duration of two months. A post test was conducted and the results analyzed.

The intervention schedule consists of 2 parts, first part is the Social Skills Training Module. This Module consists of Role Plays of social situations, In-Situ demonstrations, Practice sessions to express different sets of emotions better. All this was held in small groups of 5/6 students with a session, once in 2 days for one month. The session consists of a Counselor, a facilitator and the selected students. The Role Plays were student specific with peer situations that were drawn from the social life of this particular student group. The roles were rotated among the students to give them an overall view of the situation three dimensionally. Practical sessions were conducted with different set of emotional expression and their consequences.

The second part of the intervention involved recitation/ listening of the Gayathri Mantra. The students were requested to chant the Gayathri mantra along with a recording given to them or to listen to the recording. This recording contained rhythmic chanting of the mantra 12 times. The student was urged to listen/ chant with this mantra at least 3 to 5 times for duration of 2 months.

Regular feedback sessions were organized during the course of these 2 months. The students were encouraged to give feedback and conduct discussions with the Counselor. After the intervention of 2 months, the post test was conducted. Following this, a follow up was conducted again after a period of two months after the post test. The data was analyzed using SPSS version 21.

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IV. RESULTS AND DISCUSSION

The results of the data analysis are as follows:

The Experimental and Control Groups were initially tested for homogeneity. An Independent Sample t test was done for this purpose.

Table 1: Independent t test to test the homogeneity between the experimental and the control Groups for Social Anxiety, Stress, Self Concept and Well Being

	Groups	**N**	**Mean**	**Std. Deviation**	**t**
Social Anxiety	Experimental Control	80 80	2.69 2.72	.455 .455	0.005[ns]
Stress	Experimental Control	80 80	2.89 2.83	.318 .382	1.124[ns]
Self Concept	Experimental Control	80 80	1.08 1.09	.265 .284	.288[ns]
Well Being	Experimental Control	80 80	1.06 1.09	.244 .284	.597[ns]

[ns] Not Significant

The Table 1 shows that there is no significant difference between the experimental and the control groups on the scores of Social Anxiety, Stress, Self Concept and Well Being. This shows that the experimental and control groups are homogenous with respect to the variables taken up for study.

Table 2 Paired sample t test between Pretest and Post Test Scores on Social Anxiety (the experimental and the control group)

Variables		**Mean**	**Std. Deviation**	**t**
	Pretest Experimental Group Social Anxiety - Posttest Experimental Group Social Anxiety	1.613	.562	25.645*

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	Pretest Control Group Social Anxiety – Posttest Control Group Social Anxiety	.063	.486	1.149^{ns}

- *Significant at the 0.01 level
- ^{ns} Not Significant

The above Table 2 shows the Social Anxiety Scores for the Pretest and Post Test Phase for the Experimental and Control Group. The table shows that there is a significant difference in the scores of Social Anxiety in the Experimental Group, whereas, there is no such significant difference in the scores of the wait list Control Group. This shows that the intervention of Gayathri mantra and Social Skills Training is effective in reducing Social Anxiety in the participants.

Table 3 Paired sample t test between Pretest and Post Test Scores on Stress (the experimental and the control group)

Variables		**Mean**	**Std. Deviation**	**t**
	Pretest Experimental Group Stress – Post test Experimental Group Stress	1.813	.393	41.274*
	PretestControl Group Stress – Posttest Control Group Stress	.063	.431	-1.296^{ns}

- *Significant at the 0.01 level
- ^{ns} Not Significant

The above Table 3 shows the Stress Scores for the Pretest and Post Test Phase for the experimental and the control Group. The table shows that there is a significant difference in the scores of Stress in the Experimental Group, whereas, there is no such significant difference in the scores of the wait list control group. This shows that the intervention of Gayathri mantra and Social Skills Training is effective in reducing Stress in the participants.

Table 4 Paired sample t test between Pretest and Post Test Scores on Self Concept (the experimental and the control group)

Variables		**Mean**	**Std. Deviation**	**t**
	Pretest Experimental Group Self Concept – Posttes t Experimental Group Self Concept	-1.788	.441	-36.226*

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	Pretest Control group Self Concept – Posttest Control Group Self Concept	-.025	.389	-.575^{ns}

- *Significant at the 0.01 level
- ^{ns} Not Significant

The above Table 4 shows the Self Concept Scores for the Pretest and Post Test Phase for the Experimental and Control Group. The table shows that there is a significant difference in the scores of Self Concept in the Experimental Group, whereas, there is no such significant difference in the scores of the wait list Control Group. This shows that the intervention of Gayathri mantra and Social Skills Training is effective in improving the Self Concept of the participants.

Table 5 Paired sample t test between Pretest and Post Test Scores on Well Being (the experimental and the control group)

Variables		**Mean**	**Std. Deviation**	**t**
	Pretest Experimental Group Well Being – Post test Experimental Group Well Being	-1.738	.443	-35.099*
	Pretest Control Group Well Being – Post test Control Group Well Being	-.025	.317	-.705^{ns}

- *Significant at the 0.01 level
- ^{ns} Not Significant

The above Table 5 shows the Well Being Scores for the Pretest and Post Test Phase for the Experimental and Control Group. The table shows that there is a significant difference in the scores of Well Being in the Experimental Group, whereas, there is no such significant difference in the scores of the wait list Control Group. This shows that the intervention of Gayathri mantra and Social Skills Training is effective in improving the Well Being of the participants.

The above tables show that the Hypothesis 1, “There is a significant difference in Social anxiety, Stress, Self Concept and Well Being between the Pretest and Post test Phases” is proved. This can be interpreted that the intervention of Gayathri mantra and Social skills Training is effective in reducing Social Anxiety and Stress, and in improving Self Concept and Well Being of students with Learning Difficulties.

Post hoc Comparisons

A Follow Up study of the same variables was done two months after the above post test and the results were tabulated using a repeated measures ANOVA to compare the changes in the three phases namely, Pretest, Post test and Follow Up. The Post hoc results for each of the variables are reported hereunder.

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Social Anxiety

Table 6.1 Mean Difference in Pretest, Post test and Follow Up Phases in Social Anxiety

Groups	Mean	Std. Deviation	N
Pretest Experimental Group Social Anxiety	2.71	.45	40
Posttest Experimental Group Social Anxiety	1.10	.30	40
Follow Up Experimental Group Social Anxiety	1.10	.30	40

Table 6.2 Repeated Measures One Way Anova Analysis of Variance (within group sample)

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Social Anxiety	Sphericity Assumed	138.67	2	69.33	547.99	.00	.87
	Greenhouse-Geisser	138.67	1.81	76.49	547.99	.00	.87
	Huynh-Feldt	138.67	1.85	74.83	547.99	.00	.87
	Lower-bound	138.67	1.00	138.67	547.99	.00	.87
Error(Social Anxiety)	Sphericity Assumed	19.99	158	.12			
	Greenhouse-Geisser	19.99	143.22	.14			
	Huynh-Feldt	19.99	146.39	.13			
	Lower-bound	19.99	79.00	.25			

**Significant at 0.01 level

The above Table shows that there was a significant difference in the Social anxiety of the sample in the pre, post and follow up phases. The F (2, 1.81) =547.99 which is significant at the 0.01 level (p=0.000).

Table 6.3 Post Hoc Analysis of Intervention on Social Anxiety

(I) factor	(J) factor	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
					Lower Bound	Upper Bound
1	2	1.613*	.063	.000	1.459	1.766
	3	1.613*	.058	.000	1.472	1.753
2	1	-1.613*	.063	.000	-1.766	-1.459
	3	.000	.047	1.000	-.115	.115
3	1	-1.613*	.058	.000	-1.753	-1.472
	2	.000	.047	1.000	-.115	.115

*. The mean difference is significant at the .05 level.

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Post Hoc comparisons indicated that post test mean difference of Social anxiety (M=1.613 and SD= 0.063) was not significantly different than the follow up mean difference of Social Anxiety (M=1.613, SD=0.058).

The Table 6.3 also indicates that pre test mean difference of Social Anxiety (M=-1.613 and SD= 0.063) was significantly different than the follow up mean difference of Social Anxiety (M=0.000, SD=0.047).

Post Hoc comparisons indicated that pre test mean difference of Social Anxiety (M=-1.613 and SD= 0.058 was significantly different than the post test mean difference of Social Anxiety(M=-0.000, SD=0.047).

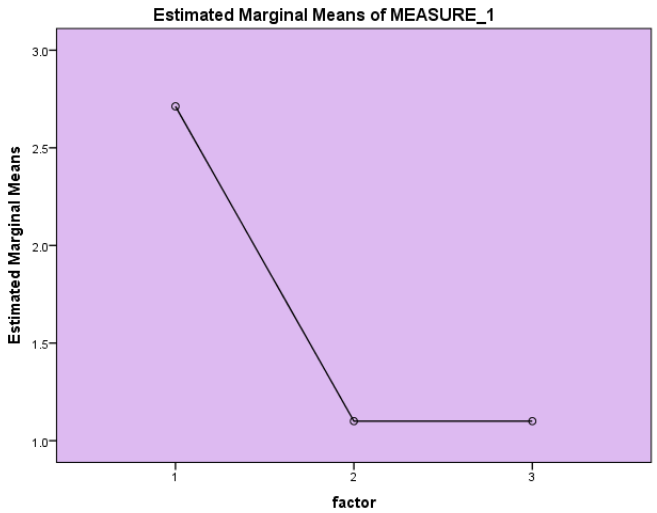

Figure 1 Significant Difference of Social Anxiety in Pretest, Post test and Follow Up Phases

The above Graph shows that there is significant difference in Social Anxiety from Pre to Post, and post to Follow Up Phases.

Thus the Hypothesis 2, "There is a significant difference of Social Anxiety, of the student with Learning Difficulties in the Pretest, Post Test and Follow Up Phases", is only partially proved. That is, there is no significant difference between the post and follow up phases. This also can be interpreted that the changes that have been seen in the post test phases have been maintained till the follow up testing.

Stress

Table 7.1 Mean Difference in Pretest, Post test and Follow Up Phases in Stress

Groups	Mean	Std. Deviation	N
Pretest Experimental Group Stress	2.89	.31	40
Posttest Experimental Group Stress	1.08	.26	40
Follow Up Experimental Group Stress	1.09	.28	40

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Table 7.2 Repeated Measures One Way Anova Analysis of Variance (within group sample)

Source		**Type III Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**	**Partial Eta Squared**
Stress	Sphericity Assumed	174.008	2	87.00	1085.97	.000	.93
	Greenhouse-Geisser	174.008	1.99	87.13	1085.97	.000	.93
	Huynh-Feldt	174.008	2.00	87.00	1085.97	.000	.93
	Lower-bound	174.008	1.00	174.00	1085.97	.000	.93
Error(Stress)	Sphericity Assumed	12.658	158	.08			
	Greenhouse-Geisser	12.658	157.77	.08			
	Huynh-Feldt	12.658	158.00	.08			
	Lower-bound	12.658	79.00	.16			

The above Table shows that there was a significant difference in the Stress of the sample in the pre, post and follow up phases. The F (2, 1.99) =1085.97 which is significant at the 0.01 level (p=0.000).

Table 7.3 Post Hoc Analysis of Intervention on Stress

(I) factor	**(J) factor**	**Mean Difference (I-J)**	**Std. Error**	**Sig.[b]**	**95% Confidence Interval for Difference[b]**	
					Lower Bound	**Upper Bound**
1	2	1.813*	.044	.000	1.705	1.920
	3	1.800*	.045	.000	1.690	1.910
2	1	-1.813*	.044	.000	-1.920	-1.705
	3	0.013	.045	1.000	-.123	.098
3	1	-1.800*	.045	.000	-1.910	-1.690
	2	0.013	.045	1.000	-.098	.123

*. The mean difference is significant at the .05 level.

Post Hoc comparisons indicated that post test mean difference of Stress (M=1.813 and SD= 0.044) was not significantly different than the follow up mean difference of Stress (M=1.800, SD=0.045).

The Table 7.3 also indicates that pre test mean difference of Stress (M=-1.813 and SD= 0.044) was significantly different than the follow up mean difference of Stress (M=0.013, SD=0.045).

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Post Hoc comparisons indicated that pre test mean difference of Stress (M=-1.800 and SD= 0.045) was significantly different than the post test mean difference of Stress (M=-0.013, SD=0.045).

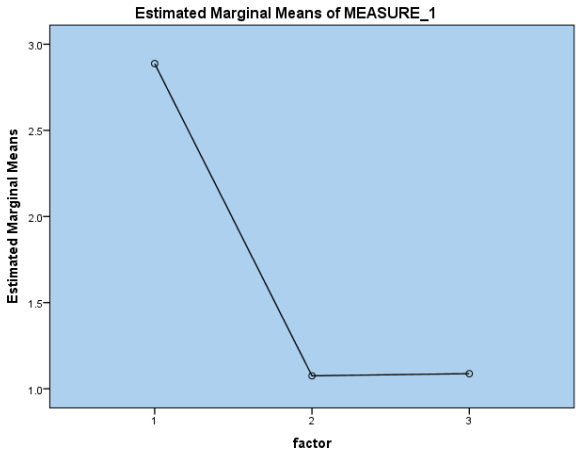

Figure 2 Significant Difference of Stress in Pretest, Post test and Follow Up Phases

The above Graph shows that there is significant difference in Stress from Pre to Post, and post to Follow Up Phases.

Thus, it can be seen that Hypothesis 3, "There is a significant difference of Stress of the student with Learning Difficulties in the Pretest, Post Test and Follow Up Phases" is partially proved.

That is, there is no significant difference between the post and follow up phases. This also can be interpreted that the changes that have been seen in the post test phases have been maintained till the follow up testing.

Self Concept

Table 8.1 Mean Difference in Pretest, Post test and Follow Up Phases in Self Concept

Groups	**Mean**	**Std. Deviation**	**N**
Pretest Experimental Group Self Concept	1.08	.265	40
Posttest Experimental Group Self concept	2.86	.347	40
Follow Up Experimental Group Self concept	2.80	.433	40

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Table 8.2 Repeated Measures One Way Anova Analysis of Variance (within group sample)

Source		**Type III Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**	**Partial Eta Squared**
Self Concept	Sphericity Assumed	164.658	2	82.329	629.166	.000	.888
	Greenhouse-Geisser	164.658	1.817	90.628	629.166	.000	.888
	Huynh-Feldt	164.658	1.857	88.657	629.166	.000	.888
	Lower-bound	164.658	1.000	164.658	629.166	.000	.888
Error(Self Concept)	Sphericity Assumed	20.675	158	.131			
	Greenhouse-Geisser	20.675	143.532	.144			
	Huynh-Feldt	20.675	146.723	.141			
	Lower-bound	20.675	79.000	.262			

The above Table shows that there was a significant difference in the Self concept of the sample in the pre, post and follow up phases. The F (2, 1.81) =629.16 which is significant at the 0.01 level (p=0.000).

Table 8.3 Post Hoc Analysis of Intervention on Self Concept

(I) factor	**(J) factor**	**Mean Difference (I-J)**	**Std. Error**	**Sig.[b]**	**95% Confidence Interval for Difference[b]**	
					Lower Bound	**Upper Bound**
1	2	-1.788*	.049	.000	-1.908	-1.667
	3	-1.725*	.056	.000	-1.862	-1.588
2	1	1.788*	.049	.000	1.667	1.908
	3	0.063	.065	1.000	-.096	.221
3	1	1.725*	.056	.000	1.588	1.862
	2	0.063	.065	1.000	-.221	.096

*. The mean difference is significant at the .05 level.

Post Hoc comparisons indicated that post test mean difference of Self Concept (M=1.788 and SD= 0.049) was not significantly different than the follow up mean difference of Self Concept (M=1.725, SD=0.056).

The Table 8.3 also indicates that pre test mean difference of Self Concept (M=-1.788 and SD= 0.049) was significantly different than the follow up mean difference of Self Concept (M=0.063, SD=0.065).

Post Hoc comparisons indicated that pre test mean difference of Self Concept (M=-1.725 and SD= 0.056) was significantly different than the post test mean difference of Self Concept (M=-0.063, SD=0.065).

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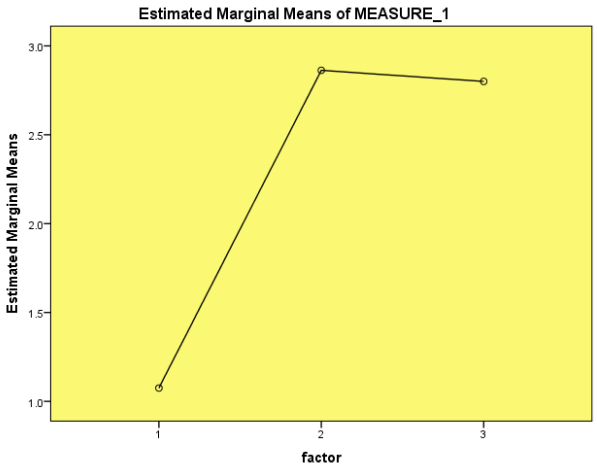

Figure 3 Significant Difference of Self Concept in Pretest, Post test and Follow Up Phases

The above Graph shows that there is significant difference in Self Concept from Pre to Post, and post to Follow Up Phases.

Thus, it can be seen that Hypothesis 4, "There is a significant difference of Self Concept of the student with Learning Difficulties in the Pretest, Post Test and Follow Up Phases" is partially proved.

That is, there is no significant difference between the post and follow up phases. This also can be interpreted that the changes that have been seen in the post test phases have been maintained till the follow up testing.

Well Being

Table 9.1 Mean Difference in Pretest, Post test and Follow Up Phases in Well Being

Groups	**Mean**	**Std. Deviation**	**N**
Pretest Experimental Group Well Being	1.06	.244	40
Posttest Experimental Group Well Being	2.80	.403	40
Follow Up Experimental Group Well Being	2.95	.219	40

Table 9.2 Repeated Measures One Way Anova Analysis of Variance (within group sample)

Source		**Type III Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**	**Partial Eta Squared**
Well Being	Sphericity Assumed	176.108	2	88.054	1051.989	.000	.930

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	Greenhouse-Geisser	176.108	1.727	101.950	1051.989	.000	.930
	Huynh-Feldt	176.108	1.762	99.920	1051.989	.000	.930
	Lower-bound	176.108	1.000	176.108	1051.989	.000	.930
Error(Well Being)	Sphericity Assumed	13.225	158	.084			
	Greenhouse-Geisser	13.225	136.465	.097			
	Huynh-Feldt	13.225	139.237	.095			
	Lower-bound	13.225	79.000	.167			

The above Table shows that there was a significant difference in the Well Being of the sample in the pre, post and follow up phases. The F (2, 1.727) =1051.989 which is significant at the 0.01 level (p=0.000).

Table 9.3 Post Hoc Analysis of Intervention on Well Being

(I) factor	**(J) factor**	**Mean Difference (I-J)**	**Std. Error**	**Sig.[b]**	**95% Confidence Interval for Difference[b]**	
					Lower Bound	**Upper Bound**
1	2	-1.738*	.050	.000	-1.859	-1.616
	3	-1.888*	.036	.000	-1.974	-1.801
2	1	1.738*	.050	.000	1.616	1.859
	3	-0.150*	.051	.012	-.274	-.026
3	1	1.888*	.036	.000	1.801	1.974
	2	0.150*	.051	.012	.026	.274

*. The mean difference is significant at the .05 level.

Post Hoc comparisons indicated that post test mean difference of Well Being (M=1.738 and SD= 0.050) was significantly different than the follow up mean difference of Well Being (M=1.888, SD=0.051).

The Table 9.3 also indicates that pre test mean difference of Well Being (M=-1.738 and SD= 0.050 was significantly different than the follow up mean difference of Well Being (M=0.150, SD=0.051).

Post Hoc comparisons indicated that pre test mean difference of Well Being (M=-1.888 and SD= 0.036) was significantly different than the post test mean difference of Well Being (M=-0.150, SD=0.051).

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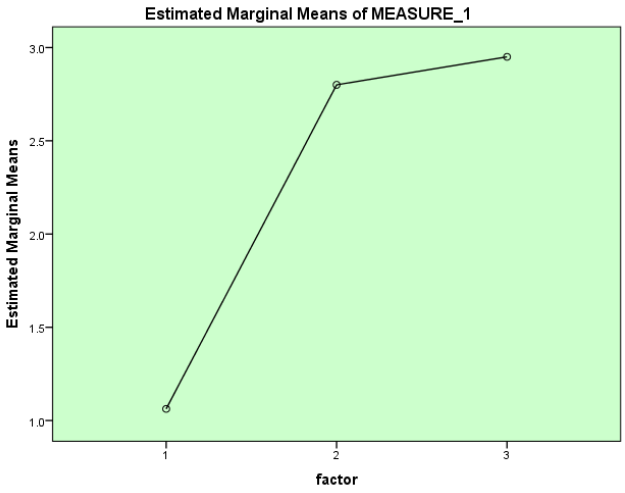

Figure 4 Significant Difference of Well Being in Pretest, Post test and Follow Up Phases

The above Graph shows that there is significant difference in Well Being from Pre to Post, and post to Follow Up Phases.

Thus, it can be seen that Hypothesis 5, "There is a significant difference of Well Being of the student with Learning Difficulties in the Pretest, Post Test and Follow Up Phases" is proved.

That is, there is no significant difference between the post and follow up phases. This also can be interpreted that the changes that have been seen in the post test phases have been maintained till the follow up testing and is also improving.

V. CONCLUSION

It can be safely concluded that the intervention used in the present study, namely Gayathri mantra and Social Skills training was highly effective in alleviating Social anxiety and Stress, and was highly effective in improving the Self Concept and Well being of the Experimental Group, namely the participants who underwent the above said intervention.

Implications for Further Research

- In the resent study, the sample was small. The same intervention can be applied to a larger sample for a longer duration
- A review follow up study could be conducted after 6 months to study the long term effects of the intervention
- The dimensions of the Liebowitz Social Anxiety Scale and the Self Concept Questionnaire can be studied in depth. The present study only encompasses the whole scale scores of both these tests.
- Other than the Gayathri Mantra, other Sanskrit Shlokas or even other rhythymic chants such as from the Holy Bible or the Holy Quran could be used with respect to the religious beliefs of the participants.

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