



Enhancement Of Attention In Adolescents Through Occupational Therapy Activities

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ABSTRACT:

Introduction

Attention refers to being able to focus on a specific task without being distracted. It is different from simply being alert, because alertness refers to basic arousal. An alert person is simply awake. An alert but inattentive person will be attracted to any novel stimulus in the environment, but will not be able to screen out irrelevant stimuli. The ability to sustain attention over time (vigilance) must be present before more complex functions like learning can be evaluated. Adolescence is the transition phase between childhood and adulthood, from chronological age 10 to 19. Adolescents experience rapid physical, cognitive and psychosocial growth. In this period, they are highly vulnerable population to biological, social and environmental perturbations. This affects how they feel, think, make decisions, and interact with the world around them. Poor attention in adolescents can be detrimental to their academic performance. Hence, this study, aiming at importance of attention span, gave Opportunities through some occupational therapy activities to develop their educational skills by sustaining their attention.

Aim & Objective of the study

The study aims to assess the adolescent age group students, in mainstream (school) education, with valid questionnaire, on attention span. This would enhance identifying those suffering with reduced attention span.

The objectives are

- ❖ To apply SNAP-IV assessment for first level screening of attention span
- ❖ To apply Vanderbilt assessment, for classifying them into categories of attention problem
- ❖ To list out, students, as per their class schedules, into activity session of Occupational therapy
- ❖ After activity sessions, to do post therapy assessment, find out whether the selected activities (OT) were helpful in enhancing attention.

Method of study

Study design

Simple random sampling was applied as it is an experimental study

Study setting & duration

Around Chidambaram town, students were selected. With proper obtained consent from authorities, Participants involved, for duration of two months study was conducted in the following schools.

Rani seethai achi higher secondary school, Sr. Ramakrishna Vidhayala Higher Secondary School, Ramasamy chettiar's town higher secondary school

Selection criteria

Children studying 6th, 7th, 8th, 9th, & 11th of age 12 to 17 years

Both Male and Female gender were included for the study

10th and 12th std students were excluded in this study.

Data analysis & Result

It is seen from the table that majority of respondents belong to 15-16 years of age group. Moreover, 76.8% of respondents are male from all the three selected schools of Chidambaram, and 23.2% of them are female, who were having attention problems.

DISCUSSION

This study, Enhancement of Attention in Adolescents through Occupational Therapy activities was done in mainstream school children in & around Chidambaram. In the study identification of poor attention was done by B.Ed trainees students of Annamalai University. They were described about the project, by utilising proper permission from HOD of Education department. Using SNAP-IV for the assessment, trainees screened 200 Students. Among the 200 students, diagnosed, with Vanderbilt assessment sub scale, 56 students showed exact problems with ATTENTION. With appropriate permission from schools headmasters and headmistress three session of occupational therapy activities was conducted per week. Before participation in Occupational therapy activities, they were taken the pre-test value with Vanderbilt assessment. Post-test assessment showed the selected activities enhance attention in selected sample.

CONCLUSION

Although many questionnaires are designed for parents and teachers for ADHD like conditions, the students studying in mainstream education are less identified with their existing learning problems. Two standardized tools used in this study, helped easy identification & sorting down learning problems. The students with the authorities at schools were also cooperative, inspite of their routine school academics. Through Occupational Therapy activities, they found an improvement in their attention, thereby in their studies. As the schools were having exams, post therapy was conducted in one month & it showed notable changes in Vanderbilt pre & post therapy score.

Adolescent neurodevelopment Journal of Health (2013) also mentions that brain continues to refine, undergo important morphological and functional transformations during adolescence period. A lot of other internal- and external factors might affect the attention span. With ability to sustain attention on a task, focused attention, multitasking ability, Concentration, ability to recall, retain and elicit information (short term & long term memory) develops. If a person can't concentrate long enough on the information available, it is impossible to correctly recall or learn subjects at school. Thus attention is basic requirement in learning. In adolescent student's reasons for developing inattention, enhancing attention through Occupational Therapy is effectively framed in this study. Occupational therapy programs can also help students enhance school education is thus proved in the study.

Key words: Attention, Adolescent age, vulnerable population, SNAP-IV assessment Vanderbilt assessment, Occupational Therapy activities.

INTRODUCTION

Global Accelerated Action for the Health of Adolescents, guides national-level policy-makers and programme managers to implement, monitor, and evaluate adolescent health programs in low- and middle-income countries, where, 90% of 10- to 19-year-olds live. WHO also supports countries to ensure their national adolescent health. It is globally felt important that physical & mental health of adolescents need to be attended by professionals, before they break with illhealth.

“Attention” is widely discussed & studied across multiple fields including psychology, neuroscience, and, most recently, machine learning (Chun et al., 2011; Cho et al., 2015). As William James wrote at the dawn of experimental psychology, it is the taking possession by the mind, in clear and vivid form, seems several simultaneously possible objects or trains of thought.

Educational implications of attention

Learning or acquiring skill is possible when the individual is attentive. Being attentive makes the learner to transform the perceived ideas from sensory memory to long term memory. Attention increases efficiency of working. Poor attention is a key symptom of behaviour disorders such as hyperactivity & other learning disorders. Though exposed to large number of stimuli, presence of attention makes the information to enter consciousness, provides strength for cognitive functioning despite the obstacles presented by distraction. Despite the obstacles / distractions by noise an attentive learner grasps meaningful stimulus related to learning. Spear L.P. Adolescent neurodevelopment Journal of Health (2013) mentions that the brain continues to refine and undergo important morphological and functional transformations, during adolescence period. Attention dysfunction is associated with multiple disorders. There are different attention types, a lot of other internal- and external factors that might affect the attention span. The harder tasks require more effort to stay focused on it. The ability to select the most important part of a task is called saliency determination . If a stimulus is salient, it stands out among other stimuli. In a lecture, if students are taking notes, they must decide which are most important information and write only this information it can be called saliency discrimination. The frontal lobe controls this function. Among the areas of brain, to mature last are the frontal lobes, which mediate essential cognitive processes including attention. Hence development of cognitive functions is highly vulnerable to biological, social and environmental perturbations in this time period.

Inductive and Deductive Reasoning

Inductive reasoning emerges in childhood and is characterized as bottom-up- processing in which specific observations, from teachers or elders (authority), may be used to draw general conclusions. In contrast, deductive reasoning, sometimes called —top-down-processing, emerges in adolescence. This type of reasoning starts with some overarching principle and, based on this, propose specific conclusions. Deductive reasoning guarantees an accurate conclusion if the premises on which it is based are accurate. Simply to say deductive reasoning aims at testing an existing theory.

ATTENTION influences LEARNING

There is evidence that attention may be an important mediating factor in a number of other key skills needed for school readiness. Evidence from a number of fields suggests that the ability to control the focus of one’s attention and to resist distraction may be an important factor in people’s experience of general well-being and happiness. Distractibility is commonly recognised as a symptom in depression and other affective disorders (Mialet, Pope & Yurgelun Todd, 1996) Distraction may take the form of daydreaming or engaging in flight of ideas in which one thought leads to another for the individual. Other mental distractions may be thinking about the future or what is coming up next instead of living at the present time. There are students, who seem to have an excess of energy and movement, born with a greater need to move, often referred to as hyperactivity.

Erikson rightly describes, this adolescence stage involves self identity development against role confusion. When environment favours with qualities of adolescence (bonding with parents, psychosocial relationship

with peers), a hike in personal development could be noted. Otherwise mental disorders can occur with any intensity & duration. According to the World Health Organization (WHO, 2001) the prevalence of psychological disorders ranges from 10 to 20% in adolescence.

DSM-5 Criteria for diagnosis in Infancy, childhood & Adolescence

The DSM-5 describes the essential feature of ADHD as a persistent pattern of inattention and/or hyperactivity-impulsivity that interferes with functioning or development. Inattention Six or more symptoms, for children up to age 16 years, or five or more symptoms for adolescents age 17 years for at least 6 months to a degree that is inconsistent with developmental level and that negatively impacts directly on social and academic/occupational activities.

Prevalence of attention problems

The comorbid conditions like Attention deficit hyperactivity disorder (ADHD), Schizophrenia, anxiety disorder, depression, posttraumatic stress disorder, epilepsy, hearing loss can all cause impairment in attentive function. Studies have indicated that girls with ADHD may be up to twice as likely as boys to have the inattentive type of ADHD and may experience more from internalising symptoms and inattention, in contrast with the hyperactive and aggressive symptoms sometimes shown by boys. In United States, American Academy of Paediatrics (AAP) recommends that healthcare providers ask parents, teachers, and other adults who care for the child about the child's behavior in different settings.

Oppositional Defiant Disorder ICD 11 allots codification (6C90) to this disorder. Oppositional defiant disorder is a persistent pattern (duration of 6 months or more) that occurs more frequently than individuals of comparable age. It occurs with persistent angry or irritable mood (emotional), argumentative and defiant behaviour (al symptom). The behaviour pattern results in significant impairment in family, social, educational, occupational areas of functioning. ODD gradually develops and becomes apparent in preschool years, often before eight years. The affected child manifests a pattern of negativistic, defiant, disobedient and hostile behaviours directed at authority figures. They often have difficulty in following rules and limits, which is a pathological disobedience, and there are non-cooperative behaviours that occur in the family environment. It is often associated with physical or verbal injury to self or others, with violating destruction of property of others. Insecure parent-child attachments can also contribute to ODD. Parenting practices of not providing appropriate adjustment to situations as well as a high ratio of conflicting events within a family are risk factors for developing ODD. They often blame others for the mistakes or misbehaviour's, mostly directed towards an authority figure such as a teacher or a parent. Family instability and stress can also contribute to the development of ODD. Children with ODD are thought to have an overactive behavioural activation system (BAS), and an underactive behavioural inhibition system (BIS). Individuals with a highly active BAS show more positive emotions such as elation, happiness, and hope in response. In terms of personality, these individuals more likely engage in goal-directed efforts. They can remember things in images, often enjoy hands-on learning. Students with ODD have trouble making friends. They find it hard to understand social situations, may not understand the consequences of behaviour. They might distract another student in class without thinking about teacher, others in class which also impact their self-esteem. ODD can occur simultaneously with other disorders like attention deficit hyperactivity disorder, anxiety.

Treatment interventions in India

Psychosocial interventions – involve behavioral intervention, parent training, peer and social skills training, and school/classroom-based intervention/training. Body oriented activities such as yoga, physical exercises, mindfulness-based interventions such as using breathing exercises with music therapy or attention training. Cognitive-behavioral training computer-based attention and EEG biofeedback training

Occupational Therapy

Occupational therapists use a range of tools and techniques to help children strengthen their focus muscles and improve their attention spans. Some — like fidget toys — are already well known by parents of children with ADHD. Fidgets come in a wide range of styles, and most are discreet enough to fit in a pocket and be used without drawing undue attention. The ADHD brain can be overstimulated by black and white worksheets, which often appear distorted under bright lighting. Scanning, reprinting it on light blue, light green, or peach-coloured paper is a way to help child better focus on work. Children with ADHD benefit

from posted rules, clear expectations. That's why occupational therapists make extensive use of rubrics, which allow children to understand exactly what's expected of them in a given area. A written rubric to develop a clear vision of success is essential. At home, also, using rubrics for almost any set of tasks, from a homework assignment to the day's chores will be easy. Kids with oppositional defiant disorder have problems controlling anger and hostility. Therapists should consider working on coping techniques to deal with everyday situations that can lead to stress. Developing a routine to implement with teachers, students, and parents to develop a structured and predictable schedule at school and home will be helpful.

Establish Calm Down Zones for Healthier Reactions

Children with ADHD, learning disabilities, or sensory challenges are prone to meltdowns, especially when faced with developmentally inappropriate tasks or expectations. Occupational therapists learn to anticipate these meltdowns and counteract them with "calm down zones," or specified places where children can go, calm down themselves. Zone could be anywhere-bedroom, or a quiet corner of the kitchen. Stock it with anything helpful - a blanket, a box of fidgets, an iPod filled with calming music. First and foremost, this area should help child take some deep breaths, fully experience her emotions — whether negative or positive — and learn to self-soothe when anger starts to bubble up.

Discuss lifestyle changes as applicable to the child, like Improvements in sleep schedules, eating habits, and exercise may improve a child's ability to cope better. Some children with oppositional defiant disorder also have oversensitivity to movement, sound, and touch. OTs can work on sensory integration. They may have increased problems controlling emotions and behavior. School-based occupational therapists could include interventions to address sensory problems. When students with oppositional defiant disorder exhibit appropriate behavior and show cooperation, positive reinforcement is helpful to motivate children.

Instruments used for Diagnosis

1. Swanson, Nolan and Pelham Teacher and Parent Rating Scale (Snap-IV)

The (Snap-IV), developed by James Swanson, Edith Nolan and William Pelham, is a 90-question self-report inventory designed to measure ATTENTION problems, Attention deficit hyperactivity disorder (ADHD) and oppositional defiant disorder (ODD) symptoms in children and young adults. The SNAP-IV Rating Scale is a revision of the (SNAP) Questionnaire (Swanson et al, 1983). In this, the items from DSM-IV (1994) criteria for Attention-Deficit/Hyperactivity Disorder (**ADHD**) are included for the two subsets of symptoms: **Inattention** Items have been added to summarize inattention domain(items #1-#9) & (#10) **Hyperactivity/impulsivity** (items #11-#19) & domain (#20) of ADHD .Including from the DSM-IV criteria for Oppositional Defiant Disorder (items #21-#28), domain (#20) of ADHD , an item from DSM-III-R (#29) for summarizing the ODD domain (#30). In addition to the DSM-IV items for ADHD and ODD, the SNAP-IV contains items from the Conners Index Questionnaire (Conners, 1968) and the IOWA Conners Questionnaire (Loney and Milich, 1985). The IOWA was developed using divergent validity to separate items which measure inattention/ overactivity (I/O — items #4, #8, #11, #31, #32) from those items which measure aggression/defiance (A/D — items #21, #23, #29, #34, #35). The Conners Index (items #4, #8, #11, #21, #32, #33, #36, #37, #38, #39) was developed by selecting the items which loaded highest on the multiple factors of the Conners Questionnaire, and thus represents a general index of childhood problems.

2. Vanderbilt ADHD Diagnostic Rating Scale (VADRS)

(VADRS) is a psychological assessment tool for attention deficit hyperactivity disorder (ADHD) symptoms and their effects on behavior and academic performance in children. This measure was developed by Mark L Wolraich at the Oklahoma Health Sciences, which is a public medical school in Oklahoma City, of United States. To add comorbid conditions like ODD, conduct disorder, anxiety, depression there are two versions, a parent form & a teacher form is available. Both scales describe about two component symptom assessment and impairment in performance. These versions rate frequency of child's behaviour.

Parent version

The parent version contains 6 subscales. Behaviors are included in the total for each subscale if they are scored as a 2 or a 3. The rules for scoring as given by the author is as follows 1) ADHD inattentive type: Must score either a 2 or 3 on six or more items in questions 1–9, and score of 1 or 2 on any items in the performance section. 2) ADHD hyperactive/impulsive type: Must score either a 2 or 3 on six or more items in questions 10–18, and a score of 1 or 2 on any items in the performance section. 3) ADHD combined type: Meets criteria for both ADHD inattentive type and hyperactive/impulsive type. 4) Oppositional defiant disorder (ODD): Must score either a 2 or a 3 on four or more items in questions 19–26 5) Conduct disorder: Must score either a 2 or 3 on three or more items in questions 27–40. 6) Anxiety/depression: Must score either a 2 or 3 on three or more items in questions 41–47.

Teacher version

The teacher version contains only 5 subscales. Behaviors are included in the total for each subscale if they are scored as a 2 or a 3. A score of 1 or 2 on at least one question in the performance section indicates impairment. Author describes: ADHD inattentive type: Must score either a 2 or 3 on six or more items in questions 1–9. ADHD hyperactive/impulsive type: Must score either a 2 or 3 on six or more items in questions 10–18. ADHD combined type: Meets criteria for both ADHD inattentive type and hyperactive/impulsive type. Oppositional defiant disorder (ODD): Must score either a 2 or a 3 on three or more items in questions 19–28. Anxiety/depression: Must score either a 2 or 3 on three or more items in questions 29–35.

Review of Literature

Brooke et al., (2009), Shaw et al., (2012) published studies relating inattention, academic achievement.

1. Eadaoin J. Slattery et al (2022) done a study on popular intervention to enhance sustained attention in children and adolescents (3-18 years). They aimed sustain attention (randomized-controlled or non-randomized controlled designs), in cognitive attention training (n=14). Physical activity (n=15) and medication intervention (n=8) did not improve sustain attention. Cognitive attention training demonstrated very limited transfer to other aspects of attention. Across all three intervention types, there was very weak evidence for transfer to other aspects of cognition, behavior, and academic achievement.
2. Christopher wickens et al (2021) done a study on attention: theory, principles, models and application. Here, two general concept of attention Multi tasks needing to be performed concurrently defining the limits of multi-tasking discussed in four types of attention, as selective attention, acquiring information for further processing, either sequentially, via scanning ,or in parallel, when information is superimposed and particularly as part of a single object, and as divided attention in multi-tasking here again either sequentially through discrete task switching or in parallel, through continuous resource allocation.
3. Nimet Haşıl Korkmaz et al (2021) done a study on Measurement of attention based on physical activity levels of secondary school students. . 40 middle-school students who have been taking education in Yalova province joined the study as a volunteer. Fifty percent of the participants are male and the others are female. The experimental and the control groups have been formed and each of these groups consisted of 10 male and 10 female students. To compare the experimental groups with the control groups, a T-test was used for independent groups. It was found between the results of the Burdon concentration test ($p > 0.05$). They concluded that students and young people can be more successful, if encouraged and supported more with physical activity.
4. Arielle S. Keller et al (2020) done a study on Attention Matters: How Orchestrating Attention May Relate to Classroom Learning. We explore frame work for understanding attention in the classroom organized along two key dimensions. Internal / external attention and on-topic /off-topic attention. This framework help as to build new theories for why active learning strategies are effective teaching tools and how synchronized brain activity across students in class room may support learning. We hypothesize that

some teaching approaches are more effective than others because they leverage natural fluctuations in Students attention.

5. Adam C. Barton et al (2020) done a study Immediate Attention Enhancement and Restoration from Interactive and Immersive Technologies: A Scoping Review. They also offer a multitude of health and well-being benefits. Research efforts have typically focused on long-term practice methods for attention enhancement with these technologies significant gaps in the literature are, identified regarding the implementation of traditional attention state training practices.

6. Yafit Gilboa et al (2020) done a study Self-Management Intervention for Attention and Executive Functions Using Equine-Assisted Occupational Therapy Among Children Aged 6–14 Diagnosed with Attention Deficit/Hyperactivity Disorder : Twenty-five 6–14-year-old children (3 girls, 22 boys, age: 7.8–12.3 years, $M = 9.41 - 1.75$) diagnosed with ADHD participated in a therapeutic equestrian riding intervention. Their EF and occupational performance were evaluated pre- and post-intervention, using The Behavior Rating Inventory of Executive Function (BRIEF) and the Canadian Occupational Performance Measure (COPM). A statistically ($p < 0.001$) and clinically significant improvement was also found in the COPM performance and satisfaction scales. This study provides key preliminary evidence supporting the effectiveness of an individual equine-assisted OT intervention for children with ADHD. It constitutes an initial step toward clinical implementation of such therapeutic approaches, and is expected to spark further research in this area.

7. Yi-Jung Lai et al (2020) done a study on Improvement of Attention in Elementary School Students through Fixation Focus Training Activity. There are five attention dimensions for children: focused attention, sustained attention, selective attention, alternating attention, and divided attention. Eighty-two grade five and six elementary school students (45 experiment group, 37 control group) were involved. The experiment group underwent focus training for 12 weeks. The results gave difference data, defined as post-test results minus the pretest results, where significant differences occurred for the total scale ($p < 0.05$), focused attention ($p < 0.05$), and selective attention ($p < 0.01$). Participants also noted that the training helped them improve concentration during school lessons (54.15%), fall asleep (29.1%), and relax the body (8.4%).

8. Bilikis Banire et al (2020) done a study on Impact of mainstream classroom setting on attention of children with autism spectrum disorder: an eye tracking study. We analyzed four eye-gaze behaviors and performance scores of 45 children: children with ASD (ASD $n=20$) and typically developing children (TD $n=25$) when performing attention tasks. Further studies are needed on different modalities for supporting the attention of children with ASD in a mainstream setting.

9. Mehmet Ali Cicekci et al (2019) done a study on teachers' and Students' Opinions about Students' Attention Problems during the Lesson. 432 teachers and 1023 students from secondary schools in the central districts of Adana voluntarily participated in the study. A descriptive study in the survey model. The students stated that teachers should show more interest towards the students, approach the students positively and use a variety of teaching methods in accordance with the students' level.

10. Li-Wei Ko et al (2017) done a study on Sustained Attention in Real Classroom Settings: An EEG Study. This study investigates electroencephalography (EEG) spectral changes during a sustained attention task within a real classroom environment. In eighteen healthy students such as development and manifestation of classroom mental fatigue. The findings of the study set a basis for developing a system capable of estimating the level of visual attention during real classroom activities by monitoring changes in the EEG spectra.

METHODOLOGY

Occupational therapy can also help students in mainstream education. This study on enhancement of attention among adolescents through occupational therapy activities was carried out to know whether selected activities is helpful for adolescent age students in enhancing attention.

AIM OF THE STUDY

To assess the adolescent age group students, in mainstream education, on their attention span for identifying those suffering with reduced attention span.

OBJECTIVE

- To reach out adolescent age group students in mainstream education
- To apply SNAP-IV assessment for first level screening of attention span by B.Ed trainees
- To apply Vanderbilt assessment, for classifying them into categories of attention problem
- To list out, students, as per their class schedules, into activity session of Occupational therapy
- After activity sessions, to do post therapy assessment, find out whether the selected activities were helpful in enhancing attention.

Study design

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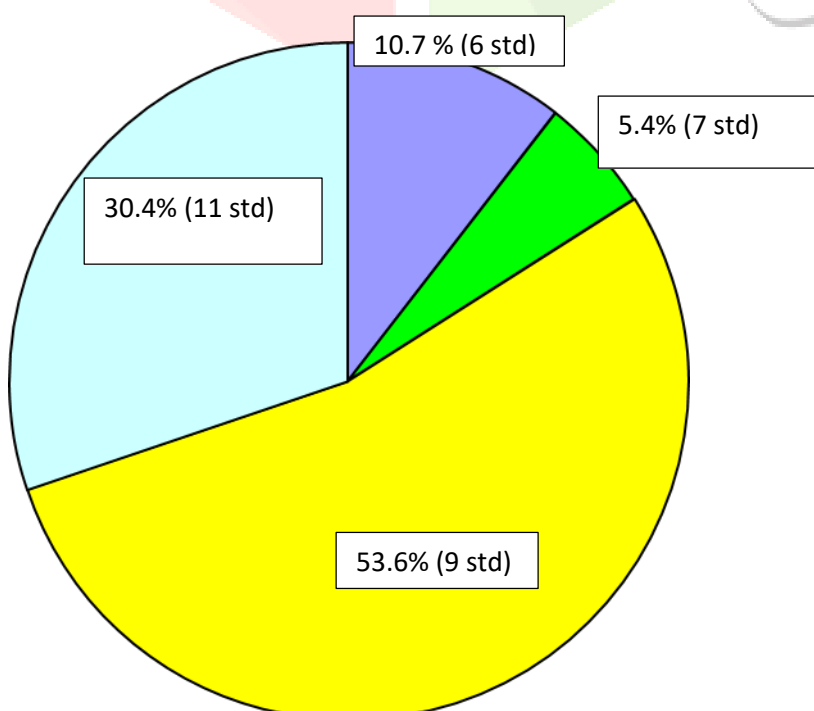
Selection criteria

Children studying 6th, 7th, 8th, 9th, & 11th of age 12 to 17 years

Both Male and Female gender were included for the study

10th and 12th std students were excluded in this study.

Graphical representation of sample according to their Standard



Distribution sample according to their Age

S.No.	Age	Number of Participants	Percentage
1.	12 years	7	12.5
2.	14 years	1	1.8
3.	15 years	23	41.1
4.	16 years	23	41.1
5.	17 years	2	3.6
	Total	56	100.0

It is seen from the table that 12.5% of respondents are 12 years of age, 1.8% of them are 14 years of age, 41.1% of them are 15-16 years of age and 3.6% of them are 17 years of age. Therefore majority of respondents are 15-16 years of age group.

Distribution sample according to their Gender

S.No.	Gender	Number of Participants	Percentage
1.	Male	43	76.8
2.	Female	13	23.2
	Total	56	100.0

It is seen from the table that 76.8% of respondents are male and 23.2% of them are female. Therefore majority of respondents are male group.

Paired Sample t-test of ADHD Vanderbilt Parent Score in Pre and Post value

Group	N	Mean	Standard Deviation	Standard Error Mean	t-value	Probability Value
Pre	56	27.64	8.48	1.13	3.064	0.001*
Post	56	24.68	6.96	0.93		

* Highly significant at 0.01 level

The pre and post test values obtained shows pre test (27.64±8.48) scored higher mean value than post test (24.68±6.96). The calculated 't' value 3.064 and Probability value is 0.001 at 0.01 level of significance. Hence it is concluded that, there is a significant difference between the pre and post test for ADHD Vanderbilt Parent Score.

Paired Sample t-test of Performance Vanderbilt Parent Score in Pre and Post value

Group	N	Mean	Standard Deviation	Standard Error Mean	t-value	Probability Value
Pre	56	25.88	7.83	1.05	9.836	0.001*
Post	56	22.39	5.55	0.74		

* Highly significant at 0.01 level

The pre and post test values obtained shows pre test (25.88±7.83) scored higher mean value than post test (22.39±5.55). The calculated 't' value 9.836 and Probability value is 0.001 at 0.01 level of significance. Hence it is concluded that, there is a significant difference between the pre and post test for Performance Vanderbilt Parent Score.

Paired Sample t-test of ADHD Vanderbilt Teacher Score in Pre and Post value

Group	N	Mean	Standard Deviation	Standard Error Mean	t-value	Probability Value
Pre	56	27.14	8.64	1.15	9.405	0.001*
Post	56	23.68	6.30	0.84		

* Highly significant at 0.01 level

The pre and post test values obtained shows, pre test (27.14±8.64) scored higher mean value than post test

(23.68±6.30). The calculated 't' value 9.405 and Probability value is 0.001 at 0.01 level of significance. Hence it is concluded that, there is a significant difference between the pre and post test for ADHD Vanderbilt Teacher Score.

RESULTS

It is seen from the table that 10.7% of respondents are studying 6th standard, 5.4% of them are studying 7th standard, 53.6% of them are studying 9th standard and 30.4% of them are studying 11th standard. Therefore majority of respondents are studying 9th standard. The majority of respondents belong to 15-16 years of age group. Moreover, 76.8% of respondents are male from all the three selected schools of Chidambaram, and 23.2% of them are female. Paired Sample t-test of ADHD Vanderbilt Parent Score & performance score obtained in Pre and Post value shows highly significant scores.

DISCUSSION

This study, Enhancement of Attention in Adolescents through Occupational Therapy activities was done in mainstream school children in & around Chidambaram. In the study identification of poor attention was done by B.Ed trainees students of Annamalai University. They were described about the project, by utilising proper permission from HOD of Education department (higher official of B.Ed trainees) Using SNAP-IV for the assessment, trainees screened 200 Students. Among the 200 students, diagnosed,with Vanderbilt assessment sub scale, 56 students showed exact problems with ATTENTION. With appropriate permission from schools headmasters and headmistress three session of occupational therapy activities was conducted per week. Before participation in Occupational therapy activities, they were taken the pre-test value with Vanderbilt assessment. Post-test assessment taken showed the selected activities enhance attention in selected sample.

CONCLUSION

Although many questionnaires are designed for parents and teachers for ADHD like conditions, the students studying in mainstream education are less identified with their existing minimum problems. Two of the standardized tools used in this study, helped easy identification & sorting of problems. The students with the authorities were also cooperative, inspite of their routine school academics. Through Occupational Therapy activities, they found an improvement in their attention, thereby in their studies. As the schools were having exams, post therapy was conducted in one month & it showed notable changes in Vanderbilt pre & post therapy score.

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