

## CHAPTER V

### SUMMARY AND CONCLUSIONS

The study titled, “Efficacy of Expressive Arts Therapy in Enhancing Academic Achievement among Learning Disabled Adolescents” enriched the learner’s experience and participant’s experience through the intervention study. The participants of the study benefitted through the Expressive Arts Therapy with Brain Gym and the following discussion shares more insight of the study.

#### **Objectives**

- To access gender difference in emotional intelligence, social competence skills, working memory, attention, academic achievement and quality of life among learning disabled adolescents.
- To measure the level of emotional intelligence, social competence skills, quality of life (Affective measures) and working memory, attention, academic achievement (Cognitive measures) among learning disabled adolescents
- To enhance the cognitive measures and affective measures using Expressive Arts Therapy

#### **Population and sampling frame**

##### **Location of the Study**

Wisdomms Special School and Learning Centre, Chennai and Saraswathi Kendra Learning Centre for Children, Chennai were selected for the study. The reasons for selecting these centers are as follows

- \* Availability of the participants
- \* National Institute of Open School (NIOS) based curriculum
- \* Permission provided by the school authorities

##### **Sampling Procedure**

Purposive sampling procedure was followed. Purposive sampling is a non probability sampling technique where the researcher deliberately chooses the sample items. It is also known as deliberate sampling, judgment sampling, selective sampling, or subjective sampling (Kothari, 2004). The sample included 80 learning disabled adolescents aged between 11 years

to 16 years. The learning disabled adolescents comprised of dyslexic adolescents. The learning disabled adolescents (N=80) were screened and diagnosed for intelligence, reading score and writing score to identify dyslexic adolescents. In the experimental group, there were 22 boys and 13 girls. In waitlist control group, there were 14 boys and 17 girls.

### **Inclusion criteria**

- \* Adolescents with dyslexia only
- \* Adolescents in the age group between 12 to 16 years
- \* Adolescents with poor memory and attention
- \* Adolescents with average emotional intelligence and social competency skills

### **Exclusion Criteria**

- \* Adolescents with intellectual disorder
- \* Adolescents with psychological disorder
- \* Adolescents with high academic achievement
- \* Adolescents with Attention Deficit Hyperactivity Disorder (ADHD)

### **Research Design**

Before, After and Follow-up with Waitlist Control Group Design was used for the purpose of research. In a waitlist control group design, the intervention will be administered to experimental group. The waitlist control group will be under waiting list and will receive the intervention after experimental group (Schimelpfening, 2021).

The primary data for the study was collected using questionnaires and the study was carried out in 4 stages.

Stage I: From Wisdomms Special School and Learning Centre, Chennai and Saraswathi Kendra Learning Centre for Children, Chennai, 80 learning disabled adolescents were selected. The learning disabled adolescents were diagnosed for dyslexia using Raven's Standard Progressive Test, Schonel Graded Reading Test and Schonell Graded Spelling Test. After considering factors like moderate intelligence quotient (IQ) and low reading score and spelling score, 70 learning disabled adolescents were included in the study. All the 70 students were assessed using a Case Study Schedule, The Schutte Self Report Emotional Intelligence Test (SSEIT), Social Competence Scale (SCS), Moss Attention Rating Scale

(MARS), Youth Disability Screener and Digit Span Test.

Stage II: After assessments, the learning disabled adolescents were divided into 2 groups – 35 adolescents from Saraswathi Kendra Learning Centre for Children, Chennai and 31 adolescents from Wisdomms Special School and Learning Centre, Chennai. The adolescents of Saraswathi Kendra Learning Centre for Children (N=35) belonged to experimental group and the adolescents of Wisdomms Special School and Learning Centre belonged to waitlist control group (N=31). The experimental group received the intervention for 8 weeks (20 sessions) whereas the waitlist control group were kept waiting and they participated in the intervention at the end of follow-up phase. The therapy was administered to the Experimental group on every Monday, Wednesday and Friday for an hour for 8 weeks (20 sessions). And to the waitlist control group, the therapy was administered at the end for 1 month on every Tuesday, Thursday and Saturday for an hour.

Stage III: In this stage, the learning disabled adolescents were reassessed to measure the effectiveness of the intervention by administering the psychological tests used initially in stage II.

Stage IV: Here, the participants were measured using the same psychological tests used in Stage II. This follow-up phase followed after a month gap from the completion of intervention.

### **Tools used**

The tools used in the study were

1. Case Study Schedule
2. Raven's Standard Progressive Matrices
3. Schonell Graded Reading Test
4. Schonell Graded Spelling Test
5. The Schutte Self Report Emotional Intelligence Test (SSEIT)
6. Social Competence Scale (SCS)
7. Moss Attention Rating Scale (MARS)
8. Youth Disability Screener (YDS)
9. Digit Span Test – Subscale of Malin's Intelligence Scale for Indian Children

## Major Findings

Learning Disabled adolescents were diagnosed with poor intelligence, poor reading ability and poor writing ability. These were identified as a major causal factor to develop psychological disorders such as poor self-awareness, poor social interaction, decreased academic performance, altogether affecting their quality of life. Considering the impact of intelligence and reading and writing scores on academic performance, emotional intelligence, social competence, working memory, attention and quality of life, this study delves deeper to study the characteristics of these variables on gender, relationship between them and to identify the effect of Expressive Arts Therapy.

The results of the study shows that the group is homogenous as the sample of the schools (Saraswathi Kendra Learning Centre for Children, Chennai and Wisdomms Special School and Learning Centre, Chennai) had uniform NIOS Curriculum, age group of students allotted to classes, examinations and syllabus. This facilitated the experimenter to conduct the therapy at both the centers.

The ANOVA results on the influence of gender on the variables shows that there was a significant difference in Emotional Intelligence among Learning Disabled Boy and Girl Adolescent students. It is imperative that due to internalization of emotions, girls tend to suppress expressing emotions and that affects their tendency to be self-aware, self-regulate, stay motivated.

The correlation study among the variables shows that there is no correlation among the variables and hence there is no multicollinearity. This is important as the variables stand unique and independent which is a requirement to conduct the therapy.

Expressive Arts Therapy and Brain Gym were effective in enhancing Emotional Intelligence, Social Competence, Working Memory and Academic Achievement. Expressing emotions through art is a gateway to relax out body and mind. Learning Disabled adolescents were identified to possess internalizing problems, poor social interaction beyond school and decreased academic performance. The therapy had been effective in enriching the emotional intelligence, social competence, working memory and academic achievement among the participants.

As the students were asked to gain knowledge on emotions, engage in individual activity and group activity to express their emotions, initiate interactions, the group gained an ecosystem of experiences to share and reflect emotions. Art and exercise as a medium of

expression brought in favourable conditions to self-reflect emotions during the therapy session. Few activities that had critical thinking and logical thinking component created a venue to engage the participants with full concentration and attention. Quick decisions and spontaneous answers created a unique environment to work on their ability to recall and recognize, thus contributing to improve working memory. The participants were asked to gain awareness on their overall well-being by analyzing their learning disability condition and their readiness to learn to measure and identify quality of life through introspecting activities.

Altogether, the Expressive Arts Therapy and Brain Gym catered to two categories of activities. One that helped to improve the cognitive measures such as attention, working memory and affective measures such as improve emotional intelligence, social competence and quality of life. These cognitive measures and affective measures become the significant contributing factor for academic achievement. The results show that the participants had enriching experiences in both the cognitive measures and affective measures. This reflects in the result with significant improvement in Emotional Intelligence, Social Competence, Working Memory and Academic Achievement.

The variables such as attention and quality of life demands further studies to identify the impact of Expressive Arts Therapy and Brain Gym. This may be due to fact that the measurement used for the variable attention is a teacher-rated questionnaire and thus the influence of bias could be one factor to address “the lack of improvement in attention. Quality of life aims to introspect the conditions of learning disability and its impact on their readiness to learn.” This too experienced biased results from participants as many were unaware of their learning disabled condition, neither were they ready to accept the relation of poor academic achievement is due to the existing condition. This lack of insight over their learning disabled condition might be the reason for no improvement in quality of life.

### **Summary**

1. The participants were found to be homogenous.
2. There was significant difference in Emotional Intelligence among boy and girl learning disabled adolescents.
3. There was no multicollinearity between the variables
4. Before intervention, most of the participants scored moderate Emotional Intelligence, Social Competence, Attention, Working Memory, Academic Achievement and Quality of Life

5. Expressive Arts Therapy was effective in enhancing the Emotional Intelligence, Social Competence, Working Memory, Academic Achievement among the Learning Disabled Adolescents

### **Implications**

1. Schools can incorporate Expressive Arts Therapy with Brain Gym into their curriculum to help adolescents with learning disabilities gain greater independence.
2. The study aligns with United Nations Sustainable Development Goals - Goal 3 (Good health and well-being) and Goal 4 (Quality education). Therefore, this intervention can serve as a model for promoting mental health services to improve access to compulsory primary education for all adolescents with learning disabilities.
3. It is essential for every school to assess the reading and writing abilities of all students using intelligence tests, as well as reading and writing assessments, to identify those with learning disabilities.
4. Teachers can develop specialized pedagogical approaches and teaching methods tailored for students with learning disabilities, taking into account their IQ scores, as well as their reading and writing abilities.
5. Policymakers should update existing policies to prioritize the quality of life of adolescents with learning disabilities, emphasizing inclusivity based on tacit knowledge (subjective knowledge) rather than solely focusing on academic performance (objective knowledge)

### **Recommendations**

1. Expansion of NIOS syllabus and increased higher education reservations are needed for students with learning disabilities in India to promote inclusivity and support this marginalized group further.
2. The Right to Education Act of 2009 should be updated to consider both physical and mental age disparities among learning disabled adolescents, ensuring educational access and eligibility for primary education.
3. Schools should mandate inclusivity and empower parents of learning disabled students to serve as shadow teachers, fostering awareness and creating a supportive ecosystem for these students.

### **Limitations**

1. The study faced limitations due to extraneous variables, such as exposure to yoga among learning disabled adolescents in the intervention group, making generalization of findings challenging.
2. The teacher-rated questionnaire used to assess attention may have introduced bias, limiting the generalizability of the study's findings.
3. Academic achievement scores were based on term examination marks, influenced by varying teaching methodologies among different teachers, thus complicating generalization of results.
4. The quality of life questionnaire provided insight into the presence of learning disabilities but did not assess physical, psychological, or emotional well-being, affecting the generalizability of findings.
5. The study's use of the digit span method from the WISC Intelligence test to assess working memory focused solely on short-term auditory memory, potentially limiting the generalizability of its findings.

### **Suggestions for future research**

1. Future study must aim to minimize the effect of extraneous variables, remove subjective bias, design robust measuring methods and consider the existence of various factors for a particular variable.
2. Additional therapies aimed to foster coping mechanisms, spread awareness and improve quality of life are recommended. Quality of life therapy, learning disability introspection therapy are few ideas to promote quality of life among learning disabled participants.
3. Longitudinal study should be carried out.
4. Additional follow-up will help to find out the effectiveness of the therapy.

### **Conclusion**

The purpose of initiating the study by choosing learning disabled adolescents was to cater to the 6 P's: Progress, Purpose, Persistence, Pragmatism, Passion and Perspective. These contribute to the cognitive measures and affective measures of academic achievement. Hence, the study can be summarized with a statement that the "progress in the growth of the

children with learning disability by promoting passion in the children to learn with a purpose and persistence that defines the perspective of growth to lead a pragmatic life” and thus catering to the sustainable goals of the UN stating that “development that meets the needs of the present without compromising the ability of the future generations to meet their own needs”.

The major objectives and the goals that the study aimed to attain were accomplished yet there are limitations and further improvements are recommended.