

**EFFECTS OF INTERVENTIONAL SPORTS ACTIVITIES ON THE
PERFORMANCE IN PHYSICAL EDUCATION OF HEARING IMPAIRED
STUDENTS SCHOOL YEAR 2016-2017**

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ABSTRACT

The main aim of the study was to determine the acceptability and effectiveness of instructional videos in Teaching Arnis to Grade Seven (7) students of Casimiro A. Ynares Sr. Memorial National High School (CAYSMNHS) for the school year 2016 – 2017.

The researcher used a self-made test and scoring rubric to determine the performance of Grade 7 respondents in Arnis Game. The population for the study consisted of 20 hearing-impaired students directly handled by the researcher. The respondents were chosen via a random sampling using lottery method. The developed instructional videos in teaching arnis to Grade Seven (7) students

used a given copy of Instructional Videos Presentation in Arnis game as guide in their instructional materials for the third grading period of their subject. The 20 Grade 7 hearing-impaired students who were enrolled in MAPEH 7 used the Traditional Method of teaching, they were rated based on the teachers made test and criteria of scoring rubrics; A researcher constructed practicum test in MAPEH 7 to determine the performance of the respondents considered the objectives of the topics in arnis such as basic striking techniques in terms of application skill, strategy, rules, and convention.

This study focused on the acceptability of the developed instructional video through

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evaluation of experts in Arnis game validating the instructional videos. The chosen experts were certified MAPEH and Special Education Teacher and have full knowledge of it. The developed instructional video lasted for 15 minutes and should be divided into various sequences to emphasize the skills such as basic stance and striking techniques into step-by-step sequence. The language to be used is English and was recorded into mp4 format. After doing the scripts and arranging the shoot list by location the developed instructional video were conducted at the Casimiro A. Ynares Sr. Memorial National High School (CAYSMNHS) campus, with the assistance of MAPEH and Special Education teachers.

The primary objective of the study is to determine the effectiveness of the sports activities through appropriate instructional videos to the physical skills of hearing-impaired students, which in turn will hope to provide relevant learning while in the mainstream. It also seeks to find out how much these interventional sports activities in video will gain impact to the student's cognitive and socio-emotional skills. A pretest before/pretest was administered to the respondents beginning of the first grading period while a posttest was done at the end of

second grading period. The 20 respondents utilized & exposed to the development Instructional Video in Arnis. The performances of the 20 Grade 7 hearing-impaired respondents were compared to determine the effects of the Instructional Video on the students' performance in Arnis. After gathering and computing the data, the results of the Before/Pretest and After/posttest of the 20 respondents were revealed increase in the level of performance of the students. It is possible that the 20 respondents gained additional knowledge from the instructional video. Several students like the instructional video because it is easy to understand and there is immediate reinforcement.

The data revealed that the level of performance of the respondents increased in their performance through written and practicum test. The effectiveness of instructional videos in teaching Arnis game activities was significant as manifested by the additional knowledge from them. The learners exposed to the instructional videos gained more knowledge due to the improvement and the positive result of their scores in the posttest. Based on the findings, the following conclusions were drawn: the utilization of instructional videos in arnis is

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contributory to the improved performance of the hearing-impaired students due to the provision of multisensory experiences specifically visual learning. The instructional videos are important aid in teaching Physical Education especially basic skills in Arnis. It accounts in acquiring knowledge and can provide good results among students regarding their performance. Using the instructional videos for the selected topic in Arnis made the performance of the respondents better. It helped the teachers in implementing and imparting knowledge to their hearing-impaired students in an easy and effective way. Students, on the other hand, could work easily with both visual and verbal representations, increasing their motivation and enhancing their learning experience.

Keywords: Teaching Style, Videos, Traditional Method, Intervention, Arnis Game And Hearing Impaired,

INTRODUCTION

One of the greatest accomplishments to be valued in Physical Education is the continuous pursuit of fitness, healthy lifestyle, and well-being of a person since the beginning of his existence. The enormous influence of western countries on physical education had deemed significant to its development in East Asian countries (Kim, 2015).

Influenced by the technological, social and cultural changes, its educational domain faces a new dimension dominated by lifelong learning. For physical education and sports specialists, this trend is also reflected by the necessity to improve teaching methodology. A modern alternative is represented by the use of computers and other information technologies meant to increase the teaching process effectiveness. This paper aims to highlight the ICT and its use and effectiveness positive influences on physical education and sports.

In the 2015 World Fact Book of the United States Central Intelligence Agency, 19% of the total population of Filipinos by age structure belongs to ages 15-24 years, categorically defined as the youth age. “Youth” is defined as a period of transition from the dependence of childhood to adulthood’s independence and awareness of our interdependence as members of a community (<http://www.unesco.org/>). According to the National Youth Commission in its resolution of the Republic Act 1844, otherwise known as The Youth in Nation - Building Act, [it] is “the critical period in a person’s growth and development from the onset of adolescence towards the peak of mature, self-reliant and responsible adulthood comprising the considerable sector of the population from the age of fifteen (15) to thirty (30) years.” Quoting from the words of our national hero, Dr. Jose P. Rizal, “The youth is the fair hope of the Motherland.” It is then appropriate to acknowledge that the youth sector is an integral part of a democratic society and a future asset to mankind if given the proper direction. In an emerging and developing country like the Philippines, a growth and development of its children and youth holds the key to its progress. We are considering the youth as the nation’s hope for transformation, and that they are going to take gigantic task of running the nation in the future. They will take charge everything tomorrow. That is why, these days, the

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present society formulates empowerment activities to train the youth’s potentials as servant leaders of tomorrow.

As mandated by the Department of Education in its “Education for All 2015” movement, “The State shall promote the right of every individual to relevant quality education regardless of sex, age, breed, socioeconomically status, physical and mental condition, social and ethnic origin, political and other affiliations. The State shall therefore promote and maintain equality of access to education as well as enjoyment of the benefits of education by all its citizens.” In Casimiro A. Ynares Sr. Memorial National High School in Taytay, Rizal, teachers in the Grade 7 level are having difficulty in giving instruction to the hearing-impaired students who are mixed with ‘regular students.’ Probable reasons for this difficulty could be the following: lack of training for teachers in handling this kind of students, the curriculum is generally designed for regular students; and lack of facilities and equipment to support the hearing impaired in comprehension of instruction.

One of the most important forms of capital investment in any country is education. Unfortunately, not all students will have a chance to go to school. The right to education is one of the most important rights in international human rights law. Education works as a multiplier since it in turn enables people to exercise other human rights. It enhances both economic, social, civil, political, and cultural rights. To be educated improves one’s self-esteem and facilitates social mobility. It is therefore essential for every human being (De Beco, 2014). A study by Filmer (2008) argued that low educational outcomes have stronger correlation with having a disability. study also noted that PWD children aged 6-17 are generally less likely to be in school and, if in school, tend to have lower probability of getting completed than non-PWD children. Progression rates to higher educational levels were also found to be lower among PWD children (WHO, 2011, p. 207). In the Philippines, women and children with disabilities were found to have lower literacy and school participation rates, and generally have lower educational attainment, than male PWDs and non-disabled children, respectively (Reyes, 2015).

However, Among the youth of today, a growing population of them are physically challenged. A physically-challenged person is defined in the Macmillan Dictionary as “disabled in a way that prevents you from using part of your body properly.” A physically challenged person or a person with disability (PWD) can be categorized into the following:

Blind and Visually Impaired, Deaf, orthopedically challenged, Intellectual challenged, Learning

disabled, With Autism, With Multiple disability, With Serious emotional disorders, With Communication disorder, speech and language impairment, Deaf blind, With other health problems (DepEd, 2014)

A considerable question to note now would be, “How will these physically-challenged youth be considered as a future asset to mankind, given that they are being groomed to be self-reliant and responsible adults?” “Deaf and Mute” is a term commonly used to describe persons who, through deafness or hearing impairment, are unable to hear the spoken words of others, and who, consequently, remain dumb. Deafness is the cause; dumbness is the consequence. Thus, the term "deaf and mute" is a misnomer, for the deficiency is single, not two-fold, although in the result it affects the two organs of hearing and speech.

Among various special populations deaf & mute is a very common type of disability seen in our society, although not in a very negligible quantity. Special care and attention is needed in their childhood to give them ample opportunity to be self-sufficient in the future. That is why various schools have been established for this special populations in our country since the late 70s. It is needed not only to give them education but also to build a healthy body and mind for them having the prime necessity of physical education as well to make them conscious about their physique, health, and fitness.

Multiple studies have indicated that deaf children demonstrate similar or slightly lower fitness levels when compared to their hearing peers, and minimally acceptable fitness levels when compared to fitness standards (Dair et al., 2016;). These findings point toward the importance of deaf children remaining physically active to combat future decreases in health-related physical fitness. Appropriate motor skill development is critical to successful long-term participation in physical activities leading to a physically active lifestyle (Hands, 2018).

Fitness has proved to be a powerful but highly undervalued and exploited tool in promoting solidarity and in contributing to an atmosphere of tolerance and understanding to the special population as an undefined part of the society. It is an ability of an individual to carry out tasks without having undue fatigue. One of the benefits of fitness or the condition of being fit is one's ability to participate in sports-related activities. It is universally recognized that sports is an effective way of channeling the energies of youth for productive & meaningful purposes.

As Physical Education is taught in the school system, it is generally considered vital to the

development of a fully rounded traditional student. In consideration of the teachers who will introduce this activity to a novice student, it is best to have plenty of research, experiences, and knowledge on how to perform and teach different techniques of such activity and assure the safety of students (Robles, 2013). The school as well has a very important role in helping students learn by providing conducive learning environment and by producing appropriate teaching tools. Learning using technology has become a global phenomenon (Gulati, 2010). The use of the internet, visual aid, cellular phone, tablet, and other technology were generally seen

as important tools which potentially allow individuals to overcome the constraints of traditional elitist spaces and gain unhindered access to learning.

It is widely suggested that technology help address issues of educational equity and social exclusion and open democratic and accessible educational opportunities (Hussain 2014). Moreover,

national governments and non-governmental agencies who fund educational endeavors in developing countries have advocated the use of new technology to reduce the cost of reaching and educating large numbers of children and adults who are currently missing out on education. Video is a very important example of instructional materials. Isiaka (2014) defined it as a record on any medium through which a moving image may be produced.

Teachers are now expected to make use of video for mass media teaching or learning. A good instrument towards achieving this is television which possesses seeing and hearing qualities that make more effective teaching and learning. With the vast perfection of modern technology today, a big difference on the non-strenuous load of work of teachers in transforming knowledge to learners seem significantly noticeable and remarkably evident. Teaching should be facilitated with utmost preparation to deal with the various vices which can affect learners to focus on their studies. 21st Century teachers use modern technology instructional materials like the use of flash drive, power point presentation, CD ROM, television, projector or a simple click or search on internet searching engine. An easy way of using the high-powered technology instructional materials which can cope with the modern technology which our third-generation children could find it more interesting and can be successfully done in any classroom situation. With all of these various kinds of instructional materials teachers can have to utilize authentic instructional materials in imparting knowledge to

enhance the teaching learning process.

Background of the Study

In the late 1800s, individuals having physical or mental defects were looked down upon as useless persons in the society. The term handicapped or disabled were leveled against their identity. They were not whole heartedly accepted by others in the society. In the passage of time this outlook began to change. Social reformers and Educators are striving hard to integrate the physically challenged persons into the mainstream. It is our social responsibility to see to it that physically challenged people can lead a self-reliant, independent, and emotionally stable life. Educationists and school administrators are now working together to fulfill that aim. Advancement in scientific knowledge is helping them in many ways in their effort. It is not easy for physically challenged people to intermingle with ‘regular’ people in the society. Due to physical disability, they also face the challenges in performing tasks that are of the same level as of the normal people. In the Philippines, based on DepEd’s official enrolment list of Children with Disabilities (CWDs) in the secondary level, of the types of disabilities, the hearing impaired following placed second.

Most students who belong to the category of hearing impaired are commonly in the mainstream. Relatively, the researcher had recently encountered several cases of hearing- impaired students who attended in the regular class together with the regular students. The most challenging aspect in this kind of situation is on the level of participation hearing impaired students and on the part of the teacher in giving instructions who do not know how to execute sign language. As much as they want to help these students learn the lesson and actively participate in the activities so as the struggle of the teacher escalates because of the inadequate instructional materials and skills of the teacher on how to handle this kind of students.

The Philippine government is seriously focused and rigorously gives its full support in the promulgation of sports and recreation for promotion of one’s healthy lifestyle and wellness.

It is the policy of the State to promote Physical Education, encourage and sustain the development of sports in the country to foster physical fitness, self-discipline, teamwork and excellence for the development of a healthy and alert citizenry through a unified national sports promotion and development program. The establishment and creation of a single, unified and integrated national sports policy-making body shall further this objective to encourage wide participation of all

sectors, government and private, in amateur sports promotion and development.

The researcher being a member of the faculty and handling Physical Education subjects for 9 years have observed that some members of the Physical Education faculty in Casimiro A ynares Sr. Memorial National High School are having a challenging time in demonstrating and administering proper execution of the Arnis sport to their hearing-impaired students.

To address the needs of secondary level students who are deaf and mute, this study will center in on providing interventional material that would aid them in their academic and physical development. Thus, the development of instructional videos in arnis game as alternative teaching aid to address these concerns. However, for the video to be effective, it must be easy to use, grasp the interest of the audience, and able to connect to the learning of the students. It is alarming to note that most of the teachers do not make use of instructional materials to deliver their lesson. It is considering this, that this study also aimed to investigate the effect of video in teaching physical education students. Furthermore, the foregoing challenges, situations, and problems in the effective delivery of services in the academe inspired the researcher to undertake this study.

Scope and Limitations of the Study

The purpose of this study was to determine the effectiveness of instructional videos in teaching arnis to the Grade Seven (7) students of Casimiro A. Ynares Sr. Memorial National High School (CAYSMNHS) this coming school year 2016 – 2017.

The developed instructional videos in Teaching Arnis for Grade Seven (7) students used a given copy of Instructional Videos Presentation in Arnis game as guide in their instructional materials for the third grading period of their subject. The 20 Grade 7 respondents who were enrolled in MAPEH 7 used the Traditional Method of teaching, they were rated based on the teachers made test and criteria of scoring rubrics.

Practicum test in MAPEH 7 was constructed to determine the performance of the two groups of respondents consider the objectives of the topics in Arnis such as Basic Striking and Blocking Techniques. This study focuses on the acceptability of the developed instructional video through evaluation of experts in Arnis game validating the instructional videos. The chosen experts were certified MAPEH and Special Education Teacher and have full knowledge of it. The developed

instructional video lasted for 15 minutes and should be divided into various sequences to emphasize the skills such as Basic Striking Techniques into step-by-step sequence. The language to be used is English and will be recorded into a computer to save a video clip into mp4 format. After doing the scripts and arranging the shoot list by location the developed instructional video was conducted in Casimiro A. Ynares Sr. Memorial National High School (CAYSMNHS), with the help and supervision of MAPEH and Special Education Teacher.

The primary objective of the study is to inspect the sports activities appropriate to the physical skills of the hearing-impaired students, which in turn will incur relevant learning while in mainstream. It will also center on how much the interventional sports activities have gained impact to the student's cognitive and socio-emotional skills by making sports activities that are achievable and confidence-building.

Statement of the Problem

The present study aimed to develop and validate the effectiveness of the instructional video in arnis game for hearing impaired students of Casimiro A. Ynares Sr. Memorial National High School (CAYSMNHS), for School Year 2016-2017.

Specifically, this study sought to answer the following questions:

1. What is the effect on the performance in Physical Education of hearing-impaired students before and after exposure to the intervention activities in Arnis with respect to:
 - 1.1 application of skill
 - 1.2 strategy; and
 - 1.3 rules and convention
2. Is there a significant difference on the level of performance in Physical Education of hearing-impaired students before and after exposure to the video material?
3. What are the strengths and weaknesses of the developed instructional video as evaluated by the experts?

Hypothesis of the Study

This study tested the null hypothesis that there is no significant difference on the level of

performance in Physical Education of hearing-impaired students before and after exposure to the instructional video.

EVALUATION DESIGN AND FRAMEWORK

This chapter presents the evaluation design, the discussion of expected output and justification, theoretical and conceptual framework, variables, and their definition which have bearing to the study supported by literature and studies both foreign and local.

Discussion of Expected Output and Justification

The expected output of this study is an individualized and self-paced learning material with which learners can study on their own after exposure to a learning aid. There is a growing trend towards interactive educational technology regarding student’s development of skills, knowledge and attitude independently.

An instructional Videos contain objectives, directions, content/discussion and learning activities and presentations of the arnis game. Each sequence of the Instructional video specifies the objectives for each topic so that students are guided as to what is expected from them at the end of the lesson. Content comprised topics such as Basic Stance and Striking Techniques in arnis. Directions for the use of the instructional videos are provided to guide the teacher.

This study was focused on the effectiveness of the quality of teaching in terms of using interventional sports activities on deaf and mute high school students in the secondary.

The interventional sports video was specifically used on the hearing-impaired students in the Grade 7 Level of Casimiro A. Ynares Sr. Memorial National High School. It intended to help them to participate in sports-related school activities more actively such as, warm-up exercises, drills and skills development, and practicum.

Currently, the interventional materials for the sports activities at Casimiro A. Ynares Sr. Memorial National High School are coming from the following forms namely, computer-based instructions and audio-visual lesson presentations and skills demonstrations. The existing modules are also helpful and presently being used as a learning tool inside the classroom were enhanced with pictures, clear texts, and video clips.

Theoretical Framework

This study is anchored on the computer-based Instruction Theory, or the Computer Assisted Instruction as is more commonly known. This theory was introduced in the 1950s through a team of researchers led by Gordon Pask and O.M. Moore. This pioneering concept was aimed to support the traditional teaching methods in enhancing the overall educational experience of learners. Multifaceted lessons can also be delivered via computer, thus allowing instructors to educate their students in a more effective and insightful manner. Even students who are unable to attend school are given the opportunity to learn through Computer-based Instruction schemes (Kulik, 2013).

The Computer Assisted Instruction are commonly used in practicing and increasing the fluency of a new skill; in instructional games that provide motivational elements such as, competition and cooperation; and in problem solving exercises for a variety of situations.

Computer-based instruction (CBI) was considered the technological phenomenon to revolutionize education and training. Today, the Internet and computer technology are reported to have significantly altered the education landscape (Johnson & Aragon, 2012). The rapid advances in technology, the need for lifelong learning, and the growth of nontraditional students have encouraged the use of the computer as a method of instructional delivery. Evaluating the effectiveness of CBI as a whole technology is very difficult. The inability to measure effectiveness is attributable in part to the fact that CBI is not just one component, but a complex range of services and activities carried out for instructional and learning purposes (Gibbons & Fairweather, 2010). The advantages of using the Computer Assisted Instruction as an interventional teaching material in subjects such as sports is that it is a highly interactive method. It can motivate learners thereby resulting to immediate results. It can also store the performance of learners for future assessment and improvement. Computer Assisted Instruction can also be adjusted to the level of the learners. It involves dynamic processes and makes use of different forms of presentation that requires less time than traditional teaching methods.

Computer Assisted Instruction as a highly customizable medium of instruction makes it a suitable choice for special needs programs that regularly group students with different physical, mental, and behavioral characteristics. For certain disabilities, manipulating data on the screen with the use of computers help students to be attentive and focus. This can lead to the development of their conceptual and fine motor skills. A computer application can also enable a student in

communicating using images and texts (Shehab, 2011)

Computer Assisted Instruction has positive characteristics that can enhance the interest and ability to learn for students with special needs. This, however, needs educationally sound techniques for the students to experience success in learning (Cattoni, 2014).

Another theory that this study is framed on is the Individualized Instruction Model within the educational environment which offer learners various skill levels and learning styles through different learning materials. For example, if a learner is more of an auditory one, instructors can use multimedia presentations such as the computer, which he/she can complete at his/her own pace. On the other hand, if a learner is more of a visual one, then the instructor can use graphic textbooks to better illustrate points of a concept.

According to the Individualized Instruction Model, learners are provided with in depth and effective educational materials, such as interactive media or textbooks. Lecture time and presentations are usually kept to a minimum, and learners are encouraged to review, research, and learn the materials on their own. This allows each learner to acquire knowledge at his/her own pace and is particularly useful in classrooms that have a high learner to teacher ratio. (Pappas 2014).

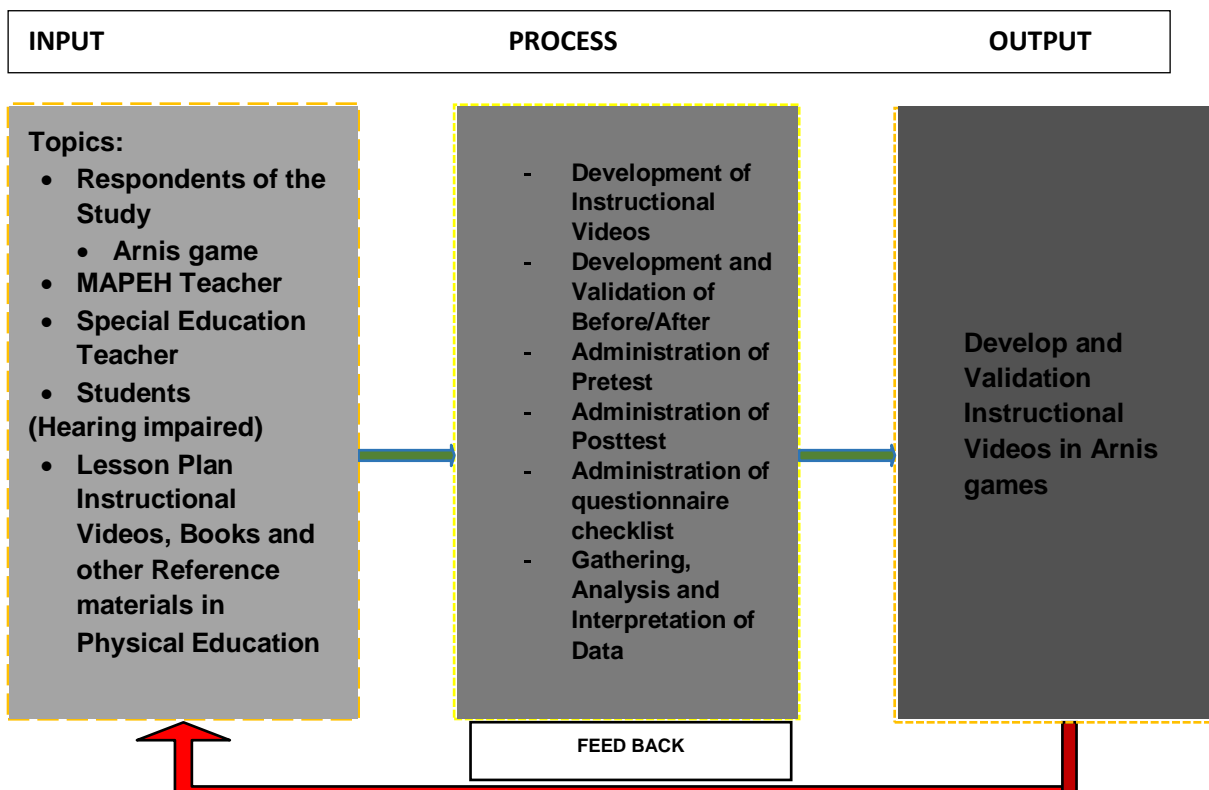
Individualized instruction is an instructional method tailored to fit the educational needs and skills of an individual learner. This involves changing the pace the information is delivered, the methods through which the content is offered, and the materials distributed.

Conceptual Framework of the Study

The conceptual framework of this study was based on the Coombs Theory approaches which consist of the input, process, and the output of the study. The conceptual model is illustrating in the instructional videos developed.

Conceptual Model of the Study on the Develop and Validation of Instructional Video in Arnis Game

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The input frame includes the respondents of the study, the MAPEH and Special Education teacher of Casimiro A. Ynares Sr. Memorial National High School, who teach Arnis game, lesson plan, textbooks and other reference materials.

The process frame refers to the construction of the Instructional Videos, validation, and administration of questionnaire-checklist on the acceptability of instructional videos in arnis games.

The output consists of the developed and accepted instructional video in Arnis games.

The arrow implies continuous process with feedback; another process was executed until it attains the desired result.

The Variables, Their Definitions and Importance to the Study

The following related literature and studies on the different variables are considered relevant in the conduct of the study. It is in this light of this that this study investigated the effect of interventional sports activities on the performance in Physical Education of Hearing-Impaired Students using

developed instructional videos in Arnis games among groups.

Level of Performance of Physical Education

Chun & Chen (2010) developed a multimedia prototype serve of the Arnis game and conducted experimental research in college classes to explore whether multimedia materials are helpful in monitoring the skills in learning of students. The multimedia computer assisted instructions group had a better result in the cognitive test but not in the motor skills test than the traditional instruction group. The aforementioned study affirms the parallelism in the present study of the researcher that computer aided materials which include the incorporation of video help in the progression of the learning activities of college students from different classes, more so the study post a great coherence in teaching physical education. Similar findings tried to surface in the study of Alvarez & Pons (2009) which also encourages the great effect & efficiency of the computer assisted instructions which feature videos integrations. The necessity to adopt the Instructional videos correlates with the present study of the researcher which has something to do with the development and effectiveness of instructional videos in Arnis for grade 7 students. The Physical Education Activities can be better enhanced & more enjoyable among grade 7 students if the said activities will be presented in a more fun filled manner thereby enabling them to like sports and hasten their growth interaction. The images help in the cognitive process in the retain & recall of the said lesson easily because of the image stipulations plus the integration of the instructions thus making the entire activities more enjoyable.

Hampton (2009), note that in the teaching of practical skills to open and distance learners, video is seen as “a successful medium because it links the audio and the visual together to provide a multisensory experience for the learner. That video makes it possible for the learner to play, replay, pause and rewind to specific sections of the lesson and further contends that because practice and rehearsal is so important in developing competency, video is particularly well placed.

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Pretest

The pretest was done to determine which objective or skill on the unit has already been mastered and which needs further mastery.

According to Bautista (2014) the pretest is the criteria reference test for knowledge and given before the lesson using the group pretest and posttest experimental design. The first two groups were given test before the utilization of the instructional material afterwards, the posttest, while the control group was taught in a traditional method of teaching without a material.

Harcourt (2017) stated that pretest design requires that you collect data on study participants' level of performance before the intervention took place (pre-), and that you collect the same data on where study participants are after the intervention took place. This design is the best way to be sure that your intervention had a causal effect.

Dimitrov (2018) stated that the pretest-posttest designs are widely used in behavioral research, primarily for the purpose of comparing groups and/or measuring change resulting from experimental treatments. The focus of this article is on comparing groups with pretest and posttest data and related reliability issues. In rehabilitation research, change is commonly measured in such dependent variables as employment status, income, empowerment, assertiveness, self-advocacy skills, and adjustment to disability posttest designs that is widely used in behavioral research, primarily for the purpose of comparing groups and/or measuring change resulting from experimental treatments.

Posttest

A posttest is a given to the students after they are exposed to the required instructional videos and developed learning activities.

Jimenez's (2009) studying the "effectiveness of Module in teaching integers" revealed that the performance of the experimental group in the posttest was significantly better than the performance in the pretest and that the learning through the modular instruction took place.

Kowalczyk (2010) stated that the process and technique of using a pretest-posttest design in psychology is necessary. Two simple examples will allow you to understand how to apply this type of design in a future experiment. The reason you run a pretest-posttest experiment is to see if

your manipulation, the thing you're looking at, has caused a change in the participants. Since everyone is being manipulated in the same way, any changes you see across the group of participants is likely from the manipulation. This means you test them before doing the experiment, then you run your experimental manipulation, and then you test them again to see if there are any changes.

According to Isaac (2018) two equivalent achievement tests, the pre-test and post-test were used to measure the achievement scores of the subjects. The data of this study were the numbers of the correct answers that students gave during the completion of the Achievement Test. The aim of the pre-test was to measure student knowledge regarding the “Health related fitness” prior to the beginning of the study and was given to students one week before the experiment. The post-test was used to measure mastery of the instructional materials and was administered at the end of the study. Students in the Control group received no formal instruction on «Health related fitness» subjects before the post test. They received instruction on elementary physical education content, unrelated to the subjects, during the class time between the pre-test and the post-test. In the control group, the teachers were asked to teach physical education according to their normal protocol.

Shuttleworth (2009) stated that pretest- post-test designs are the preferred method to compare participant groups and measure the degree of change occurring as a result of treatments or interventions. Pretest-posttest designs grew from the simpler post-test only designs, and address some of the issues arising with assignment bias and the allocation of participants to groups. While this post-test only design does find many uses, it is limited in scope

and contains many threats to validity. It is very poor at guarding against assignment bias, because the researcher knows nothing about the individual differences within the control group and how they may have affected the outcome. Even with randomization of the initial groups, this failure to address assignment bias means that the statistical power is weak. The post-test only design with non-equivalent group is usually reserved for experiments performed after the fact, such as a medical researcher wishing to observe the effect of a medicine that has already been administered.

Before/Pretest

Bustos, (2009) stated that the before/pretest is a test which measures a learner’s performance on each objective in a unit selected for study. This is to determine which objective or skill on the unit

has already been mastered and which needs further mastery.

According to Bautista (2014) the before/pretest is the criteria reference test for knowledge and given before the lesson using the group pretest and posttest experimental design. The first two groups were given test before the utilization of the instructional material afterwards, the posttest, while the control group was taught in a traditional method of teaching without a material. Harcourt (2017) stated that pretest design requires that you collect data on study participants' level of performance before the intervention took place (pre-), and that you collect the same data on where study participants are after the intervention took place. This design is the best way to be sure that your intervention had a causal effect.

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After/Posttest

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Kowalczyk (2010) stated that the process and technique of using a pretest-posttest design in psychology is necessary. Two simple examples will allow you to understand how to apply this type of design in a future experiment. The reason you run a pretest-posttest experiment is to see if your manipulation, the thing you're looking at, has caused a change in the participants. Since everyone is being manipulated in the same way, any changes you see across the group of participants is likely from the manipulation. This means you test them before doing the experiment,

then you run your experimental manipulation, and then you test them again to see if there are any changes.

Shuttleworth (2009) stated that pretest-posttest designs are the preferred method to compare participant groups and measure the degree of change occurring as a result of treatments or interventions. Pretest-posttest designs grew from the simpler post-test only designs, and address some of the issues arising with assignment bias and the allocation of

participants to groups. While this post-test only design does find many uses, it is limited in scope and contains many threats to validity. It is very poor at guarding against assignment bias, because the researcher knows nothing about the individual differences within the control group and how they may have affected the outcome. Even with randomization of the initial groups, this failure to address assignment bias means that the statistical power is weak. The post-test only design with non-equivalent group is usually reserved for experiments performed after the fact, such as a medical researcher wishing to observe the effect of a medicine that has already been administered.

Arnis

Arnis (also called Kali or Eskrima) is a generic term for the deadly martial arts of the Philippines. It contains both bare hand and weaponry arts - everything that has got to do with fighting. The bare hand combat includes boxing, wrestling, grappling, pressure points and locks. Weaponry arts include swords, sticks, staffs, knives, nunchakus, sai and all sorts of "weapons of convenience" like the handkerchief, walking stick. Contrary to uninformed public opinion, Arnis is not only a stick fighting art.

Unlike other martial arts (eg. Karate, Judo, Kung Fu, Tae Kwon Do), Arnis has not been exposed to the West until recently and thus retained more of its original essence. It is thus very different from most other systems known to the West.

Mallari 2011 stated that Arnis places emphasis on using and defending against weapons. In the practical world, a knife or machete is regarded as a dangerous weapon that is easily obtained and used in conflicts. Therefore, Arnis practitioners familiarise themselves against knife and machete attacks. Unfortunately, this important aspect is not emphasized in other martial arts.

Arnis requires that the whole body moves as a single co-ordinated unit, involving usage of all muscles. Flow of movement is emphasized. Its practice is therefore excellent for co-ordination.

Arnis regards the arms/legs as weapons. Therefore, the techniques that are used for swords/sticks/knives are the same ones used in empty-hand combat. "Weapons are just an extension of the arms". Students do not need to memorise so many techniques as in other martial arts.

The main weapon of entry when learning Arnis is generally the stick or baton. This is very convenient to obtain and carry. The elderly and handicapped will easily adapt their walking cane to Arnis. Exercise with a stick is very beneficial to enhance fitness and vitality. Unlike most other martial arts, strength and speed is not an important factor in Arnis. Thus, it is suitable for ladies, the young, and the elderly.

Reyes 2013 stated that as an arnisador (practitioner of arnis), it gives me joy to see other people getting interested in the Philippines' National Martial Art and Sport, as declared by Republic Act No. 9850. Not because they have joined me in the bandwagon but because we are now one in the desire to practice and propagate arnis. As a form of self-defense, we all want to make ourselves prepared against attack and aggression.

Caballes 2009 stated that arnis game endeavors to preserve our cultural heritage through sports. It is an indigenous and only traditional sport, classified the Filipino martial arts. As individual sports, it is often called a lifetime sport because of the greater livelihood of participation throughout life. These sports can be engaged in by an individual alone or with only one partner. Arnis like other sport, can teach fair play, self-confidence, how to win and how to lose, as well as specific sports skills.

The FMA – Filipino Martial Arts – Arnis gained respect from the students in the University. The active Hall of Fame awardee grandmaster Bobby Taboada and twenty-one (21) Masters of World Balintawak Arnis Escrima Cuentada System Mecklenburg County, North Carolina United States of America took pleasure in presenting a Certificate of Appreciation to the University of Cebu – Arnis Team (UCAT) and to the researcher in honor and recognition of their continued efforts and accomplishments in promoting the art of the Filipino. UC has the biggest population in terms of people the biggest in practicing arnis and it came up as a constant champion in over-all tournaments. Many times UC bagged the gold medals which merited a special interview in Bombo Radio and CCTN with Mr. Bobby Inoferio.

Masters of the Arnis still follow the ancient ways to teach new practitioners the basic methods and

12 striking techniques in Arnis to become a great warrior. Arnis basically depends on defending against different angles. This is because almost every type of hand-to-hand attack reaches the body of the opponent through a different angle. And this is also the same whether the practitioner is using a weapon or is fighting barehanded. For instance, learning to defend against an attack that hits the left side of the chest is particularly the same whether the attacker is using a knife, a baston, or a sibat. Learning to defend against these angles is by far much more efficient than learning to defend against different weapons. Although Arnis is a rather ancient practice, it is gaining a bigger fan base by the hour.

Today there are a lot of Arnis enthusiasts who want to know everything about the famous glorious practice. Getting better at Arnis or Eskrima is all about dedication and devotion. It takes practice and patience to master this interesting art. Moreover, you will have to spend some time learning more about the basics. To attack is great, but what is attack with some efficient defense. Learning about the blocking techniques in Arnis will definitely take your game up a notch. They are crucial for the success of your training, and this is why you need to give them all the time and concentration needed.

These blocking techniques will help you basically to avoid pain. In the past, Eskrima practitioners weren't so lucky and didn't use such blocking techniques. Ancient Filipino Arnis masters used the sword to neutralize their enemies. It was quick swift death.

Grabbing the blade was never an option. But modern Arnis uses the stick as a primary tool and not just as a replacement for the sword. In that sense, blocking techniques actually make more sense. They will protect your body from the opponent's attacks and turn the odds of the fight to your favor.

Although, there are very low chances that anybody could develop fatal injury during modern Arnis, there would still be some pain. Also, it makes sense that you will not just stand there waiting for your opponent to shower you with strikes.

Application Skill

correctly categorized as skill acquisition, we would be hard pushed to call this a planned skilled development programmed! Furthermore, other than toddlers/children hitting broadly defined development goals it would be very difficult to identify if a child had gone through an 'effective'

skill development programmed, even if we wanted to, until several years after completion. By contrast, case history evidence from elite sports players (e.g. Côté et al 2003) would suggest that, at some point in an athlete’s development, effective skill development becomes linked with, or even dependent on, a planned and deliberate skill development

programme. Indeed, recent research examining the long term development of talent (Abbott & Collins 2004; Bailey & Morley 2006; Balyi 2002) would suggest that

planned skill development programmes are important from as early as six or seven years if children are to gain the early motor, cognitive and emotional skills crucial for a successful lifetime association with physical activity. Unfortunately, as we will evidence later in this chapter, there appear to be real problems across the coaching spectrum of novice to expert in coaches’ capacity to optimally plan for and implement effective skill development programmed. we engage in skill development moving from a set of involuntary reflexive and spontaneous movements to the development of grasping, posture control and locomotion to more complex linked movements such as running, jumping, throwing, kicking, hitting etc (Haywood & Getchell 2005). Much of this initial development occurs through trial and error, influenced by implicit copying behaviors, explicit guidance from significant others (e.g., parents, siblings etc.) and environmental factors, all of which are underpinned by physiological developments in the neuromuscular system. There are some very obvious influences on a child’s early development through the provision of environmental stimuli such as mobiles, shape sorters, trolleys etc that parents can use to encourage children to develop skill we engage in skill development moving from a set of involuntary reflexive and spontaneous movements to the development of grasping, posture control and locomotion to more complex linked movements such as running, jumping, throwing, kicking, hitting etc (Haywood & Getchell 2005). Much of this initial development occurs through trial and error, influenced by implicit copying behaviors, explicit guidance from significant others (e.g., parents, siblings etc.) and environmental factors, all of which are underpinned by physiological developments in the neuromuscular system. There are some very obvious influences on a child’s early development through the provision of environmental stimuli such as mobiles, shape sorters, trolleys etc that parents can use to encourage children to develop skill we engage in skill development moving from a set of involuntary reflexive and spontaneous movements to the development of grasping, posture control and locomotion to more

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Strategy

Sport, as a field and industry, is rapidly changing. Therefore, there is an increased need for strategic management to adjust to these changes. It is important to have a clear road map and vision for the future. It is no longer sufficient to rely on old business models and outdated management practices. Sports is a business and requires sophisticated management and leadership skills. Venues are becoming increasingly sophisticated and operations more complex. The success of a sports team depends as much on good strategic decisions as it depends on the performance of the athletes. It depends on proper supply chain management and selection of quality vendors. It also depends on

quality recruitment of staff and administrators.

Kidman, L. and Hanrahan, S. (2014) Stated Strategy, devote a large percentage of time to learning key requirements for that sport suggests that athletes will learn more if provided with quality learning activities and the skills, knowledge, and understandings they need for a quality performance in their sport. Therefore, it is important for coaches to plan and consistently provide training sessions that provide this. It is also important that athletes are engaged in appropriate learning for that sport for a high proportion of time. For example, if an athlete is trying to practice throwing a ball at a target, there is no point in spending a large amount of time if the athlete cannot throw. In other words, the learning activity should aim for each athlete to have success in performing that activity through practicing it appropriately. To enable learning, the coach is therefore responsible to understand the athletes' physical, social, cognitive, and emotional levels. Strategy mentioned by Siedentop, Mand and Taggart (2016) is hold athletes accountable for their learning. This strategy refers to enabling athletes to try their best, to practice intensely, concentrate on the task and demonstrate an interest in and take ownership for their learning. To hold athletes accountable, coaches should encourage athlete and team goal setting, show an interest overtly in what athletes are learning and doing, have 'with-it-ness' and be 'involved' in the training session, facilitate a clear direction for each task and encourage athletes' performance. This does not mean explicitly providing information, but more of a 'setting things up and keeping an eye on things' approach, encouraging the athletes to continue, asking questions to help solve problems, and providing activities to extend athletes' abilities. Setting goals, monitoring, and reinforcing the team culture, listening to athletes and valuing their opinions all encourage athlete accountability. Strategy is maximized opportunities that athletes have to practice. To reach a high level of skill, an athlete may need to perform a skill or game situation thousands of times. It is important to organize drills/games so that the athletes have multiple opportunities to practice and perform the skills. This can be done in a range of different contexts that present progressive levels of challenge, to avoid complacency or boredom. Keep athletes on task, refers to ensuring athletes are practicing and not sitting out, wasting time or waiting their turn in the queue. For learning to take place, athletes must be involved in the learning process. If athletes enjoy the activities or subject matter, they are more likely to be involved. Also, athletes who are on task are less disruptive. To achieve this strategy, coaches need to ensure that they are monitoring athletes' activities and learning levels.

If athletes are not involved, coaches can change the activity to ensure all athletes are involved.

Rules and Convention

Sports sections are filled with description and occasional polemics over aspects of the role of sport in society, but that discourse rarely goes beyond the superficial as to specific issues raised. For example, commentators repeatedly argue that intercollegiate athletes should be "paid" without discussing in any depth the ramifications of their suggestions on the athletes and educational institutions.

Yap (2017) State that considering that the aim of the Council of Sport is to achieve a greater unity between its members for the purpose of safeguarding and realizing the ideals and principles which are their common heritage and facilitating their economic and social progress. Conscious that sport should play an important role in the protection of health, in moral and physical education and in promoting international understanding; Concerned by the growing use of doping agents and methods by sportsmen and sportswomen throughout sport and the consequences thereof for the health of participants and the future of sport. Mindful that this problem puts at risk the ethical principles and educational values embodied in the Olympic Charter, in the International Charter for Sport and Physical Education of Unesco and in Resolution (76) 41 of the Committee of Ministers of the Council of Europe, known as the "Sport for All Charter". Bearing in mind the anti-doping regulations, policies and declarations adopted by the international sports organizations. Aware that public authorities and the voluntary sports organizations have complementary responsibilities to combat doping in sport, notably to ensure the proper conduct, on the basis of the principle of fair play, of sports events and to protect the health of those that take part in them. Recognizing that these authorities and organizations must work together for these purposes at all appropriate levels.

Arnis was further distinguished as Philippines' own when former President Gloria Macapagal-Arroyo signed Republic Act 9850, an act declaring arnis as the National Martial Arts and Sports of the Philippines, last December 11, 2009. Section 2 of RA 9850 defines arnis as "an indigenous Filipino martial art and sport characterized by the use of swinging and twirling movements, accompanied by striking, thrusting and parrying techniques for defense and offense" which is done by using either one or 2 sticks.

Athletes use these to strike, block, and grapple their opponents. The actual origin of the sport arnis, however, is still yet to be determined. Due to the fact that the Philippines has over 7,000 islands, the sport could have flourished in one place or another at the same time. Because of this, more than one school emerged throughout the years. Players could basically participate in two types of arnis sports, the anyo or form, and the laban, or full combat competitions. Different scoring systems and rules and regulation apply for each division, depending on who hosts the competition. In anyo, athletes would perform sequences of movements using 2 batons. Competition will be judged based on the execution of the anyo and the creativity of overall choreography of the performance. Gracefulness combined with strength and force is needed to execute these forms properly. Meanwhile, in the full combat competition, players are required to strike their opponents' different body parts with one baton. Unlike other combative sports, arnis does not usually require any body contact between each player besides the batons that they are holding. Any attack using bare hands or feet is considered a foul. Scores depend on the number of strikes each player could deliver. Agility and quick thinking combined is required to have a high score in this type of competition. However, some competitions allow full contact between players. Competitors could grapple, disarm, and block their opponents.

Hearing Impaired Students

Students with hearing impairment cannot be identified easily from their appearances as with other students with bodily or visual impairments and so therefore most of them are easily mistaken as normal students. This physical deficiency, however, causes the students in having poor communication with other people specially receiving or giving information. As a result, they often tend to experience frustration and anxiety, and have low self-esteem in interpersonal relationships and learning. In the recent years, the upsurge of computer technology in the world has led to rapid development of the Internet, multimedia technologies and bandwidth. Traditional classroom-style education, which is instructor oriented and in which learning activities are mainly conducted in classrooms, is transformed into student-oriented Internet digital learning not limited by space and time. Interactions are also switched from one way to two way and from passive to active.

The use of science and technology in daily life has helped hearing-impaired students to live independently, broaden social participation and enhance employment skills. It has become a new

direction for the development of special education (Chang, 2010).

The impressive audio-visual effects of digital data and the prospects for immediate feedback capture the attention of students and facilitate their learning motivation and effectiveness. This has thus helped overcome learning obstacles faced by special students. As we know, the major learning obstacles of hearing-impaired students who use visual contact as the primary means to acquire information are the communication and reception of information. However, information in the Internet is mainly displayed in texts and pictures and this enables hearing-impaired students to effortlessly acquire social information from the Internet. Communication problems with the general public are greatly reduced. In addition, individualized and self-regulated learning environment of the Internet enables learners to learn at their own time and pace and choose their preferred subjects (Chen, 2012).

The IDEA defines hearing impairment as “an impairment in hearing, whether permanent or fluctuating, that adversely affects a child’s educational performance” (Sec. 300.8c, 5). Deafness is defined as a “hearing impairment that is so severe that the child is impaired in processing linguistic information through hearing, with or without amplification (Sec. 300.8c, 3). In this study, the researcher provided specific instructional strategies to assist physical education teachers in accommodating the needs of a student with hearing impairment. Included in the strategies are programming suggestions for the whole school year, proactive ideas to help the hearing-impaired student feel socially comfortable with his or her classmates, and practical instructional tactics that can be used throughout the school year while teaching or coaching (Reich & Lavay, 2009).

A lack or loss of hearing can affect a child’s learning progress, particularly in the understanding and production of spoken language. While many theories have emerged over the years as to which approach is the most effective, experts agree that the teaching method should adhere to the individual student’s capabilities, needs, and personality. The most common educational approaches include bilingual-bicultural, wherein English is taught through exposure to printed words in paper; auditory/oral which teaches the English Language through residual hearing and speech; total communication, a combination of auditory and visual communication for instruction. It may be a sign system including American Sign Language, signed English, speech, and sign language, that may be used simultaneously with other communication methods. (Pringle, 2010)

How then should MAPEH teachers prepare for the students with hearing impairment in class? Must curriculum and teaching methodologies be changed, or additions be made on it? Based on research, the first characteristic that must be identified is the etiology of the hearing impairment (Schmidt, 2010). The emotional, social, and cognitive needs that may be specific to a hearing impairment must also be taken into consideration. This is highly observable in the effect of having a concomitant language delay, problems in motor and balance skills, and other problems with delay. Physical education is certainly an avenue for group games and other activities that help develop students' social skills. If students are provided with sufficient understanding and assistance, there is excellent opportunity to help the hearing impaired improve their social skills. Therefore, physical educators must take vital efforts in having the hearing-impaired student participate in group activities and encourage the other students to include them. Helping make the hearing-impaired student feel this sense of belongingness will be one of the physical education teacher's major tasks (Schmidt, 2010).

The readiness of the teachers is closely associated to the implementation of this law. In a study conducted on fifty teachers in a university in Israel on the purpose of raising awareness on children with special needs, it was concluded that their attitudes and requirements for accommodation bear a significant factor in the participation and success of the student with disability in the educational setting. The results of the study were positive and moreover cited that a teacher's age, years of teaching experience and work conditions all correlate to an effective implementation of the law (Gal et al, 2010).

The use of an e-learning environment in the instruction of physical education to hearing impaired students has become important and effective in the years following the birth of e- technology. A related literature on e-learning environment for hearing impaired students suggested a need for adjustment and enhancement on the instruction and education particularly on its terms of adaptability. Students are often faced with the problem of accessing information available in terms of understanding it and using it properly (Fichten, Ferraro, Asuncion, Chwojka, Nguyen, Klomp & Wolforth, 2009). Thus, for information to be adequately accessed by these students, an addition and enhancement on some of the features of an e-learning environment (Hashim et al, 2013).

Intervention Sports Activities

It is important for sport and exercise psychology (SEP) professionals to demonstrate that the interventions they employ make a difference. Assessing the degree of an intervention’s effectiveness depends first and foremost on the nature and scope of the intervention (i.e., the objective of the intervention) and its targeted group. Traditionally, interventions have been quite varied between the fields of sport psychology and exercise psychology; a common thread however, can be seen as an enhancement of the sport or exercise experience, along with an attempt to help the individual better self-regulate engagement with the targeted behavior or mindset. The central aim of enhancing the experience and increased self-regulation is oriented toward performance enhancement within sport psychology interventions, whereas within exercise psychology interventions the orientation is toward physical-activity adoption and better exercise program adherence. Although the two fields may have different objectives, it can be argued that sport psychology interventions—specifically psychological skills training (PST) interventions—can inform SEP professionals’ research and applied practices with both the sport and exercise populations. Psychosocial sport and play programmes aim to restore social well-being and psychological health through group-focused practices, tailored to fit the contexts of local culture, traditions, needs and resources. It is understood in the emergency field that **group intervention is most effective**, whilst it is appropriate for individuals with more serious psychological symptoms to receive individual support within the overall health system. Psychosocial sport programs can provide a safe, structured and friendly environment for people to begin to share their emotions through **verbal and non-verbal communication**. (Zakrajsek and Blanton 2017)

In exercise contexts, interventions tend to more closely follow a behavioral theory, strategies or combination of theories to help individuals develop a healthier approach and enjoyment of exercise. In line with the description of PST in the preceding paragraph (Vealey, 2018), the term PST is used here to refer to various psychological techniques designed to enhance psychological skills and qualities to facilitate optimal sport and exercise performance experiences. The emphasis is on building **social cohesion** and encouraging community members to **interact and communicate** with each other. Sport and physical activity can allow for brief periods of **respite**, **focus attention away from the experience of loss** and provide an opportunity to **reinforce**

educational messages. Additionally, sport and play can provide a welcome breathing space for parents and caregivers, highlighting the impact of sport and play programs on different levels of community members.

In exercise settings, there is a common thread of utilizing psychological skill building or psychological manipulations in exercise- and physical-activity-focused interventions to help individuals to begin exercising, increase physical activity, or enhance adherence to regular exercise habits (see Berger, Weinberg, & Eklund, 2015; Buckworth et al., 2013). There has been a long history of interest in the relationship between psychology and exercise (some scholars have linked it to the writings of Herodotus and Hippocrates), but exercise psychology emerged as a focused field of study only in the 1960s (e.g., Layman, 1960), and became more fully established in the 1970s and 1980s. Much of the field's progression has been credited to William P. Morgan, whose body of work focused on various psychological experiences associated with or mitigated by exercise, and his influence in seeing the viability of psychology as a field of interest in physical education and exercise science. He is further credited with creating, in 1986, and serving as the founding president of Division 47: Society for Sport Exercise and Performance Psychology, a division of the American Psychological Association that focuses on the combined interests of exercise and sport psychology (Buckworth et al., 2013).

Definition of Terms

The following terms are defined operationally for betterment of the study

Arnis. A martial art, game spawned in Philippine soil. It was known in ancient Philippines as kali, an ancient Malayan word that implies a large, bladed weapon longer than a knife. This art was practiced primarily for self-defense by the pre-Spanish Filipinos who were noted for their friendly nature and legendary hospitality.

Adapted Physical Education. The National Consortium for Physical Education and Recreation for Individuals with Disabilities defines adapted physical education as being adapted or modified to address the individualized needs of children and youth who displayed gross motor development delays.

Computer Assisted Instruction (CAI). Is an interactive instructional technique whereby a

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computer is used to represent the instructional material and monitor the learning that takes place.

Control Group. This pertains to the respondents not exposed to the developed instructional videos.

Deaf. Not able to hear anything, or not able to hear very well. Many deaf people wear a hearing aid to help them hear. Deaf people often use their hand to communicate in sign language, and many can lip-read what other people saying.

Development. This refers to process of constructing instructional videos materials that will supplement arnis.

Disability. Federal law defines a person with disability as “any person who has a physical or mental impairment that substantially limits one or more major life activities; has a record of such impairment; or is regarded as having such an impairment.

Experimental Group. This refers to the students exposed to the developed instructional videos in arnis.

Hearing Impairment. A hearing loss that prevents a person from total receiving sound through the ear. If the loss is mild, the person has difficulty hearing that faint or distant speech. A person with this degree of hearing impairment may use a hearing aid to amplify sound.

Intervention. The Cambridge Dictionary defines it the systematic process of assessment and planning employed to remediate or prevent a social, educational, or developmental problem.

Instructional Video. This refers to the act or practice of instructing or teaching; education, an item of such knowledge or information and or any video designed to teach a particular thing.

Posttest. This refers to a test which is given to both experimental and control group after the methods of learning arnis. The result of this test will identify the effects of the instructional videos to the students.

Pretest. This is the test given before the start of the learning of Recreational Activities that cover all topics under the study. The result of this test will identify the weaknesses and strengths of the students.

RESEARCH METHODOLOGY

This chapter presents the research methodology and sources of data gathered for the development of the study. This includes the research design, setting of the study, subject of the study, procedure

of the study sources of data and statistical treatment necessary for the study.

Research Design

This study was used descriptive-developmental and experimental methods of research since this involves development and determination of acceptability of Instructional Videos in Arnis games. The researcher was used experimental and descriptive developmental research design. Experimental design is the design of any information-gathering exercises where variation is present, whether under the full control of the experimenter or not. However, in statistics, these terms are usually used for controlled experiments. This study employed the experimental and descriptive methods of research since this involves determining the performance of two groups and development of accepted instructional videos that could be used as instructional teaching aid.

The experimental method involves two comparable groups, the experimental and control groups. In this design, the control group will undergo learning the Arnis game under the traditional demonstration while the experimental group will learn the Arnis game skills under traditional demonstration aided with instructional video. The performances of the two groups were compared to determine the learning outcome among the two groups.

Khan (2012) stated that descriptive research uses quantitative methods to describe “what is” describing and recording, analyzing and interpreting conditions that exist. It involves some type of comparison or contrast and attempts to discover relationship between existing non-manipulative variables.

Experimental and descriptive methods of research were used in this study, since the researcher aimed to develop an acceptable instructional video as its effectiveness determined by the learning outcome of the controlled and experimental group.

Setting of the Study

This study was conducted at Casimiro A. Ynares Sr. Memorial National High School. The government secondary school (also known as CAYSMNHS) is situated at the Rizal Provincial Lot at Hilltop, Cabrera Rd., Tikling, Taytay, Rizal. Its mother school is Taytay National High School. The school is now an independent public secondary school. It offers specialized curriculum specifically in English, Journalism, ICT, and **SPED PROGRAM**. The school is currently rolling

out the new K-12 BEC for students starting this S.Y. 2012 – 2013. The school also has been planned to carry the new SHS (Senior High School) program that will start on the S. Y. 2016 – 2017 but out of all three choices for the new program, they will be implementing the Academics area of the curriculum.

At the time of this study, only existing regular sports programs and activities of the school are participated in all by students, including the physically deficient learners. Other non-athletic programs such as quiz bee, talent competitions, and involvement in schoolwide programs (example: leading in Doxology via song and dance interpretation) also enjoins these students' participation.

Subject of the Study

Instructional videos play a vital role in the teaching learning process. Through the use of these materials, concepts and ideas are clarified, strategies in teaching Arnis games learners perform better and develop a good conceptual understanding of the content or skill taught.

The respondents of the study were is Grade 7 students who are enrolled at Casimiro A. Ynares Sr. Memorial National High School (CAYSMNHS) for the school the current school year 2016-2017. The develop instructional videos in Teaching Arnis for Grade Seven (7) students used the group A ten (10) students as controlled group were given a copy of Instructional Videos Presentation in Arnis were used as guide in their instructional materials for the third grading period of their subject. Group B ten (10) student's experimental group who were enrolled in MAPEH 7 used the Traditional Method of teaching, they were rated based on the teachers made test and criteria of scoring rubrics;

After doing the scripts and arranging the shoot list by location the developed instructional video was conducted in Casimiro A. Ynares Sr. Memorial National High School (CAYSMNHS), were help and supervise of MAPEH and Special Education Teacher.

The primary objective of the study is to inspect the effectiveness sports activity video appropriate to the physical skills of the hearing-impaired students, which in turn was incur relevant learning while in mainstream. It will also center on how much the interventional sports activities have gained impact to the student's cognitive and socio-emotional skills by making sports activities that are achievable and confidence-building.

Grade Seven (7) students used the group A ten (10) students as controlled group were given a copy of Instructional Videos Presentation in Arnis game were used as guide in their instructional materials for the third grading period of their subject. Group B ten (10) student’s experimental group who were enrolled in MAPEH 7 used the Traditional Method of teaching, they were rated based on the teachers made test and criteria of scoring rubrics; On the other hand, the experimental group were exposed to the instructional videos prepared by the researchers. After the undertaking of the process, both groups were given a post test.

The different variables particularly the scoring rubrics reflected the skill that could be possible exhibit while conducting the drill exercise activities in Arnis game.

Procedure of the Study

Seeking approval from the Superintendent and School Principal of Casimiro A. Ynares Sr. Memorial National High School (CAYSMNHS) was the first step in this research.

The researcher prepared instructional videos in teaching Arnis game. A high definition video camera (Sony Vegas Pro 7.0) was used for clarity of the video and audio in cable students learn efficiently. Researcher made researches about basketball particularly on the skills to be taught which are included in the videos. Inquiries from the experts on basketball were also made. On the other hand, in creating a video, scripts for audio presentation was carefully made with the help of English Teacher. A professional video editor was help to trim out unnecessary clips and generates ideas.

In developing the instructional videos in arnis game, the researcher anchored the said videos in accordance with the lesson plan which served as a guide. Lesson plan is a detail organization of how to teach a particular lesson. With this assumption, the lesson plan was the materials that eventually serve as a basis for possible script that will be manifested on this storyboard is used in creating videos and images as to how the videos were crafted together. The videos were basically open in a fancy- free manner with matching background music followed by instructions on how the viewers gained benefit from the videos itself; demonstrations was also utilized to create an atmosphere to easily engage the participants or the viewers in the possible activities. The proposed videos were manifested and observed where activities present topic or lesson wherein every participant can view the videos on how to execute the designated activities because every topic was

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captured with videos on how to execute activities or exercises. The videos were subject for content evaluation by the respected Physical Education teachers.

Practicum test in MAPEH 7 to determine the performance of the two groups of respondents consider the objectives of the topics in Arnis game such as Stance and Striking. This study focus on the acceptability of the developed instructional video through evaluation of experts in Arnis game validating the instructional videos. The chosen experts were certified MAPEH and Special Education Teacher and have full knowledge of it. The develop instructional video lasted for 15 minutes and should be divided into various sequences to emphasize the application of skill, strategy, rule of convention and personal of Striking Techniques into step by step sequence. The language to be used is English and were recorded into a computer to save a video clip into mp4 format.

The initial draft of the practicum test contains the criteria of skills scoring rubric that also composed of ten points (10) per skill equivalent to fifty points (50). For the scale of criteria of scoring rubric (1) needs improvement, (2) more practice (3) Fair, (4) good and (5) very good.

The Department of Education E-Class Record was used in scoring the data. The gathered data were analyzed and interpret in order to develop accurate instructional videos in Arnis game skills.

To gather reliable data needed in the conduct of the study criteria of Basic Scoring Rubric 50 items of an objective type comprehension, application and evaluation.

Final forms of test were constructed with the table of specification. After the item analysis, some item were deleted and revised. The different lesson and presentation of the proposed Instructional Videos in Arnis game skills were process and develop by the researcher to determine the level of performance of the respondents.

The study was used two groups of MAPEH 7 to determine the performance of the two groups of respondents consider the objectives of the topics in Arnis such as Basic Stance and Striking Techniques skills. This study focus on the acceptability of develop instructional video through evaluation of experts in Arnis game validating the instructional videos. The chosen experts were certified Mapeh and Special Education Teacher and have full knowledge of it. The develop instructional videos lasted for 15 minutes and should be divided into various sequences to emphasize the application of skill, strategy, rule of convention and personal of Striking Techniques into step by step sequence. The researcher personally requested the respondents to be part of the study and

a positive confirmation received from them.

The qualified respondents were informed that the procedures and results of this study were used as data in the foregoing study. After which, they signed a waiver indicating that they agreed to be the subjects on the study.

To ensure the safety of the participants from injuries, the researcher asked the respondents if they are in good condition to participate in the study. All of them are expected in good health and physical condition.

Before the implementation of Developed Instructional Videos in Physical Fitness, a pretest was given to the respondents of the study.

The researcher addresses the letter to conduct their study to the Superintendent of Third District of Department of Education Division of Rizal and the Principal of Casimiro A. Ynares Sr. Memorial National High School (CAYSMNHS) to conduct the experiment. After that when the request was granted the researcher proceeded to conduct the experiment.

At the beginning of the Third Grading Period of SY 2016-2017 the experimental and controlled groups were given a pretest, the group A thirty (10) students as controlled group were given a copy of instructional videos Presentation in Arnis game to be used as guide in their instructional materials for the third grading period of their subject. Group B thirty (10) grade 7 students' experimental group who were enrolled in MAPEH 7 used the traditional method of teaching. And after the third grading exam, the students were given a posttest same as the pretest to determine the effectiveness of the developed Instructional Videos in Arnis game.

After/Posttest was given to the two groups of respondents. The posttest result was the gathering and analyzing of data to determine the level of performance of the respondents as revealed by the posttest mean score with respect to different lessons of instructional videos. The significant difference on the performance of the control and experimental groups as revealed by the pretest mean score. However, independent t-test was used to compare the significant difference as revealed by the posttest mean score.

Data Processing

In data processing, the data were tabulated, analyzed, and subjected to appropriate statistical tools and the interpretation of the results.

Sources of Data

The researcher-made test and criteria of skills scoring rubrics were utilized as the main instrument to determine the performance of the two groups of respondents. The researcher made use of pretest and posttest in Arnis game.

To determine the scope of the test constructed, the researcher considered the objectives of the topics in Arnis game using the Table of Specification.

For the interpretation of the result the following scale and their interpretation was used.

Scale for Aris practicum

Very good

8.0-10.00 (VG)

Good

6.0-7.99 (G)

Fair

4.0-5.99 (F)

More practice

2.0-3.99 (MP)

Needs to

0-1.99 improve NP)

Statistical Treatment

The following statistical tools were considered in the interpretation of the gathered data.

To determine the level of performance of the respondents as revealed by the pretest and posttest mean score, with respect to different topics in Arnis game, mean was used.

To determine the significant difference on the level of performance of the respondents as revealed by their respect pretest and posttest mean score, dependent t-test was used.

To determine the level of effectiveness of the developed instructional videos in Arnis game; mean percentage increase was utilized.

RESULTS AND DISCUSSION

This chapter presents the data gathered including analysis and interpretation based on the sequence of the specific problem in chapter 1.

Level of Performance in Physical Education of Hearing-Impaired Students Before and After Exposure to Intervention Sports Activities in Arnis

Table 1 presents the level of performance in before and after exposure to intervention Sports Activities with respect to the different topic Arnis in terms of Application Skill.

Table 1
Level of Performance in Physical Education of Hearing-Impaired Learners Before and After Exposure to Intervention Sports Activities in Arnis in terms of Application Skill

Application of Skills	Before			After		
	Mean	Sd.	VI	Mean	Sd.	VI
1. Left side of the head attack	3.5	0.527	VG	4.7	0.483	E
2. Right side of the head attack	3.5	0.527	VG	4.7	0.483	E
3. Left side of the body attack	3.5	0.527	VG	4.7	0.483	E
4. Right side of the body attack	3.3	0.483	VG	4.7	0.483	E
5. thrust to the Stomach	3.9	0.738	VG	4.7	0.483	E
6. Left chest stab	3.1	0.316	G	4.6	0.516	E
7. Right chest stab	3.1	0.738	G	4.5	0.527	E
8. Left Lower leg	3.6	0.699	VG	4.6	0.516	E
9. Right Lower leg	3.6	0.516	VG	4.7	0.483	E
10. Left Eye Poke	3.6	0.699	VG	4.9	0.316	E
11. Right Eye Poke	3.7	0.675	VG	4.7	0.483	E
12. Strike to the crown	3.6	0.516	VG	4.7	0.483	E

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Table shows the performance of experimental group exposure to intervention Sports Activities with respect to the different topic Arnis game in terms of Application Skill for techniques 1, 2, 3, 4, 5, 8, 9, 10, 11 and 12 before exposure as a mean of 3.5 to 3.9 verbally interpreted as very good. While after exposure to intervention as a mean 4.7 to 4.9 verbally interpreted as excellent.

It also shows the performance of the respondents' exposure to intervention sports activities with respect to the different topic Arnis game in terms of Application Skill for techniques 5 and 6 before exposure as a mean of 3.1 verbally interpreted as good. While after exposure to intervention as a mean 4.5 to 4.6 verbally interpreted as excellent.

The groups of respondents obtained higher means in after than the before, it can clearly be seen that the respondents obtained higher mean verbally interpreted as excellent.

This implies that using Instructional Videos in Arnis game for the selected topic in terms to Application of Skills, Strategy, Rule and Convention made the performance of the respondents better. Hampton (2009), teaching of practical skills to open and distance learners, sees video as “a successful medium because it links the audio and the visual together to provide a multisensory experience for the learner. That video makes it possible for the learner to play, replay, pause and rewind to specific sections of the lesson and further contends that because practice and rehearsal is so important in developing competency, video is particularly well placed.

The findings of the study suggest video-based instructional materials have been more popular than any other medium for teaching practical skills during the delivery of technical and vocational education and training via distance learning, instructional effectiveness. Video is a successful medium because it links the audio and the visual together to provide a multisensory experience for the learner.

Table 2 presents the level of performance in before and after exposure to intervention Sports Activities with respect to the different topic Arnis in terms of Strategy.

Table 2

Level of Performance in Physical Education of Hearing-Impaired Learners Before and After Exposure to Intervention Sports Activities in Arnis in terms of Strategy

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**“EFFECTS OF INTERVENTIONAL SPORTS ACTIVITIES ON THE PERFORMANCE IN PHYSICAL
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year while teaching or coaching.

The findings of the study suggest video-based instructional materials have been help the hearing-impaired students to become proactive and social comfortable to their classmate and to encourage them to perform practicum activity.

Table 3 presents the level of performance in before and after exposure to intervention Sports Activities with respect to the different topic Arnis in terms Rule and Convention.

exposure to intervention as a mean 4.9 to 5.0 verbally interpreted as excellent.

It also shows the performance of the respondent's exposure to intervention Sports Activities with respect to the different topic Arnis game in terms of Rule and Convention for techniques 6, 7, 9, 10, 11 and 12 before exposure as a mean of 3.9 to 4.1 verbally interpreted as Very good. While after exposure to intervention as a mean 4.7 to 5.0 verbally interpreted as excellent.

The groups of respondents obtained higher means in after the intervention compared to the performance before, it can clearly be seen that the experimental group obtained higher mean than the control group.

This implies that using Instructional Videos in Arnis game for the selected topic in terms of Rule and Convention made the performance of the respondents better.

Gal et al (2010) state that readiness of the teachers is closely associated to the implementation of this law. In a study conducted on fifty teachers in a university in Israel on the purpose of raising awareness on children with special needs, it was concluded that their attitudes and requirements for accommodation bear a significant factor in the participation and success of the student with disability in the educational setting.

The findings of the study teachers need to create and implement strategies and use e learning for the students with special needs, able to help them to participate and perform activities.

Significant Difference on the Level of Performance in Physical Education of Hearing-Impaired Students Before and After Exposure to Intervention Sports Activities in Arnis

Table 4 shows the significant difference on the level of performance of the experimental group as revealed by their respective before and after exposure to intervention results with respect to different Techniques in Arnis game in terms of Application Skill.

Table 4

Significant Difference on the Level of Performance in Physical Education of Hearing Impaired Learners
Before and After Exposure to Intervention Sports
Activities in Arnis in terms of Application Skills

“EFFECTS OF INTERVENTIONAL SPORTS ACTIVITIES ON THE PERFORMANCE IN PHYSICAL EDUCATION OF HEARING-IMPAIRED STUDENTS SCHOOL YEAR 2016-2017”

Technique		Mean	Sd.	MnDf.	t	Df	Sig.	Ho	VI
1. Left side of the head attack	Before	3.50	.527	1.200	4.811	9	.001	R	S
	After	4.70	.483						
2. Right side of the head attack	Before	3.50	.527	1.200	6.000	9	.000	R	S
	After	4.70	.483						
3. Left side of the body attack	Before	3.50	.527	1.200	6.000	9	.000	R	S
	After	4.70	.483						
4. Right side of the body attack	Before	3.30	.483	1.400	8.573	9	.000	R	S
	After	4.70	.483						
5. Thrust to the Stomach	Before	3.90	.738	.800	4.000	9	.003	R	S
	After	4.70	.483						
6. Left chest stab	Before	3.10	.316	1.500	6.708	9	.000	R	S
	After	4.60	.516						
7. Right chest stab	Before	3.10	.738	1.400	8.573	9	.000	R	S
	After	4.50	.527						
8. Left Lower leg	Before	3.60	.699	1.000	3.354	9	.008	R	S
	After	4.60	.516						
9. Right Lower leg	Before	3.60	.516	1.100	6.128	9	.000	R	S
	After	4.70	.483						
10. Left Eye Poke	Before	3.60	.699	1.300	6.091	9	.000	R	S
	After	4.90	.316						
11. Right Eye Poke	Before	3.70	.675	1.000	3.354	9	.008	R	S
	After	4.70	.483						
12. Strike to the crown	Before	3.60	.516	1.100	6.128	9	.000	R	S
	After	4.70	.483						

The table shows that there is significant difference on the level of performance in P.E. of Hearing-Impaired Learners before and after exposure to the intervention sports activities in Arnis in terms of Application Skills since the computed probability values are less than 0.05 level of significance, hence the null hypothesis is rejected.

The result implies that the Instructional Videos is an important aid in teaching Physical Education

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specially techniques in Arnis game. It accounts in acquiring knowledge and it provides the good results among the students with regards to their performance.

Isiaka (2014) state as a record on any medium through which a moving image may by any means be produced. Teachers are now expected to make use of video for mass media teaching or e learning. A good instrument towards achieving this is television which possesses seeing and hearing qualities that make more effective teaching and learning.

The findings of the study suggest that the video-based instructional materials which indicated that there were improvements in the performance results, which have more clear effects on the students than the use of the traditional method.

Table 5 shows the significant difference on the level of performance of the experimental group as revealed by their respective before and after exposure to intervention results with respect to different Techniques in Arnis game in terms of Strategy.

Table 5

Significant Difference on the Level of Performance in Physical Education of Hearing Impaired Learners
Before and After Exposure to Intervention Sports
Activities in Arnis in terms of Strategy

Technique		Mean	Sd.	Mean Diff.	T		Df	Sig.	Ho	VI
1. Left side of the head attack	Before	3.50	.527	1.200	6.000		9	.000	R	S
	After	4.70	.483							
2. Right side of the head attack	Before	4.20	.422	.500	2.236		9	.052	FR	NS
	After	4.70	.483							
3. Left side of the body attack	Before	3.90	.568	.900	3.857		9	.004	R	S
	After	4.80	.422							
4. Right side of the body attack	Before	4.20	.422	.700	4.583		9	.001	R	S
	After	4.90	.316							
5. Thrust to the Stomach	Before	3.90	.568	.900	5.014		9	.001	R	S
	After	4.80	.422							
	Before	3.60	.516	1.000	4.743		9	.001	R	S

“EFFECTS OF INTERVENTIONAL SPORTS ACTIVITIES ON THE PERFORMANCE IN PHYSICAL EDUCATION OF HEARING-IMPAIRED STUDENTS SCHOOL YEAR 2016-2017”

6. Left chest stab	After	4.60	.516							
7. Right chest stab	Before	3.40	.516	1.200	6.000		9	.000	R	S
	After	4.60	.516							
8. Left Lower leg	Before	3.90	.316	.800	4.000		9	.003	R	S
	After	4.70	.483							
9. Right Lower leg	Before	3.90	.316	.800	4.000		9	.003	R	S
	After	4.70	.483							
10. Left Eye Poke	Before	3.90	.316	1.000	6.708		9	.000	R	S
	After	4.90	.316							
11. Right Eye Poke	Before	4.20	.422	.600	3.674		9	.005	R	S
	After	4.80	.422							
12. Strike to the crown	Before	4.40	.516	.400	2.449		9	.037	R	S
	After	4.80	.422							

The table shows that there is significant difference on the level of performance in P.E. of Hearing-Impaired Learners before and after exposure to the intervention sports activities in Arnis in terms of Strategy since the computed probability values are less than 0.05 level of significance, hence the null hypothesis is rejected.

While techniques no. 2 the results before and after exposure to intervention of the respondents revealed that P value of 0.052 greater than 0.05, hence the null hypothesis which states that there is a significant difference on the level of performance of the respondents with respect to topic Arnis game was failed to be rejected.

The result implies that the Instructional Videos is an important aid in teaching Physical Education specially techniques in Arnis game. It accounts in acquiring knowledge and it provides the good results among the students with regards to their performance.

Vealey (2018) stated in exercise contexts, interventions tend to more closely follow a behavioral theory, strategies or combination of theories to help individuals develop a healthier approach and enjoyment of exercise. The findings of the study intervention and applying video-based instructional materials which indicated that there were improvements in the performance results, which have more clear effects on the students than the use of the traditional method.

“EFFECTS OF INTERVENTIONAL SPORTS ACTIVITIES ON THE PERFORMANCE IN PHYSICAL EDUCATION OF HEARING-IMPAIRED STUDENTS SCHOOL YEAR 2016-2017”

Table 6 shows the significant difference on the level of performance of the experimental group as revealed by their respective before and after exposure to intervention results with respect to different Techniques in Arnis game in terms of Rule and Convention.

Table 6

Significant Difference on the Level of Performance in Physical Education of Hearing Impaired Learners
Before and After Exposure to Intervention Sports
Activities in Arnis in terms of Rules & Convention

Technique		Mean	Sd.	Mean Diff.	T	df	Sig.	Ho	VI																																																																																																																											
1. Left side of the head attack	Before	4.40	.516	.500	3.000	9	.015	R	S																																																																																																																											
	After	4.90	.316							2. Right side of the head attack	Before	4.20	.422	.800	6.000	9	.000	R	S	After	5.00	.000	3. Left side of the body attack	Before	4.30	.483	.600	3.674	9	.005	R	S	After	4.90	.316	4. Right side of the body attack	Before	4.40	.516	.500	3.000	9	.015	R	S	After	4.90	.316	5. Thrust to the Stomach	Before	4.30	.483	.600	3.674	9	.005	R	S	After	4.90	.316	6. Left chest stab	Before	4.00	.000	1.0	-	-	-	-	-	After	5.00	.000	7. Right chest stab	Before	4.10	.568	.600	2.714	9	.024	R	S	After	4.70	.483	8. Left Lower leg	Before	4.30	.483	.700	4.583	9	.001	R	S	After	5.00	.000	9. Right Lower leg	Before	4.10	.568	.900	5.014	9	.001	R	S	After	5.00	.000	10. Left Eye Poke	Before	4.00	.471	1.000	6.708	9	.000	R	S	After	5.00	.000	11. Right Eye Poke	Before	3.90	.568	1.100	6.128
2. Right side of the head attack	Before	4.20	.422	.800	6.000	9	.000	R	S																																																																																																																											
	After	5.00	.000							3. Left side of the body attack	Before	4.30	.483	.600	3.674	9	.005	R	S	After	4.90	.316	4. Right side of the body attack	Before	4.40	.516	.500	3.000	9	.015	R	S	After	4.90	.316	5. Thrust to the Stomach	Before	4.30	.483	.600	3.674	9	.005	R	S	After	4.90	.316	6. Left chest stab	Before	4.00	.000	1.0	-	-	-	-	-	After	5.00	.000	7. Right chest stab	Before	4.10	.568	.600	2.714	9	.024	R	S	After	4.70	.483	8. Left Lower leg	Before	4.30	.483	.700	4.583	9	.001	R	S	After	5.00	.000	9. Right Lower leg	Before	4.10	.568	.900	5.014	9	.001	R	S	After	5.00	.000	10. Left Eye Poke	Before	4.00	.471	1.000	6.708	9	.000	R	S	After	5.00	.000	11. Right Eye Poke	Before	3.90	.568	1.100	6.128	9	.000	R	S	After	5.00	.000						
3. Left side of the body attack	Before	4.30	.483	.600	3.674	9	.005	R	S																																																																																																																											
	After	4.90	.316							4. Right side of the body attack	Before	4.40	.516	.500	3.000	9	.015	R	S	After	4.90	.316	5. Thrust to the Stomach	Before	4.30	.483	.600	3.674	9	.005	R	S	After	4.90	.316	6. Left chest stab	Before	4.00	.000	1.0	-	-	-	-	-	After	5.00	.000	7. Right chest stab	Before	4.10	.568	.600	2.714	9	.024	R	S	After	4.70	.483	8. Left Lower leg	Before	4.30	.483	.700	4.583	9	.001	R	S	After	5.00	.000	9. Right Lower leg	Before	4.10	.568	.900	5.014	9	.001	R	S	After	5.00	.000	10. Left Eye Poke	Before	4.00	.471	1.000	6.708	9	.000	R	S	After	5.00	.000	11. Right Eye Poke	Before	3.90	.568	1.100	6.128	9	.000	R	S	After	5.00	.000																			
4. Right side of the body attack	Before	4.40	.516	.500	3.000	9	.015	R	S																																																																																																																											
	After	4.90	.316							5. Thrust to the Stomach	Before	4.30	.483	.600	3.674	9	.005	R	S	After	4.90	.316	6. Left chest stab	Before	4.00	.000	1.0	-	-	-	-	-	After	5.00	.000	7. Right chest stab	Before	4.10	.568	.600	2.714	9	.024	R	S	After	4.70	.483	8. Left Lower leg	Before	4.30	.483	.700	4.583	9	.001	R	S	After	5.00	.000	9. Right Lower leg	Before	4.10	.568	.900	5.014	9	.001	R	S	After	5.00	.000	10. Left Eye Poke	Before	4.00	.471	1.000	6.708	9	.000	R	S	After	5.00	.000	11. Right Eye Poke	Before	3.90	.568	1.100	6.128	9	.000	R	S	After	5.00	.000																																
5. Thrust to the Stomach	Before	4.30	.483	.600	3.674	9	.005	R	S																																																																																																																											
	After	4.90	.316							6. Left chest stab	Before	4.00	.000	1.0	-	-	-	-	-	After	5.00	.000	7. Right chest stab	Before	4.10	.568	.600	2.714	9	.024	R	S	After	4.70	.483	8. Left Lower leg	Before	4.30	.483	.700	4.583	9	.001	R	S	After	5.00	.000	9. Right Lower leg	Before	4.10	.568	.900	5.014	9	.001	R	S	After	5.00	.000	10. Left Eye Poke	Before	4.00	.471	1.000	6.708	9	.000	R	S	After	5.00	.000	11. Right Eye Poke	Before	3.90	.568	1.100	6.128	9	.000	R	S	After	5.00	.000																																													
6. Left chest stab	Before	4.00	.000	1.0	-	-	-	-	-																																																																																																																											
	After	5.00	.000							7. Right chest stab	Before	4.10	.568	.600	2.714	9	.024	R	S	After	4.70	.483	8. Left Lower leg	Before	4.30	.483	.700	4.583	9	.001	R	S	After	5.00	.000	9. Right Lower leg	Before	4.10	.568	.900	5.014	9	.001	R	S	After	5.00	.000	10. Left Eye Poke	Before	4.00	.471	1.000	6.708	9	.000	R	S	After	5.00	.000	11. Right Eye Poke	Before	3.90	.568	1.100	6.128	9	.000	R	S	After	5.00	.000																																																										
7. Right chest stab	Before	4.10	.568	.600	2.714	9	.024	R	S																																																																																																																											
	After	4.70	.483							8. Left Lower leg	Before	4.30	.483	.700	4.583	9	.001	R	S	After	5.00	.000	9. Right Lower leg	Before	4.10	.568	.900	5.014	9	.001	R	S	After	5.00	.000	10. Left Eye Poke	Before	4.00	.471	1.000	6.708	9	.000	R	S	After	5.00	.000	11. Right Eye Poke	Before	3.90	.568	1.100	6.128	9	.000	R	S	After	5.00	.000																																																																							
8. Left Lower leg	Before	4.30	.483	.700	4.583	9	.001	R	S																																																																																																																											
	After	5.00	.000							9. Right Lower leg	Before	4.10	.568	.900	5.014	9	.001	R	S	After	5.00	.000	10. Left Eye Poke	Before	4.00	.471	1.000	6.708	9	.000	R	S	After	5.00	.000	11. Right Eye Poke	Before	3.90	.568	1.100	6.128	9	.000	R	S	After	5.00	.000																																																																																				
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	After	5.00	.000							10. Left Eye Poke	Before	4.00	.471	1.000	6.708	9	.000	R	S	After	5.00	.000	11. Right Eye Poke	Before	3.90	.568	1.100	6.128	9	.000	R	S	After	5.00	.000																																																																																																	
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	After	5.00	.000							11. Right Eye Poke	Before	3.90	.568	1.100	6.128	9	.000	R	S	After	5.00	.000																																																																																																														
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	After	5.00	.000																																																																																																																																	

“EFFECTS OF INTERVENTIONAL SPORTS ACTIVITIES ON THE PERFORMANCE IN PHYSICAL EDUCATION OF HEARING-IMPAIRED STUDENTS SCHOOL YEAR 2016-2017”

12. Strike to the crown	Before	4.00	471	1.000	6.708	9	.000	R	S
	After	5.00	000						

The table shows that there is significant difference on the level of performance in P.E. of Hearing-Impaired Learners before and after exposure to the intervention sports activities in Arnis in terms of Rules and convention since the computed probability values are less than 0.05 level of significance, hence the null hypothesis is rejected.

The result implies that the Instructional Videos is an important aid in teaching Physical Education specially techniques in Arnis game. It accounts in acquiring knowledge and it provides the good results among the students with regards to their performance.

According to Isaac (2009) two equivalent achievement tests, the pre-test and post-test were used to measure the achievement scores of the subjects. The data of this study were the numbers of the correct answers that students gave during the completion of the Achievement Test.

The findings of the study the pretest and posttest practicum activities using video-based instructional materials which indicated that there were improvements in the performance results, which have more clear effects on the students than the use of the traditional method.

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the summary of findings, the conclusions and recommendation of the study.

Summary of Findings

From the analysis of the data gathered, the following findings are hereby summarized:

1. Level of Performance in Physical Education of Hearing-Impaired Students Before and After Exposure to Intervention Sports Activities through instructional in Arnis:

With respect to different topics in Arnis game in terms of Application Skills, Strategy, Rules of Convention and Personal the 12 Techniques of the game, the pretest mean scores of the respondents are verbally interpreted as very good.

With respect to the different topics in Arnis game in terms of Application Skills, Strategy, Rules of Convention and Personal the 12 Techniques of the game, the posttest mean scores of respondents are verbally interpreted as excellent.

This means that the instructional videos and traditional way of teaching are not effective.

2. Significant Difference on the Level of Performance in Physical Education of

Hearing-Impaired Students Before and After Exposure to Intervention Sports Activities in Arnis

With respect to the different topics Arnis game in terms of Application Skills, Strategy, Rules of Convention and Personal the 12 Techniques of the game, the results of before and after exposure to intervention of the activities of the respondents revealed that the P value is greater than the 0.05 level of significance, hence the null hypothesis which states that there is no significant difference on the level of performance with respect to the topic Arnis game was accepted.

Conclusions

Based on the findings, the following conclusions were drawn:

1. The utilization of Instructional Videos in Arnis is contributory to the improved performance of the Physical Education students due to the provision of multisensory experience especially for the students hearing impaired.
2. The Instructional Videos is an important aid in teaching Physical Education especially Basic Skills in Arnis. It accounts in acquiring knowledge and it provides the good results among the students with regards to their performance.
3. Using instructional videos for the selected topic in Arnis made the performance of the experimental group better in the topic Basic Skills. It helped teachers in implementing and imparting knowledge to students in an easy and effective way at the same time a great advantage to students as well.
4. The developed instructional videos can be used to provide real experiences especially in Physical Education. Students could work easily with both visual and verbal representations and to capture the attention of learners, increase their motivation and enhance their learning experience, How, significant increase in their performance is attained.

Recommendations

Based on the findings and conclusions, the following recommendations are offered:

1. The developed instructional videos may be utilized in the enhancement of the teaching

learning process of teaching arnis.

2. Encourage the implementation of instructional videos in teaching physical education for hearing-impaired students.
3. The developed instructional videos are recommended to be used as teaching material, that fit to students and diverse the application of the audio-visual stimuli.
4. The instructional videos in arnis may be subject to revisions and modifications.
5. As for the area of research and studies, the researcher recommends to conducting a similar study aimed at developing instructional videos for students hearing impairment.

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