An Assessment of the Cooperative Learning Activities (CLA) Utilized for Learners with ADHD

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Abstract

Handling learners with handicapping conditions–special needs – requires deep love, understanding, empathy and highest degree of commitment which undeniably is the very core of service-driven teachers. This study aimed to determine the level of effectiveness of the Cooperative Learning Activities utilized for learners with Attention Deficit Hyperactivity Disorder (ADHD) in the Division II, Province of Pangasinan of the Philippines. A total of twenty-eight (28) teachers who handle learners with ADHD were considered in the study. This initially identified the profile of the Special Education (SPED) Teachers in the Division II of Pangasinan in terms of their age, sex, highest educational attainment, specialization, academic rank and seminars attended related to SPED. The Cooperative Learning Activities utilized for learners with ADHD along multi-sensory activities, group dynamics learning activities and game-based activities were also identified. The study, likewise, determined the level of effectiveness of the Cooperative Learning Activities utilized for learners with ADHD along academic instructions, behavioral interventions and classroom accommodations. Lastly, it determined the significant difference between the effectiveness of the Cooperative Learning Activities utilized for learners with ADHD across their profile variables.

This study utilized the descriptive-correlational survey method of research. The Researcher-made questionnaire checklist was utilized as the main instrument in gathering the needed data of the study. Descriptive and inferential statistical tools like frequency, percentage distribution, average weighted mean, rank and ANOVA were employed to analyze and interpret the facts and data that were gathered from the respondents.

The study found out that majority of the teachers are female, 25-49 years old, Baccalaureate degree holders and have participated in international SPED-related seminars. Results have shown that Cooperative Learning Activities were utilized for learners with ADHD. Along multi-sensory activities, the respondents utilized Blind Walking which is ranked as number 1 as evidenced by the frequency mean of 3.7. Along group dynamics activities, Video Scavenger Hunt has been identified as rank 1 as supported by the mean of 4.0. Lastly, along game-based activities, the Boat is Sinking -is utilized as number one (1) in rank indicated by the mean of 2.6.

Along level of effectiveness of Cooperative Learning Activities utilized for learners with ADHD, the study found out that the Cooperative Learning Activities utilized for children with ADHD along academic instructions are highly effective as evidenced by the average weighted mean of 4.52. In like manner, Cooperative Learning Activities along behavioral interventions are highly effective as indicated by the average weighted mean of 4.49. Lastly, Cooperative Learning Activities utilized for learners with ADHD along classroom accommodations are highly effective as evidenced by the mean of 4.40. This study further found out that there is no significant difference on the level of effectiveness of the Cooperative Learning Activities utilized for learners with ADHD across categories of their profile variables.

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The study concluded that SPED teachers utilized various Cooperative Learning Activities like multi-sensory, group dynamics and game-based for learners with ADHD. Cooperative Learning Activities utilized for learners with ADHD are highly effective for the academic instructions, behavioral interventions and classroom accommodations. Lastly, the profile variables of the SPED in the Division II of Pangasinan are not significantly different to the level of effectiveness of the Cooperative Learning Activities utilized for learners with ADHD. Moreover, the study strongly recommended that SPED teachers should pursue higher studies not only to have the higher rank and to be promoted but to have the personal growth and professional development. Teachers should always employ various collaborative learning activities for ADHD learners to meet their educational needs and to be able to perform well in the classroom. Since Cooperative Learning Activities are highly effective in the teaching-learning process, teachers should keep themselves abreast with the new strategies in teaching so that their pupils become more interactive, engaging and productive. Lastly, SPED Teachers should be attending seminars which are internationally-based to adapt the new and effective strategies in managing learners with ADHD.

Introduction

Education for All – The major thrust of the Department of Education of the country, is that 'Every child should have the right to education' (Article IV, Philippine Constitution) [1]. Normal individuals or even the handicapped should matter. No one should be left behind in education, even if that individual has Attention Deficit Hyperactivity Disorder (ADHD).

Attention Deficit Hyperactivity Disorder (ADHD) is the most prevalent neuro behavioral disorder diagnosed in nearly 3.8 % children in the country (Philippine Census, 2002) [2]. Given the prevalence of ADHD, considerable research has explored treatment options for this population. Literature reviews and meta-analyses of treatment options including medical management, psychosocial interventions, and educational treatments are available in their respective fields (Hattie & Carroll, 2002) [3].

A lot of things were done to address this problem. Working with a holistic approach to the ADHD issue, envisions many more possibilities and strategies to help kids who have attention and behavior difficulties. As it is, most advocates of children with ADHD tend to have a conservative attitude toward the range of strategies that might help an individual child. However, the problem is that most books on ADHD tend to approve only a very few "treatments" (usually, medication, cognitive-behavioral therapy, parent training, and a few educational accommodations), while regarding 'anything else' as "unscientific."

Children with Attention Deficit Hyperactivity Disorder (ADHD) often have serious problems in school. Inattention, impulsiveness, hyperactivity, disorganization, and other difficulties can lead to unfinished assignments, careless errors, and behavior which is disruptive to one's self and others.

It is believed that to address the identified problems of the disorder, Cooperative Learning could be effective. Cooperative Learning enhances social interaction, which is essential to meet the needs of at-risk. (Johnson, 2006)[4]. Within the framework of Cooperative Learning groups, students learn how to interact with their peers and increase involvement with the classroom activities. Positive interactions do not always occur naturally and social skills instruction must precede and concur with the Cooperative Learning Strategies. Social skills encompass communicating, building and maintaining trust, providing leadership, and managing conflicts. (Maheady, et. al., 2001) [5].

Cooperative Learning has been found to be a successful teaching strategy at all levels, from pre-school to post-secondary. The developmental characteristics of school children make Cooperative Learning a good fit

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of teaching strategy for the needs of the students. Young children need to socialize, be a part of a group, share feelings, receive emotional support, and learn to see things from other perspectives. Cooperative Learning groups do not separate students on the basis of class, race, or gender and the goals of middle schools are consistent with the goals of Cooperative Learning theories. It is a peer-centered pedagogy that promotes academic achievement and builds positive social relationships (Sapon-Shevin, 2010) [6].

There were identified children with ADHD in the different SPED Centers in the Division of Pangasinan II, it is for this reason that the Researcher would like to find out whether their teachers also utilize Cooperative Learning Activities in managing them.

Objectives of the Study

This study aimed to determine the effectiveness of Cooperative Learning Activities utilized for learners with ADHD. Specifically, this study sought answers to the following problems:

(a) What is the profile of the SPED Teachers in the Division II of Pangasinan in terms of their age, sex, highest educational attainment, specialization, academic rank and seminars attended related to SPED?

(b) What are the Cooperative Learning Activities utilized for learners with ADHD along multi-sensory activities, group dynamics learning activities, and game-based activities?

(c) What is the level of effectiveness of Cooperative Learning Activities utilized for learners with ADHD alongwith academic instructions, behavioral interventions and classroom accommodations? and

(d) Is there a significant difference between the level of effectiveness of the Cooperative Learning Activities utilized for learners with ADHD across their profile variables?

Assumption of the Study

There is significant difference between the level of effectiveness of the Cooperative Learning Activities utilized for learners with ADHD across their profile variables.

Materials and Procedure

This study has utilized the descriptive-correlational survey method of research. Descriptive research can be explained as a statement of affairs as they are at present with the Researcher having no control over variable. Moreover, "descriptive research may be characterized as simply the attempt to determine, describe or identify what is". Moreover, descriptive research is "aimed at casting light on current issues or problems through a process of data collection that enables them to describe the situation more completely than was possible without employing this method". In its essence, descriptive studies are used to describe various aspects of the phenomenon. In its popular format, descriptive research is used to describe characteristics and/or behaviour of sample population.

The Researchers used the descriptive survey because the focal point of the study was to determine the level of effectiveness of the Cooperative Learning Activities utilized for learners with ADHD of schools in the Division II of Pangasinan, Philippines

The respondents of the study were the Special Education teachers who are managing children with Attention Deficit Hyperactivity Disorder (ADHD) in the Division II of Pangasinan, Philippines. A total of 28 teachers who handle learners with ADHD served as the respondents of the study. The Researcher-made questionnaire checklist was utilized as the main instrument in gathering the needed data of the study.

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The instrument had three parts which reflected in **Part I**– the profile of the SPED teachers who handle the learners with ADHD in terms of their age, sex, highest educational attainment, specialization, academic rank, and seminars attended related to SPED.

Part II– elicited the Cooperative Learning Activities utilized for learners with ADHD along multi-sensory activities, group dynamics learning and game-based activities.

The **last part** focused on the level of effectiveness of the Cooperative Learning Activities utilized for learners with ADHD along academic instructions, behavioral interventions and classroom accommodations as perceived by the teachers. The Researchers sought permission from the Office of the Schools Division Superintendent of the Division II of Pangasinan for the approval of administration and conduct of the study. Likewise, a letter was served to the Principals of the SPED Centers of the schools also for the approval of the administration of the questionnaire to all teachers involved. Lastly, the Researchers personally conducted and administered the questionnaire to establish credibility, integrity and authenticity of the data. Also, interview was conducted to elicit first-hand information from the respondents.

Descriptive and inferential statistical tools were employed to analyze and interpret the facts and data that was gathered from the respondents like frequency counts and percentages, mean, ranking and Analysis of Variance (ANOVA)

Result and Discussion

Table 1 **Profile of the Teachers of SPED in the Division II of Pangasinan, Philippines**

Profile		Frequency	Percentage
Age	25-49 years old	25	89.29
	24 years old and below	3	10.71
Sex	Male	5	17.86
	Female	23	82.14
Highest Educational Attainment	Master's Degree	8	28.57
	Baccalaureate Degree	20	71.43
Specialization	Guidance and Counselling	1	3.57
	Special Education	27	96.43
Position/Rank	SPET I	21	75.00
	T-1	7	25.00
Seminars Attended Related to SPED	Local	1	3.57
	Regional	6	21.43
	National	6	21.43
	International	15	53.57

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Age. This is defined as the length of an existence extending from the beginning to any given time (wwww.thesaurus.com). It could be gleaned from the Table, that majority of the teachers of SPED are 25-49 years old as evidenced by twenty-five (25) or 89.29%. However, only three (3) of them are 24 years old and below as supported by the percentage of 10.71. The data imply that there is now new breed of young teachers who are equipped with the new trends in handling pupils with exceptionalities and can address the present situation of the learners with ADHD.

Sex. The Table shows that most of the respondents are female as evidenced by the frequency of 23 or 82.14% while only five (5) of them are male as indicated by the 17.86%. The result supports the common notion that teaching is still a female-dominated profession.

Highest Educational Attainment. It could be seen from the Table that twenty (20) or 71.43% of the teachers are Baccalaureate degree holders while only eight (8) of them or 28.57% are Master's degree holders. The data imply that teachers of the SPED are generally bachelor's degree holders.

Specialization. The Table shows that majority of the SPED teachers are experts in special education as evidenced by the frequency of 27 or 96.43 while only one (1) or 3.57% has the specialization along guidance and counselling.

The result implies that specialization of teachers who teach in the SPED are aligned to their field and all of them meet the requirements/criteria of becoming a SPED teacher.

As supported in the Dep Ed Order (DO) 12, s. 2011[7] - Guidelines on the Allocation of New Special Education Teacher I Items Teachers to be given item should possess any of the following qualifications: Bachelor of Elementary Education specializing in Special Education; Bachelor of Science in Elementary Education major in Special Education; Bachelor of Science in Elementary Education plus 18 units in special education at the graduate level with 3 years of teaching experience to children with special needs and with very satisfactory performance in the regular schools for the last 3 years; Bachelor of Science in Elementary Education plus 15 units in special education with 4 years of teaching experience in children with special needs and with very satisfactory performance in the regular schools for the last 3 years; Bachelor of Science in Elementary Education plus 12 units in special education with 6 years of teaching experience to children with special needs and with very satisfactory performance in the regular schools for the last 3 years; and Bachelor of Science in Elementary Education plus 9 units in special education with 9 years of teaching experience with children with special needs and with very satisfactory performance in the regular school for the last 3 years.

Academic Rank. It is shown in Table that twenty-one (21) of them or 75% having the position of SPED Teacher I (SPET 1) while seven (7) or 25% are Teacher I who are not given the item for SPED yet teaching students with special needs. The data imply that teachers are still new because majority of them are still at the basic level.

Seminars Attended Related to SPED. It could be gleaned from the Table that most of the teachers have attended international seminars related to SPED as evidenced by the frequency of 15 or 53.57%. While there are 6 or 21.43 % who have attended national seminar, there are also six (6) of them or 21.43% have attendance in the regional level. Meanwhile, there is just only one (1) or 3.57% of them who has attended

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a local-based seminar which is SPED-related. Felipe's (2013) [8] article entitled, "The Importance of Seminars and Trainings in Improving Teachers' Performance" revealed that it is the goal of the Department of Education that every teacher will become not only efficient but also effective. It is in this mission, a lot of **trainings and seminars** are being conducted to improve and develop the skill of each mentor in school. The Department fully understands that everything rises and falls on the teachers' capability to bring learning at the heart of every pupil.

Cooperative Learning Activities Utilized for Learners with ADHD

Cooperative Learning is a successful teaching strategy in which small teams, each with students of different ability levels, use a variety of learning activities to improve their understanding of a subject. Each member of a team is responsible, not only for learning what is taught, but also for helping his or her teammates learn—thus creating an atmosphere of achievement. (www.teachervision.com/cooperative-learning)[9]. Moore (2013) [10] defined it as an educational approach which aims to organize classroom activities into academic and social learning experiences. There is much more about Cooperative Learning than merely arranging students into groups, and it has been described as "structuring positive interdependence". Students must work in groups to complete tasks collectively towards academic goals.

Multi-Sensory Activities

Corpuz (2013) [11] stressed in her book entitled, "*Principles of Teaching 1*" that the more senses that are involved, the more and the better the learning.

Table 2a **Cooperative Learning Activities Utilized for Children with ADHD Along Multi-Sensory Activities**

Multi-Sensory Activities	Mean Rank	Rank[a]
Blind Walk	3.7	1
Blind Crossing	3.8	2
Sensual Awareness Inventory	4.9	3
Life Map	5.1	4
Solo Hour in Nature	5.5	6
Get Lost	5.5	6
Empty Your Pockets	5.5	6
Perceptual Fallibility	6.6	8
Fear in a Hut	6.8	9
Write your Own Eulogy	7.4	10

Note: **Ranking** is based on their mean rank according to most utilized activity*: 1- most utilized and 10-least utilized*

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The Table 2. a shows that among the activities under multi-sensory, the respondents utilized Blind Walking which is ranked as number 1 as evidenced by the frequency mean of 3.7. Blind Crossing is also utilized being the second rank with the mean of 3.8. In like manner, Sensual Awareness Inventory is utilized by SPED teachers which has been chosen as number 3 among all other activities. Life Map (5.1), Solo Hour in Nature (5.5), Get Lost (5.5) and Empty Your Pockets (5.5) are also utilized for children by SPED Teachers. However, of all the multi-sensory activities, Write Your Own Eulogy has been identified as rank number 10 as evidenced by the mean of 7.4.

The data imply that teachers utilized multi-sensory activities for ADHD students intended to address their hyperactivity because when these activities are given premium as part of the learning process, pupils with ADHD tend to behave and have their focus in the various activities. Coinciding with this result, Slavin (2002) [12] found that the use of multi-sensory activities can enhance any lesson for students with ADHD. These students are often kinesthetic learners and any hands-on activity using manipulatives, computers, or audio/visual materials can help these learners process information more effectively. Additionally, Cruz-Maru (2012) [13] stated that routine, structure, and consistency within the classroom are very important for ADHD students. They will perform much better if there are consistent practices and routines in place within the classroom.

Group Dynamics Activities

One of the advantages of teaching group dynamics is that the subject matter itself can be created and demonstrated within the confines of the classroom—both traditional ones as well as those that make use of distance learning technologies. Group-dynamics are experiential, educational and Cooperative Learning that helps students learn about themselves, interpersonal relationships, and how groups function from a group dynamics or social psychological point of view. (Rief, 2004) [14]. Group dynamics can be understood as complex from an interpersonal relationships point of view because it involves relationships between two people, relationships between a person and a group and relationships between groups.

Table 2b **Cooperative Learning Activities Utilized for Children with ADHD Along Group Dynamics Activities**

Group Dynamics Activities	Mean Rank	Rank
Video Scavenger Hunt	4.0	1
Build a Big Structure	4.1	2.5
Lights, Camera, Action	4.1	2.5
Tallest Tower	4.5	4
Flying Cotton Balls	5.3	5
All the News	5.8	6
Dragons Den	6.4	7
Scrapheap Challenge	6.7	8
Egg Escape Rocket	7.0	9
Marble Motion	7.1	10

Note: Ranking is based on their mean rank according to most utilized activity: *1- most utilized and 10-least utilized*

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It could be gleaned from the Table 2.b that Video Scavenger Hunt has been identified as rank 1 as supported by the frequency (mean) of 4.0. Lights, Camera, Action (4.1) and Build a Big Structure (4.1) ranked as 2.5 while Tallest Tower ranked 4. However, Egg Escape Rocket (7.0) has been assessed as rank 9 while Marble Motion is utilized as last among all activities. The data imply that Cooperative Learning Activities are utilized to make the pupils stronger and to make weaker pupils to be given needed care and help to make themselves strong and to develop their self-esteem. It is also believed that when possible, learners with ADHD should be placed in groups with students who can be role models.

Game-Based Activities

Game-Based Activities use competitive exercises, either pitting the students against each other or getting them to challenge themselves, so as to motivate them to learn better. Games often have a fantasy element that engages players in a learning activity through a storyline. In order to create a truly educational game, the instructor needs to make sure that learning the material is essential to scoring and winning. (Corpuz, 2013) [15].

Table 2c **Cooperative Learning Activities Utilized for Children with ADHD Along Game-Based Activities**

Game-Based Activities	Frequency	Rank
Boat is Sinking	2.6	1
Match-it	4.8	2
Fact or Fiction	4.9	3
Number Draw	5.0	4
Four Corners	5.1	5
Write-n-Pass	5.8	6
Fix-it	6.0	7
Two-Slipper Jump-over	6.8	8
Ask-n-Switch	6.9	9
Synchronized Write-n-pass	7.3	10

Note: **Ranking** is based on their mean rank according to most utilized activity*: 1- most utilized and 10-least utilized*

The Table-2.c shows that the activity Boat is Sinking is ranked number one (1) in terms of utilization as indicated by the mean of 2.6. Match-it with a mean of 4.8 is second in rank, Fact or Fiction (4.9) as the third and Number Draw is assessed as fourth in rank with the mean of 5.0. However, of all the activities enumerated along game-based, Ask-n-switch has been assessed as ranked 9 as supported by the mean of 6.9 while Synchronized Write-n-Pass has been evaluated as the last, as indicated by the mean of 7.3.The data imply that teachers utilized game-based activities because these can regulate the hyperactivity of the pupils since the energy is used in various games conducted in the classroom.

Results of the studies by (Admiraal, et al., 2011) [16] affirmed the findings of this study that game-based learning increases attention, decreases disruptive behavior in the classroom, and leads to more meaningful academic engagement.

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Level of Effectiveness of Cooperative Learning Activities Utilized for Learners with ADHD

Academic Instructions

Over-all, the Table shows that the Cooperative Learning Activities utilized for learners with ADHD along academic instructions are highly effective as evidenced by the average weighted mean of 4.52. In particular, the activities like Lights, Camera, Action, Write-n-Pass and Match-it prompt the child to be always on time, Egg Escape Rocket and Boat is Sinking give the signal when to start and end the activity that entails alertness and vigor, synchronized Write-n-Pass and Scrapheap Challenge teach the child how to use watch and be very aware on how to use the time wisely and appropriately, Build a Big Structure and Fix-it provide the child with supervised opportunities to break down into a sequence of short and interrelated activities and Life Map and Dragons' Den help the child create a daily activity schedule–all are deemed to be effective to be utilized for the learners with ADHD.

Table 3a Level of Effectiveness of Cooperative Learning Activities Utilized for Learners with ADHD along Academic Instructions

Academic Instructions		Level of Effectiveness									
		Frequency									
		VHE		HE		ME		SE		LE	
		f	%	f	%	f	%	f	%	f	%
Time Management Skills											
The activities like:											
1	Lights, Camera, Action, Write-n Pass and Match-it prompt the child to be always on time	15	53.6	13	46.4	0	0.00	0	0.00	0	0.00
2	Egg Escape Rocket and Boat is Sinking give the signal when to start and end the activity that entails alertness and vigor	21	75.0	7	25.0	0	0.00	0	0.00	0	0.00
3	Synchronized Write-pass and Scrapheap Challenge teach the child how to use watch and be very aware on how to use the time wisely and appropriately	21	75.0	6	21.4	1	3.6	0	0.00	0	0.00
4	Build a Big Structure and Fix-it provide the child with supervised opportunities to break down into a sequence of short and interrelated activities.	14	50.0	12	42.9	2	7.1	0	0.00	0	0.00

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5	Life Map and Dragons' Den help the child create a daily activity schedule	18	64.3	8	28.6	2	7.1	0	0.00	0	0.00
Study skills necessary for academic success											
The activities like:											
6	Perceptual Fallibility and Four Corners give the awareness and instruct the child to organize books or other materials before beginning his or her task (uncluttered environment)	20	71.4	8	28.6	0	0.00	0	0.00	0	0.00
7	Write-n-Pass and Write Your Own Eulogy instruct the child how to use instructional worksheets	15	53.6	10	35.7	3	10.7	0	0.00	0	0.00
8	Write Your Own Eulogy and All the News help illustrate and organize key concepts in reading, mathematics and other academic subjects	13	46.4	12	42.9	3	10.7	0	0.00	0	0.00
9	Write-n Pass and Match- it teach the child how to take note when organizing key academic concepts that he or she has learnt	12	42.9	13	46.4	3	10.7	0	0.00	0	0.00
10	Tallest Tower and Flying Cotton Balls keep track of how well the child completes his/her assigned task	13	46.4	13	46.4	2	7.1	0	0.00	0	0.00
Average Weighted Mean (DE)		**4.52 (Highly Effective)**									

Note: Highest frequencies are in boldface; DE=Descriptive Equivalent

Legend:

4.21 – 5.00 **VHE –Very Highly Effective**
3.41 – 4.20 **HE – Highly Effective**
2.61 – 3.40 **ME – Moderately Effective**
1.81 – 2.60 **SE – Slightly Effective**
1.00 – 1.80 **LE – Least Effective**

The data imply that learners with ADHD need to be given instructions which instill in them the development of their time management skills and are very necessary for their academic success. Results of the study of Taylor (2014) [17] affirmed in this study that all students need the skills gained from active participation in Cooperative Learning Activities. Without developing these skills (such as, the ability to analyze and evaluate multiple perspectives, manage conflict, cope with change, and appreciate cross-cultural differences), students with ADHD are at serious risk of failing as adults in a global society. Furthermore, it is believed that time

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management is not very difficult as a concept, but it is surprisingly hard to do in practice. It requires the investment of a little time upfront to prioritize and organize oneself. But once done, one will find that with minor tweaks, the day, and indeed the week and month, fall into place in an orderly fashion, with time for everything one needs to do. (www.skillsyouneed.com) [18]

Behavioral Interventions. It could be gleaned from the Table that Cooperative Learning Activities utilized for learners with ADHD along behavioral interventions are highly effective as indicated by the average weighted mean of 4.49. In particular, the Cooperative Learning Activities are highly effective like Lost and Solo Hour in Nature mitigate immaturity of learners with ADHD. Sensual Awareness Inventory and Blind Crossing alleviate difficulty of learning how to control impulsiveness and hyperactivity of the children. All the News and Fact or Fiction lessen difficulty thinking through the social consequences of their actions. Boat is Sinking and Synchronized Write-n-Pass form friendships with other children in the class. Blind Walk and Fear in a Hut assist children in showing the behaviors that most encourage good learning. Blind Walk and Blind Crossing encourage children not to engage in destructive activities. Flying Cotton Balls, Egg Escape Rocket and Two-Slipper Jump-over entail use of manipulatives that help children to focus on the activity. Blind Crossing, Blind Walk, Build a Big Structure and Tallest Tower permit children to concentrate better. Empty Your Pockets, Write Your Own Eulogy and Get Lost keep children always busy. Solo Hour in Nature, Get Lost, Life Map and Sensual Awareness Inventory Support and assist to prevent learners to continuously work independently. The data imply that activities are relevant for behavioral interventions because these develop the good characters of pupils.

Table 3b **Level of Effectiveness of Cooperative Learning Activities Utilized for Learners with ADHD along Behavioral Interventions**

	Behavioral Interventions	**Level of Effectiveness**									
		Frequency									
		VHE		**HE**		**ME**		**SE**		**LE**	
		f	**%**	**f**	**%**	**f**	**%**	**f**	**%**	**f**	**%**
The activities like :											
1	Get Lost and Solo Hour in Nature mitigate immaturity of children with ADHD	15	53.6	13	46.4	0	0.00	0	0.00	0	0.00
2	Sensual Awareness Inventory and Blind Crossing alleviate difficulty on learning how to control impulsiveness and hyperactivity of the children	10	35.7	16	57.1	2	7.1	0	0.00	0	0.00
3	All the News and Fact or Fiction lessen difficulty thinking through the social consequences of their actions.	17	60.7	10	35.7	1	3.6	0	0.00	0	0.00

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Behavioral Interventions		Level of Effectiveness									
		Frequency									
		VHE		HE		ME		SE		LE	
		f	%	f	%	f	%	f	%	f	%
4	Boat is Sinking and Synchronized Write-n-Pass form friendships with other children in the class	19	67.9	8	28.6	1	3.6	0	0.00	0	0.00
5	Blind Walk and Fear in a Hut assist learners in showing the behaviors that encourage good learning.	16	57.1	12	42.9	0	0.00	0	0.00	0	0.00
6	Blind Walk and Blind Crossing encourage children not to engage in destructive activities.	17	60.7	9	32.1	2	7.1	0	0.00	0	0.00
7	Flying Cotton Balls, Egg Escape Rocket and Two-Slipper Jump-over entail use of manipulatives that help children to focus on the activity.	19	67.9	8	28.6	1	3.6	0	0.00	0	0.00
8	Blind Crossing, Blind Walk, Build a Big Structure and Tallest Tower permit children to concentrate better.	10	35.7	16	57.1	2	7.1	0	0.00	0	0.00
9	Empty Your Pockets, Write Your Own Eulogy and Get Lost keep children always busy	14	50.0	11	39.3	3	10.7	0	0.00	0	0.00
10	Solo Hour in Nature, Get Lost, Life Map and Sensual Awareness Inventory Support and Assist to prevent children to continuously work independently.	13	46.4	15	53.6	0	0.00	0	0.00	0	0.00
Average Weighted Mean		**4.49 (Highly Effective)**									

Note: Highest frequencies are in boldface; DE=Descriptive Equivalent

Legend:

4.21 – 5.00 **VHE –Very Highly Effective**
3.41 – 4.20 **HE – Highly Effective**
2.61 – 3.40 **ME – Moderately Effective**
1.81 – 2.60 **SE – Slightly Effective**
1.00 – 1.80 **LE – Least Effective**

Homes (2014) [19] said that if a student is not responsive to behavioral strategies and interventions, more intensive interventions, such as functional behavior assessment and behavior intervention plans, should be considered. No one intervention is universally effective for all students with ADHD. A combination of research-based and promising practices are recommended.

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Table 3c **Level of Effectiveness of Cooperative Learning Activities Utilized for Learners with ADHD along Classroom Accommodations**

Classroom Accommodations		Level of Effectiveness									
		Frequency									
		VHE		HE		ME		SE		LE	
		f	%	f	%	f	%	f	%	f	%
The activities like:											
1	Fear in a Hut, Solo Hour in Nature and Video Scavenger lessen the difficulty of adjusting to the structured environment	12	42.9	15	53.6	1	3.6	0	0.00	0	0.00
2	Marble Motion, Egg Escape Rocket, Four Corners reduce distractions in the classroom environment and help them stay on task and learn	10	35.7	17	60.7	1	3.6	0	0.00	0	0.00
3	Write Your Own Eulogy, Blind Crossing and Blind Walking demand praises and constructive criticisms that encourage the children	14	50.0	13	46.4	1	3.6	0	0.00	0	0.00
4	Match-it, The Boat is Sinking and Tallest Tower give more time to pair written instructions with oral instructions	11	39.3	17	60.7	0	0.00	0	0.00	0	0.00
5	Tallest Tower, Build a Big Structure and All the News help the child to concentrate to address inattention	13	46.4	13	46.4	2	7.1	0	0.00	0	0.00
6	Perceptual Fallibility and Fear in a Hut ease impulsiveness to lessen the condition of the child.	9	32.1	17	60.7	2	7.1	0	0.00	0	0.00
7	Blind Crossing, Perceptual Fallibility, Empty Your Pockets and Dragon's Den provide assurance for the children's safety	12	42.9	15	53.6	1	3.6	0	0.00	0	0.00
8	Life Map, Write Your Own Eulogy,Tallest Tower, Fix-it and Ask-n-Switch provide effective calming strategies of teachers	14	50.0	12	42.9	2	7.1	0	0.00	0	0.00
9	Boat is Sinking, Synchronized Write-n-Pass, Lights, Camera Action, All the News and Egg Escape Rocket strengthen leadership role in the class	15	53.6	10	35.7	3	10.7	0	0.00	0	0.00
10	Fact or Fiction, Number Draw, Fix-it and Video Scavenger Hunt give good rewards to ease bad moods and attain success of a child.	16	57.1	10	35.7	2	7.1	0	0.00	0	0.00
Average Weighted Mean		**4.40 (Very Highly Effective)**									

Highest frequencies are in boldface; DE=Descriptive Equivalent

Legend:

4.21 – 5.00 **VHE –Very Highly Effective**
3.41 – 4.20 **HE – Highly Effective**
2.61 – 3.40 **ME – Moderately Effective**
1.81 – 2.60 **SE – Slightly Effective**
1.00 – 1.80 **LE – Least Effective**

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Classroom Accommodations. Over-all, it could be gleaned from the Table that Cooperative Learning Activities utilized for learners with ADHD along classroom accommodations are very highly effective (VHE) as evidenced by the mean of 4.40. In particular, the Cooperative Learning Activities are highly effective like Fear in a Hut, Solo Hour in Nature and Video Scavenger to lessen the difficulty of adjusting to the structured environment. Marble Motion, Egg Escape Rocket, Four Corners reduce distractions in the classroom environment and help them stay on task and learn. Write Your Own Eulogy, Blind Crossing and Blind Walking demand praises and constructive criticisms that encourage the child. Match-it, the Boat is Sinking and Tallest Tower give more time to pair written instructions with oral instructions. Tallest Tower, Build a Big Structure and All the News help the child to concentrate to address inattention, perceptual fallibility and Fear in a Hut help ease impulsiveness, provide assurance for the children's safety. Life Map, Write Your Own Eulogy, Tallest Tower, Fix-it and Ask-n-Switch provide effective calming strategies for teachers. Boat is Sinking, Synchronized Write-n-Pass, Lights, Camera Action, All the News and Egg Escape Rocket strengthen leadership role in the class and Fact or Fiction, Number Draw, Fix-it and Video Scavenger Hunt give good rewards to ease bad moods and attain success of a child.

Results of the study imply that Cooperative Learning Activities are best for accommodation services because these address inattention, impulsiveness, hyperactivity, disorganization, and other difficulties among pupils with ADHD because distractions are reduced, constructive criticisms are enhanced, safety is provided, rewards are offered and leadership roles are strengthened.

Parker (2013) [20] in his book entitled, "*Accommodations Help Students with Attention Deficit Disorders*", revealed that children and youth with Attention Deficit Hyperactivity Disorder (ADHD) often have serious problems in school. Inattention, impulsiveness, hyperactivity, disorganization, and other difficulties can lead to unfinished assignments, careless errors, and behavior which is disruptive to one's self and others. Through the implementation of relatively simple and straightforward accommodations to the classroom environment or teaching style, teachers can adapt to the strengths and weaknesses of students with ADHD. Small changes in how a teacher approaches the student with ADHD or in what the teacher expects, can turn a losing year into a winning one for the child.

Table 4 **Difference between the Level of Effectiveness of the Cooperative Learning Activities Utilized for Learners with ADHD across their Profile Variables**

Profile	Wilk's Λ	Sig.
Age	. 734[ns]	.127
Sex	.860[ns]	.424
Highest Educational Attainment	. .839[ns]	. .357
Specialization	—-	——
Position/ Rank	.773[ns]	.191
Seminars Attended Related to SPED[b]	.697[ns]	.334

Note: Not Significant; [a]not included due to minimum number of cases in one category; [b]Some categories collapsed due to minimum number of cases.

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It could be gleaned from the Table that the level of effectiveness of the Cooperative Learning Activities utilized for learners with ADHD has no significant difference across age category as indicated by the significance value of .127 which is higher than 0.05 level of significance. Further, since sex, highest educational attainment, position/rank and seminars attended by the SPED teachers have same trend as with the age having the significance values of .424, .357, .191 and .334, respectively, it could be deemed there is no significant difference to the level of effectiveness of the Cooperative Learning Activities across profile variables because these values are higher than the alpha value of 0.05. Overall, there is no significant difference in the level of effectiveness of the Cooperative Learning Activities utilized for children with ADHD across categories of profile variables based on the values of the multivariate Wilk Λ with corresponding significance values that are greater than the set level of significance of .05. Therefore, the hypothesis which states that there is no significant difference between the level of effectiveness of the Cooperative Learning Activities utilized for children with ADHD across profile variables is **accepted**.

Conclusion

Based on the findings of the study, the following conclusions are drawn:

1. Majority of the teachers are female, relative of their age, baccalaureate degree holders, SPET 1 and have participated in international SPED-related seminars.
2. SPED Teachers utilized various Cooperative Learning Activities like multi-sensory, group dynamics and game-based for learners with ADHD.
3. Cooperative Learning Activities utilized for learners with ADHD are highly effective to the academic instructions, behavioral interventions and classroom accommodations.
4. Profile variables of the SPED in the Division II of Pangasinan are not significantly different to the level of effectiveness of the Cooperative Learning Activities utilized for learners with ADHD.

Recommendations

Based on the conclusions drawn, the Researcher strongly recommends the following:

1. SPED teachers should pursue higher studies not only to have the higher rank and to be promoted but to have the personal growth and professional development.
2. Teachers should always employ various Collaborative Learning Activities for ADHD pupils to meet their educational needs and be able to perform well in the classroom.
3. Since Cooperative Learning Activities are highly effective in the teaching-learning process, teachers should sustain using these activities for more interactive, engaging and productive learning.
4. SPED Teachers should be attending seminars which are internationally organised to adapt new and effective strategies in managing learners with ADHD.
5. Teachers have a very important role to play in creating the learning environment that enable learners with ADHD to reach their potential. Therefore, teachers should respond effectively to the needs of children with special educational needs to enhance their educational opportunities to become better citizens of the country.

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