Special Swimming Activity, a Recommend Program for Persons with Disabilities (PWD)
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Abstract

A special swimming program for the students with disabilities was started in summer year 2016 when the researcher was privileged and invited to make a physical education program in a Special Education (SPED) School in Quezon City, Philippines, through the initiative of its directress to offer a swimming lesson specifically designed for learners with disabilities (the activity just stopped due to Covid-19 pandemic). The school has 70 students with different disabilities and level of mental health problems. The directress was in need of physical activity program that she believed will enhance the total personality development of her students [22, 11]. She was hesitant at first to have the outdoor program due to the high risk responsibility, a venue outside the school, and how the students react to the environment, in a swimming program that is new to them [13]. The partnership envisioned that the water activity provides significant benefits for children with disabilities [32, 33] that regular participation in the program would also promote positive advancements physically, can increase competency in gross motor skills, enhance fitness level, improve self-esteem, social skills, encourage and maintain a motivation to improve their health and raise their level of enjoyment [9, 21, 10].

Keywords: Enjoyment, special swimming activity, and students with disabilities.

INTRODUCTION

Children with disabilities are the most marginalized and excluded groups of children in the community, in school, and even in their own family, experiencing widespread violations of their rights and privileges as individual [1]. Discrimination arises not as a result of the intrinsic nature of disability, but rather, as a consequence of lack of understanding, affection and knowledge, fear in the family identity, or negative cultural views of disability. It is further compounded by ignorance, poverty, social isolation, humanitarian emergencies, and a hostile and inaccessible environment. Their exclusion and invisibility serve to render them uniquely vulnerable, denying them respect for their dignity, their individuality, even their right to be taught and to learn, and the right to life itself [2].

James et al., [3] and Lieberman et al., [4] emphasizes that teachers of children with learning problems must do more than just follow the prescribed curriculum because the educator constantly has to adapt to the specific and unique special needs of the individuals.

Ross, et al., [5] and Cumming, et al., [6] added that parents of the students with disabilities should encourage participation in physical activity of their children. Let them explore movement and play, be optimistic and guide them toward participation that enhanced their level of physical fitness.

De Leon [7] in his study based on the 1989 United Nations Conventions on the Rights on the Child, the 1990 World Declaration for All, the 1994 UNESCO Salamanca Statement and framework for Action on Special Needs Education, Rule six of the Standard Rules and the Final Declaration of the 1995 United Nations World Summit for Social Development, attempted to synthesize these legislations and their impairment status in the educational system in countries like China, Cambodia, India, Japan, Taiwan, Thailand, and the Philippine on how these are being carried out to address the educational needs:

1. China - Law on Basic Protection of Disabled Persons, adapted in1990 and enacted in 1991. In Article 18 establishes that the state guarantees the right to education for disabled persons and provides

3. India - Equal Opportunities, Protection of Rights and Full Participation Bill for Persons with Disabilities. The act establishes the right to education in a conducive and appropriate learning environment, for children with disabilities.

4. Japan - Fundamental Law for Persons with Disabilities enacted in 1970 and amended in 2004. There is a strong effort in the compliance of Special Support Education throughout the school system.


6. Taiwan - Special Education Law, Revised 2004 Welfare Protection Law for the Disabled Individuals. The laws centered on the importance of inclusion and former law clearly states that all children with special needs at age 3 could receive the free and appropriate education and the education settings should be in regular kindergarten with regular children.

7. Philippines - Republic Act 7277 or Magna Carta for Disabled Persons in 1992. The laws centered on the State shall (i) ensure that disabled person are provided with adequate access to quality education, opportunity to develop their skills, (ii) make appropriate steps to make such education accessible to all disabled persons, and (iii) take into consideration the special requirements of disabled persons in the formulation of educational policies and programs.

All countries mentioned above have their own laws protecting the rights of persons with disabilities. Their national constitutions mandate the State’s obligation to people with disabilities. These national laws on education express a commitment of equalizing opportunities to education for people with disabilities. They are designed to remove and prevent social and environmental barriers and increase access to special and mainstream and inclusive education.

In regards to increase access to special and mainstream and inclusive education, the researcher and the school directress of the sped school in Quezon City, Philippines, the vision of special physical activity with the cooperation of special students’ parents experimentally developed a one hour special swimming program.

The researcher by organizing the program the 70 special students were divided into two groups in different sessions. It was very hard to keep the special students to follow instructions in the 4 feet deep pool the reason they experimentally brought the learners in the deeper part, putting inflatable arm float gadgets to those who have difficulty to swim, in Amoranto, Quezon City Olympic long course standard sized pool.

They have tried the students to cross the 50 meter length pool, inch-by-inch, little-by-little, with the help of 7 assistant swimming instructors, and have discovered that components of physical fitness such as agility, balance, endurance, flexibility, organic vigor, power, reaction time and strength of the students have been exercised and enhanced. The students successfully crossed the pool, and enjoyed the activity. Furthermore, the special students crossed the 50 meter pool 10 times or 500 meters in an hour.

The following areas in a child’s development as identified can be enhanced in this study, the 500 meters special swimming activity for students with disabilities. The said physical development has been touched and measured with the Physical Activity Capability Scale (PACAS) and Physical Activity Enjoyment Scale (PACES) respectively, to come up with a recommendation physical activity program for PWD.

Statement of the Problem
The purpose of this study is to determine and investigate the levels of physical capability and enjoyment of the students with disabilities (SWD) in the 500 meters swimming program of 70 SWD of the SPED School in Quezon City, Philippines.

Specifically, it sought answers to the following

1. What is the profile of the students with disabilities (SWD) in terms of:
   1.1 Types of Disability,
   1.1.1 with visual and hearing impairment;
   1.1.2 Intellectual disability;
   1.1.3 Learning disability;
   1.1.4 autism spectrum;
   1.1.5 communication disorder;
   1.1.6 physical disability;
   1.1.7 emotional and behavioral disorder;
   1.1.8 orthopedically handicapped, and
   1.1.9 Chronically ill?
   1.2 Types of Swimming Ability:
   1.2.1 swim without arm floats and
   1.2.2 Swim with arm floats?

2. What are the level of physical activity capabilities of the SWD in terms of the following physical fitness components:
   2.1 Agility;
   2.2 Balance;
   2.3 Endurance;
   2.4 Flexibility;
   2.5 Organic Vigor;
3. What is the level of enjoyment of SWD before and after swimming based on Physical Activity Enjoyment Scale (PACES)?

4. What are the experiences of participants based on PACAS and PACES as perceived by:
   2.1 Parents/Guardians
   2.2 Teachers/Instructors and
   2.3 Students with Disabilities?

5. What is the significant difference on the level of enjoyment of the SWD before and after the swimming program?

6. What is the significant relationship between the physical activity program and level of enjoyment of SWD?

7. What physical activity program can be recommended for persons with disabilities (PWD) as a result of this study?

**Research Paradigm**

![Research Paradigm on the Physical Activity Program of SWD](image)

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**Significance of the Study**

This study will expand the limited research regarding physical activity program for PWD in the Philippines. It will help for the formulation of physical activity program which are beneficial to the following:

**School Administrators**

They will be able to make strides on the issues regarding problems and concerns of the learners with disabilities, assess the issues and concerns so they will be in a better position to address the existing problems in the management of physical activity program.

**PE & SPED Teachers**

They work hand-in-hand to provide special physical educational programs, for the adoption of new techniques and innovative activities, and mentor in helping the individuals with disabilities to enjoy and be healthy. Through this study, they will be able to maximize the use of their teaching skills and abilities in indoor and outdoor activity programs for the disabled students.

**Parents/Guardians**

They will be more aware of their children’s needs and their capabilities for active participation in physical activities, recreation or sports and get involved in school activity programs so they can guide their children to maximize their potentialities to live full, happy and productive lives.

**Persons with Disabilities**

PWD will discover the new experience, develop confidence and trust, and increase social competence and skills that are extremely important to strengthen their chances to survive in a more complex world, and to keep them active, healthy and happy.

**Community**

The community will gain knowledge, ideas and importance of physical activity to cater the needs of their constituents with disabilities.

**Future Researchers**

They will have the chance to expand their knowledge and educate further on current information and techniques to improve the lives of PWD. This study serves as reference for future research.
The results and conclusions of this study can improve survey instruments, theoretical/conceptual frameworks, and expand the knowledge on administering program of physical activities for PWD.

Scope and Limitation
The quantitative-survey questionnaire data were drawn from 110 participants consists of parents/guardians, administrators, SPED-teachers, swimming instructors, school helper and maintenance present during the 500 meters swimming activity of 70 students with disabilities in a special school in Quezon City, Philippines.

The researcher also made a qualitative-interview guide questions validated by experts in the field of this study, and the information and experiences were taken from 5 Parents/Guardians, 5 Teachers/Instructors, and 10 Students with Disabilities from the participants.

Those involved in the activity from school years 2015-2016 and 2016-2017 were not included as participants to avoid speculations regarding the present study on the levels of physical activity capability and enjoyment of children with disabilities.

Synthesis of Review of Related Literature
The related literature and studies helped the researcher expound on the validity and Importance of the experimental swimming program PWD.

Smail, et al., [8] said that the physical activities aim is for all children, with disabilities or not, to become physically literate, having the knowledge, skills and dispositions to be physically active throughout their lifespan. Regardless of the abilities of the individuals, the purpose of participation in physical activities remains the same, to engage in meaningful movement experiences for the development of healthy individuals.

Diaz [9] pointed out that enjoyment in physical activities is an important ingredient in children’s participation. It is defined as positive effective response to physical activity that reflects feeling and perceptions such as pleasure, liking and experience fun.

National Center on Physical Activity and Disability [10] noted that one must have communicated with child and selected appropriate activities that will allow sufficient opportunity to child to have fun, must determine measurable outcomes for defining belonging, success, accomplishment, growth, and competence. To do this, it is important to set goals. Goal setting can be done before and after selecting appropriate activities. Joseph, et al. [11] said that for all children can benefit from the exercise, energy release, and pure enjoyment of physical activities. This includes students with disabilities needs. Just about any physical activity can be modified to allow them to get the cardiovascular, flexibility, and strength-training benefits to stay healthy, fit and happy.

Hellison [12], McClelland et al. [13] PWD cannot acquire the high degree of skills of normal individuals but they acquire sufficient skills to participate in different types of muscular activities to increase their physical fitness and improve their body mechanics. Aside from the physical benefits that they would get from physical activities they would also have opportunities for social development and emotional growth.

Umali [14] observes that the special physical activity program designed to meet the unique needs of the child in the least restrictive environment and essential for quality of life reasons and as a public health promoter, recognized the fact that the children with special needs are educable and an important matter to be dealt with making them productive and responsible individual.

METHODOLOGY
This chapter describes the research design, respondents of the study, research locale, instrumentation, data gathering procedure and statistical treatment of data that will be used in this study.

Research Design
Qualitative and quantitative methods are the research designs of the study. The first method, according to positivist paradigm, analyses the problem with statistical and methodological rigor, in this way it offers a better chance of reaching generalizations. The second method is linked to the paradigms of complexity, conceptuality, according to a phenomenological approach, to understand educational reality in a holistic way in its uniqueness and specificity [15].

Research Locale
The study used a SPED school located at 24 Atok St. Sta. Mesa Heights, Sto. Domingo, 1114 Quezon City (QC), engaged since the School Year 2016-2017 to 2018-2019 in the 500 meters swimming program in Amoranto Sports Complex Swimming Pool in Don Chino Roces Avenue, QC, Philippines.

Participants of the Study
There were 20 participants for the qualitative – interview, while the quantitative – survey questionnaires were distributed to 110 parents or guardians, teachers, swimming instructors, school helpers and maintenance staff present during the 500 meters swimming activity of 70 SWD.
**Research Instrument**

The participants of the study answered qualitative – interview guide questions. And for the quantitative method: survey questionnaire, which consists of the Physical Activity Capability Scale (PACAS) and the Physical Activity Enjoyment Scale (PACES).

The survey questionnaire have been adopted and modified by the help of 3 experts in the field of this study, with 30 copies sent out to test the validity and reliability of the survey questionnaire before conducting the study.

The result of the reliability statistics: Cronbach’s Alpha = .889

The survey questionnaire was composed of two (2) parts. Part 1 has two (2) sections. The first, Section A is the profile of the students with disabilities in terms of “Types of Disabilities” and “Types of Swimming Abilities.” The second, Section B is the questionnaire of PACAS, and Part 2 is the questionnaire on PACES.

The Section B, the PACAS which is adopted from the “Physical Fitness Component Skills,” is one of the main activities in the former college PE1 curriculum with a course description of “Fundamentals of Physical Activities,” and now, in the new curriculum in PE1 as Movement Enhancement and PE2 Fitness Exercises.

Part 2 of the questionnaire is the PACES (Diaz H.L.C, 2015), that includes a set of 18-items and rated by the participants, before and after the swimming activity with value interpretation of: (1) Very Low (2) Low (3) Moderate (4) High (5) Very High. The scale can measure the exercise enjoyment trait meaning “the exercise enjoyment in general/most of the time” [16].

**Data Gathering Procedure**

The quantitative-survey questionnaire data were drawn from the 110 participants. The qualitative-interview guide questions and the information and experiences were taken from 20 selected participants.

The researcher initially wrote a formal request to the Directress of the school to conduct the study. Upon approval, the participants were given consent letters informing them of the topic, the objectives and the procedures to answer the interview and survey questionnaires that emphasized the importance of the data to be gathered from them. They were given the freedom to ask questions if there were some items or terms that they did not understand. They were also informed of confidentiality and anonymity of their participation. Then proceed with the writing of the experiences, ideas, comments, and suggestions of the interviewees. For the quantitative-survey questionnaire, data were collected and encoded.

**Statistical Treatment of Data**

The data collected from the questionnaires were the inputs in the SPSS, Version 20. It is a statistical analysis package developed in the late 1960s. Its purpose was “to develop a software system based on the idea of using statistics to turn raw data into information essential to decision-making”. The researcher was assisted by a statistician in the generation of data.

1. Frequency and Percentage Distribution – this was used to describe the profile of the students with disabilities as given by the participants
2. Weighted Arithmetic Mean. This was used to find out the level of enjoyment of the participants. This is applicable to options of different weights.
3. t – test is used as a hypothesis testing tool, which allows testing of an assumption applicable to a population. The t-distribution values and the degrees of freedom to determine the probability of difference between two sets of data.
4. Pearson Product Moment Coefficient Correlation or Pearson r. – this was employed to find out if there is significant relationship between the level of physical activity capability and level of enjoyment of the students with disabilities.

The statistics is set at .05 alpha levels and at different dfs to set the acceptance and rejection of Ho set.

**RESULTS AND DISCUSSION**

The presentation of the results, discussion of the study and the interpretation of data were presented and interpreted in conformity with the sequence of the statement of the problem.
1: Profile of the students with disabilities (SWD)

Table-1: Types of Disabilities and Types of Swimming Ability of the SWD

<table>
<thead>
<tr>
<th>Types of Disability</th>
<th>Can float and swim</th>
<th>With arm floats</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>with visual and hearing impairment</td>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>intellectual disability</td>
<td>5</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>learning disability</td>
<td>2</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>autism spectrum</td>
<td>4</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>communication disorder</td>
<td>4</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>physical disability</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>emotional and behavioral disorder</td>
<td>5</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>orthopedically handicapped, and</td>
<td>0</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>chronically ill</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>46</td>
<td>70</td>
</tr>
</tbody>
</table>

The distribution of data on Table 1 below shows that there were 24 students who can float and swim, while the students who used arm floats were 46 out of the total number of 70 SWD.

The table shows that the number of SWD with emotional and behavioral disorders ranked the highest with 15 students, followed by the students with intellectual disabilities at 2nd with 12. The students with learning disabilities and with autism spectrum with 10 students each both ranked 3rd, the students with communication disorders ranked 4th with 8, students with visual hearing impairment ranked 5th with 6. The orthopedically handicapped with 4 students ranked 7th, students with Physical disability ranked 8th with 3, and the chronically ill ranked 9th with 2 students and the least number among the SWD.

With regards to the number of SWD who can float and swim, the data shows that the students with intellectual disability and with emotional behavioral disorder who can float and swim have the highest number of 5 students each and ranked 1st followed by students with autism spectrum and with communication disorder with 4 each ranked 3rd. There were 3 students with visual and hearing impairments ranked 5th, the students with learning disabilities were 2, ranked 6th. There is only one (1) student with physical disability and ranked 7th. There were no students who were orthopedically handicapped and chronically ill disabilities can float and swim.

There were 46 SWD who used arm floats to float and swim. According to the data the students with emotional and behavioral disorder ranked the highest with 10, followed by 8 students with learning disability at 2nd. There were 7 students with intellectual disability which ranked 3rd, 6 students with autism spectrum ranked 4th, the students with communication disorder and orthopedically handicapped ranked of 5th with 4 each. There were 3 students with visual and hearing impairment which ranked 6th. There are 2 students each for the chronically ill and with physical disability ranked 7th.

Menear [17] in her study, stated that a number of reports have indicated that overweight, obesity, and inactivity occur at higher rates in individuals with disabilities than in general population largely due to issues with social impairment, emotional and physical regulation, common attributes of individuals on autism spectrum, and below optimal motor skills and fitness levels.

Special swimming program was designed for SWD as a form of recreation, sport, exercise, or survival. The SWD can float and swim or they can use arm floats while performing the different special swimming activities that will develop their physical skills and enhance their level of enjoyment.
2: Level of physical activity capabilities of the SWD in terms of the physical fitness components

Figure 2 below shows the range of mean value in the eight (8) physical activity capabilities of SWD in regards to physical fitness components observed by the participants:

![Image](image_url)

**Fig-2: The level of Physical Activity Capabilities of the SWD in terms of following physical fitness components**

In the figure 2, looking closely at the mean result of each physical fitness component, the longest bar graph the highest is Strength with 4.17 they are strong enough to manifest good swimming. Reaction time which rank the second with 4.15. This is very important while in the deep, not to drink or to inhale water, synchronize timing movement of the whole body to float, to survive and to swim. Their level of flexibility and endurance are also very good as shown in the mean value of 4.14 each. The level of power of the SWD is also very good with 4.07 the combination of their strength and speed resulting to explosive movement of their arms and legs to swim forward. The agility mean of 4.04 they could move forward not hitting/hurting each other by initiating change of positions and direction efficiently and effectively to reach the other side of the pool. Their level of Balance is very good as evident in the mean value of 4.00. They learn to maintain their equilibrium, with or without arm floats for them not to sink, but to float, to survive and swim. The students have a very good level of Organic Vigor as shown in the mean value of 3.91. It also shows that they could not get tired easily.

In general, the students with disabilities have a very good level of physical activity capabilities. This is evident in the over-all mean value of 4.08. It was supported by the study of Laural [18] that all children can be directed to engage in some physical activity capability, Torralba[19] said, in teaching physical education to students with special needs demands special skills and knowledge that will enable educators to meet and address. Ross, et al., [5] added that parents of SWD should encourage participation in physical activity of their children. Let them explore movement and play, be optimistic and guide them toward participation that is very important in to enhance their level of physical capabilities. Furthermore, Durstine J.L. [20] stated that the primary goals for increasing physical activity participation among children with disabilities are to reverse de-conditioning secondary to impaired mobility, optimize physical functioning, and enhance overall well-being.

3: Level of Enjoyment of SWD before and after swimming based on The Physical Activity Enjoyment Scale

The level of enjoyment of SWD based on the physical activity enjoyment scale of before the swimming activity was moderate, while after, the children enjoy more as the distribution of data presented in the Table below.
Table-2: The level of enjoyment of SWD before and after swimming activity

<table>
<thead>
<tr>
<th>Level of enjoyment of SWD Indicators</th>
<th>Time</th>
<th>Mean</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>He/she enjoys it</td>
<td>Before</td>
<td>2.71</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>4.45</td>
<td>High</td>
</tr>
<tr>
<td>He/she feels interested</td>
<td>Before</td>
<td>3.02</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>4.46</td>
<td>High</td>
</tr>
<tr>
<td>He/she likes it</td>
<td>Before</td>
<td>3.01</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>4.43</td>
<td>High</td>
</tr>
<tr>
<td>He/she find it pleasurable</td>
<td>Before</td>
<td>2.90</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>4.39</td>
<td>High</td>
</tr>
<tr>
<td>He is very absorbed in this activity</td>
<td>Before</td>
<td>2.68</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>4.28</td>
<td>High</td>
</tr>
<tr>
<td>It's a lot of fun</td>
<td>Before</td>
<td>2.91</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>4.48</td>
<td>High</td>
</tr>
<tr>
<td>He finds it energizing</td>
<td>Before</td>
<td>2.86</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>4.42</td>
<td>High</td>
</tr>
<tr>
<td>It makes him/her happy</td>
<td>Before</td>
<td>3.00</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>4.58</td>
<td>High</td>
</tr>
<tr>
<td>It's very pleasant</td>
<td>Before</td>
<td>2.94</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>4.35</td>
<td>High</td>
</tr>
<tr>
<td>He feels good doing it</td>
<td>Before</td>
<td>2.83</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>4.46</td>
<td>High</td>
</tr>
<tr>
<td>It's very invigorating</td>
<td>Before</td>
<td>2.85</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>4.23</td>
<td>High</td>
</tr>
<tr>
<td>He/she is not at all frustrated</td>
<td>Before</td>
<td>2.69</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>4.25</td>
<td>High</td>
</tr>
<tr>
<td>It's very gratifying</td>
<td>Before</td>
<td>2.77</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>4.31</td>
<td>High</td>
</tr>
<tr>
<td>It's very exhilarating</td>
<td>Before</td>
<td>2.71</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>4.32</td>
<td>High</td>
</tr>
<tr>
<td>It's very stimulating</td>
<td>Before</td>
<td>2.78</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>4.33</td>
<td>High</td>
</tr>
<tr>
<td>It gives him/her a strong sense of accomplishment</td>
<td>Before</td>
<td>2.85</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>4.48</td>
<td>High</td>
</tr>
<tr>
<td>It's very refreshing</td>
<td>Before</td>
<td>2.83</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>4.45</td>
<td>High</td>
</tr>
<tr>
<td>He/she felt as though there was nothing else he/she would rather be doing</td>
<td>Before</td>
<td>2.62</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>4.42</td>
<td>High</td>
</tr>
<tr>
<td>Over-all</td>
<td>Before</td>
<td>2.83</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>4.39</td>
<td>High</td>
</tr>
</tbody>
</table>

The distribution of data on Table 2 shows that in general, the level of enjoyment of students with disabilities increased after they were exposed to the special swimming program as compared to their level of enjoyment before the water activities. This is evident in the over-all mean value of 4.39 (High) after the special swimming program and over-all mean value of 2.83 before (Moderate).

They rated High the enjoyment level of SWD after the special swimming program, it gave them a sense of happiness as evident in the indicator #3.8, and it makes him/her happy, with the highest mean value of 4.58. After joining the special swimming program, they also felt Interested (indicator #3.2 with a mean value of 4.46), had a lot of fun (indicator #3.6 with a mean value of 4.46), felt good in doing it (indicator #3.10 with a mean value of 4.46) and, it gave them a strong sense of accomplishment in doing it (indicator #3.16 with a mean value of 4.46).

The findings supported by the study of Ross et al., [5], physical activity participation is widely recognized as a critical component of health and development for disabled and non-disabled children. Emergent literature reflects a paradigm shift in the conceptualization of childhood physical activity as a multi-dimensional construct, encompassing aspects of physical performance, and self-perceived engagement. Engagement in moderate to high intensity physical activity during childhood is advocated for in the promotion of optimal health outcomes and offset predisposed risk for the development of secondary health conditions experienced by disabled children. Participation in physical activity opportunities is a fundamental childhood experience that fosters the psychosocial development of interpersonal skills, self-confidence, and self-efficacy.

4: What are the experiences of the participants based on the PACAS and PACES as perceived by Parents/Guardians, Teachers/Instructors and Students with Disabilities?

The experiences of the participants based on the physical activity capability scale and the physical activity enjoyment scale were very significant. The more they engaged in the special swimming activity participation the more interested and excited they became. Read their experiences below:
In the following meetings, the same child, did well in crossing the 50 meter pool 10 times. Because of the advice of some parents/guardian, the special swimming program improved. Whenever they encounter the same attitude from the SWD, they followed the same pattern for the child and found it effective.

Educating a child is really an effort between teacher and parent partnership, and made the session swimming activity successful!

According to Laural [18], all children can be directed to engage in some physical activity or explore their own unique movement as a form of their expression for their feelings, emotions and ideas, and aware of the activity and make them follow instructions to accomplished activities and learn. It is their unique way and means of self-expressions and creativity.

Torralba [19] stated that teaching physical activities to students with special needs is very challenging task and overwhelming experiences. They demands special skills and knowledge that will enable educators to meet and address the special needs of SWD. They must be motivated to raise their interest in movement activities to uplift their skills that lead to enjoyment in games, sports, recreation or dance.

B. Establishing Relationship

P/G 4, a grandmother of one of the SWD with communication disorder, said that they need to be looked at directly in the eyes; holding the hands gently and calling the name of her grandchild personally, not by group, to establish relationship in doing the swimming activity.

The instructor in charge with the child did as suggested, looked directly in the child’s eyes, holding her hands gently and calling her name, got the child from the bench, stood up, walked toward the swimming pool and joined the swimming activity.

The communication skills of the grandchild got better and made the vocal sounds audible and louder since the child joined the special swimming program.

The National Center on Physical Activity and Disability [10] stated that there are some guidelines that can follow to help make SWD experience the best that it can be. To be successful in helping the child create a healthy lifestyle, activities must be selected that will help him achieve feelings of belonging/acceptance, success, accomplishment, growth and competence. One must have communicated with child and selected appropriate activities that will allow sufficient opportunity to child to join and have fun and encourage Involvement.
P/G 5. A mother of a child with emotional and behavioral disorder, need to keep her child away from the crowd for she did not know what to do when others looked at and sometimes other approached them.

One instance, according to her, during the therapy of her child, the therapist suggested that the child study in school and be included in a SPED program. The child must learn to mingle with other children and have a developmental activity like in the water or exposed in the open area, for exposure to water or air is good for SWD, more beneficial if there are developmental skill activities and program.

She said, three (3) years ago, she enrolled her child in the CHILD’S WORLD, and still enrolled and her child is included in the special swimming program. According to her, the child used to be sickly, and was always hiding away from the people. The child’s inclusion in the program made the child healthy, happy and learned to be with other class mates and people.

According to Holecko [21] children with physical disabilities, sports participation can give enjoyment and be a challenge. They may need special equipment or other assistance (such as specially trained coaches, teachers, or guides) to participate in exercise and sports.

Ferrara [2] explained that sports can give both kids and parents an emotional boost. The more the muscles move, the better, sports can give ego work-out, to feel proud of the accomplishments on the field, around their kids and parents. Enjoy the physical activity and have fun!

According to Weiner [23], the physical activity should be sweating, competing and interacting with others is made a fun experience, SWD are more likely going to continue those activities outside the classroom. Physical activity can be fun when exercise routines are mastered, and friendships are formed. This can be accomplished with repetition, progression and regression of a given activity.

Teachers/Instructors (T/I)

D. Excitement in Attending the Swimming Program

T/I 1 have observed that every 1st and 2nd week of the months, about 8in the morning, the SDWs were excitedly going to the swimming pool venue scheduled at 9 AM for their special swimming program. They eagerly lined up properly with their swimming bags to enter the vehicles used to transport them to the swimming pool venue about 3 kilometers away from their school.

During the trip, when the children were really noisy inside the van, the teacher would shout that they will not go to swimming if they were that noisy. Then the noise would subside, and the SWD would keep quiet. It shows that the children really like to go to swim.

T/I 2 also shared that before going to the swimming pool venue, about 3 special children had no swimming bags with them and said the yaya (the helper) will carry and bring it for them. The teacher commanded that if they did not bring their bags personally, they will be left behind. The 3 quickly went to their rooms and got their bags and returned hastily to the van.

De Leon [7] said, teaching in the special education (SPED) setting can be a very stimulating experience. Exploring learning strengths and weaknesses, trying new teaching methods and discovering new ways to organize the activity can be exciting. Correspondingly, one of the most important challenges in the field of special education is developing a qualified work force and creating work environments that sustain involvement and commitment. The focal aim of a special educator is to have an affirmative impact and to make a difference in the lives of SWD.

E. The Hazard during the Special Swimming Program

T/I 3 learned the hard way how to take out the necklace whistle he wore which was accidentally held by one of the SWD during one of the special swimming activity. According to him, one of the SWD he was supervising during the swim held the lace of the whistle he was wearing.

He was choked and strangled with the lace for about a minute until a companion instructor helped him release the lace from the hand of the SWD. Now, he has a whistle bracelet in the arm instead.

T/I 4 had the same experienced, not with a whistle lace but with his own loose long hair. One of the SWD grabbed his hair so hard during the swimming activity. And because both hands of the child would not like to let go of his hair, some of his hair was pulled out before help came. The more movement they did trying to loosen the hair from the SWD’s grasp, the more pain the instructor felt. Now, it is a policy of the program that if somebody involved in the activity has a long hair, he must wear a head cup for safety.
Lumberton [11] emphasizes that teachers of children with learning problems must do more than just follow the prescribed curriculum because the educator constantly has to adapt to the specific and unique special needs of the individuals. The educator should therefore be knowledgeable about the abilities and circumstances in which the child learns best. It is understood that special child has limited reasoning power and conceptual ability. The teacher has to be mentally and emotionally prepared to give the child adequate support.

F. In the Swimming Pool Venue

T/I 5 shared his experience in leading a warm up activity for the SWD, in preparation for going to the pool. During the warm up activities, there were some students who did not like to do some stretching. But with close supervision by the other instructors, they followed.

To the instructor’s surprise, those who had a hard time following the stretching, hastily wanted to and were among the first to go and enter the water pool. And they were those who were not wearing arm floats. It is now mandatory that everybody, if able, must do the warm up stretching.

Lee, et al., [24] said that Special Physical Activity Program should prepare the environment in advance to address the student’s sensory challenges this often involves focusing on communication and presenting challenging behavior. Supports can be very helpful and may include strategy that provides predictability, which help reduce anxiety and prepare students for routine scenarios.

Students with Disabilities

G. Before the Special Swimming Program

Upon arrival of the SWD, they greet the instructors waiting at the swimming pool deck with a smile. They appeared (hand greetings of “give me 5”) to some of them raising their hands.

Asking them why they have a smile, SWD 1 said he was excited to swim and happy to see “kuya” instructor again. SWD 2 added he feel good looking the pool water and that it gives him a sense of calmness and a feeling of freshness. SWD 3 explained, upon seeing the water he visualized himself swimming like a champion, can do different swimming strokes like freestyle, back stroke, breast stroke and even butterfly, feel like a fish with the freedom to swim. SWD 4 agreed that upon waking up in the morning of swimming lesson day, he prepared his things for swimming, for his lungs got strengthened and, that he gets rid of his asthma problem in the water activity program.

H. During the Special Swimming Program

SWD 5 responded that it is refreshing while in the water. In the deep, according to her, she could move her whole body freely, stretch and flex her arms and legs, rotated hips and head and feel no pain and no difficulty doing it. SWD 6 indicated that while under the water, she was amused with the bubbles produced by her breathing. She loves to dip under the water and like to swim and explore it. She felt quiet, silent and independent while under the water, and she enjoyed that. SWD 7 was always ahead in crossing the 50 meter pool. When asked, he said he love racing, he felt like a racing boat exercising his speed and strength against all the SWD. He felt and developed a high self-esteem, honor and pride being the fastest among them all.

I. After the Swimming Activity

After more or less one hour crossing the swimming pool 10 times, SWD 8 said with a smile, she was happy and thankful and hugged her favorite swimming instructor right after the activity. SWD 9 commented he felt accomplished, and shouted “at last finished,” with a big laugh. SWD 10 complained that he wanted to stay longer in the water, but cannot, because all of them had to shower and dress up, and together, go back to school.

One thing good about them is that when they were dressed up, ready to go, they lined up together and in unison bade goodbye, thankfully waving their hands. You could feel respect and happiness in the air when they walked away.

Santelices [25], on the 3rd National Conference on Sport Pedagogy, He wrote and presented a paper about “Designing Sport and Physical Activities for Inclusive Participation,” stated that beyond the well-accepted notion on the benefits of sport for health and recreation, more and more develop countries recognize the value of sport as a tool to compliments their development goals towards promoting inclusive and the psychosocial well-being of their target beneficiaries.

Claveria [26] and Saguil [27] said that play; a form of physical activity is a primary vehicle for and indicator of children’s mental growth. It enables children to progress along the developmental sequence from the sensory motor intelligence of infancy to preoperational thought. It is an essential component of developmentally appropriate practice for all children regardless of their exceptionalities.

For most of us, play is simply activity that is fun, pleasurable, and enjoyable. But play is much more than that. It is generally agreed that important cognitive, social, emotional, and physical skills are develop through play.
5: Is there a significant difference on the level of enjoyment of the SWD before and after the swimming program?

Table 3: Significant difference on the level of enjoyment of SWD before and after the swimming program

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<th>p-value</th>
<th>Decision</th>
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<td>After</td>
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The data on Table 3 shows that there is a significant difference on the level of enjoyment of the SWD before and after the swimming program are being compared. It shows that they enjoy more the swimming activities after. This could mean that their level of interest, fun and self-confidence increased.

Pan [28] also stated that students with disabilities have also demonstrated improvements during physical education, exercise, and recreational-setting research interventions design to measure motor skills and activity participation. Structured physical education has been shown effective and beneficial to students with disabilities by using moderate to vigorous physical activity program.

Rimmer [29], Chaddock, et al., [30], Fedawa, et al., [31-34], they said that in addition to the physiologic benefits of decreased body fat and increased fitness overall, regular physical activity for children with disabilities has been shown to help in controlling or slowing the progression of the chronic disease, improving overall health and function, and mediating the psychosocial impact of the condition on children and their families.

6: Is there a significant relationship between the physical activity and level of enjoyment of SWD?

Table 4: Significant relationship between the physical activity and level of enjoyment (PACES) of SWD

<table>
<thead>
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<tr>
<td>Enjoyment</td>
<td>4.3930</td>
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</tbody>
</table>

The data on Table 4 shows that there is a significant relationship on the physical activity of SWD when their level of enjoyment before and after the swimming program being compared. It shows that they enjoy more the special swimming activities after the swimming program because they have already acquired a higher level of physical activity.

The findings are supported by the National Council on Physical Activities and Disabilities [10] stated that the number one factor in choosing appropriate activities for children with disabilities should be fun. Any activity chosen for a child or a group, should offer varying degrees of fun. The primary reason that children participate in sports is fun, and the key reason they quit is a lack of fun. Community-based programs that offer activities for children with disabilities can provide suggestions to help select the most appropriate activities for the child’s interests and goals [21] to participate in exercise and sports will surely be happy and enhance their enjoyment level.

7: The Recommended Physical Activity for Persons with Disabilities

Based on the findings and conclusions of the study, a swimming program is advisable, applicable and recommended activity for PWD for the following reasons:

1. They will improve their level of enjoyment before, during and after the activities.

   In going to the swimming, the PWD develop a feeling of excitement, happy, enjoy and have fun. Feel good, give them sense of calmness, freshness and motivation to have focus to have positive attitude.

   During the swimming activity in the water, they feel refresh, move and practice their body, stretch and flex the arms and legs, rotate hips, head; feel no pain and no difficulty doing it. They also indicated that while under the water, amused to the bubbles produced while exhaling, loves to dip and explore, feel quiet, silent and independent, and enjoy.

   Someone always want ahead in crossing the pool, love racing, feel like a racing boat practice speed against all the SWD, develop a high self-esteem, honor and pride being the fastest among them all.

   After more or less one hour swimming and crossing the pool several times, they are satisfy, happy, feel accomplish, and want to stay longer in the water.

   The swimming program must be adopted in schools public or private as a part of their curriculum offering, by the community (Barangay and City) for the improvement of the total wellbeing of the PWD and their integration into the mainstream of the society.

Summary

The research had observed, determined, investigated and evaluated the physical activity and level of enjoyment of the 70 SWDs studying in the SPED school in Quezon City, Philippines in their special swimming program, observed and evaluated.

There are about 9 different kinds of disabilities that the students had in this research. The students with emotional and behavioral disorders ranked the highest with the most number of SWD, 15. This was followed
by the students with intellectual disabilities ranked 2nd with 12, the students with learning disabilities and with autism spectrum with 10 students each have the same ranked 3rd, the students with communication disorders ranked 5th with 8, the students with visual hearing impairment ranked 6th with 6. The orthopedically handicapped with 4 students ranked 7th and the students with Physical disability ranked 8th with 3. There are 2 chronically ill students rank 9, the least number among the SWD.

Among the 70 SWDs, 46 or 66% of the students used arm floats to swim. Meaning, among the SWDs, the remaining 34% can float and swim without arm float.

Swimming with or without arm floats types of SWD was designed for the special swimming program for them to cross the 50 meter pool 10 times in one hour. And they did swim and finished the program as scheduled.

The level of enjoyment of the SWD before going to the water were moderate, but increased after they were exposed in the water activity.

The rating of the enjoyment level of SWD after the special swimming program gave them a sense of happiness with a mean value of 4.58, the highest. Followed by 4 indicators with the same mean value of 4.46, which the 4 ranked 2nd. The indicators are 1) He/she feels Interested, 2) its lot of fun, 3) He/she feels good in doing it, and 4) it gives him/her a strong sense of accomplishment. The 18th in ranking is indicator It’s very invigorating with 4.23 the lowest mean value which also with high level of enjoyment.

There is a significant difference on the level of enjoyment before and after the swimming program was compared. The SWD enjoyed the special swimming program even before the activity. It was showed in their arrival in the pool area for they have smiles greeting the instructors waiting at the deck. They were excited, feel good looking the pool water and have sense of calmness, feeling of freshness, visualized they like a fish and have freedom to swim.

After more or less one hour crossing the swimming pool 10 times, the SWD still had a smile, felt accomplished, and wanted to stay longer in the water. It is very evident that they really enjoyed the swimming activity, when they were dressed up, ready to go, lined up together, in unison bade goodbye, waving their hands thankfully. Respect and happiness was felt in the air when they walked away. They have enjoyed more the swimming program after they experienced and exercised in the water.

There is a significant relationship on the physical activity of students with disabilities when their level of enjoyment before and after the swimming program being compared.

CONCLUSIONS

Based on the findings, the researcher conclude that the students with different disabilities can float and swim with or without using of special gadget like arm floats and crossed the length of the swimming pool several times provided with the guides of swimming instructors.

The SWD will surely enjoy the special swimming program before, during and after the water activity. It is manifested in the result of this study that the SWD were interested, excited, and happy going to the swimming venue, In the water, the SWD responded refreshing, amused in the deep and the bubbles they produced while exhaling, felt quite, silent and independent. Develop also high self-esteem, honor and pride to swim and move fast. After the swimming activity they have smiles, felt accomplished, thankful for a swimming well done, but still they want to stay longer in the water.

The researcher, therefore conclude that the SWD have the capability to enjoy the water activity and raise their level of enjoyment as they engaged in the water.

The special swimming program is an effective tool to enhance the level of physical fitness capabilities and level of enjoyment of SWD.

RECOMMENDATIONS

1. The students with disabilities should be advised and directed to participate in a special swimming program to develop their level of enjoyment surely manifested that their interest being motivated, feeling of excitement arises, happy and have fun.
2. Parents and guardians should be advised to join and expose their children with disabilities in any meaningful physical activity like the special swimming program, participate, assist and be partner for they are part of the success of the children’s program.
3. For the schools and community to adopt the recommended swimming program.
4. For future researches, that this study may serve as a baseline information in the conduct of researches for students with disabilities on a wider scope.
REFERENCES


