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The influence of using video media on basic movement skills in kindergarten

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Abstract

This study aimed to measure the effects of video media on kindergarten children basic movement skills. Educators use many strategies to assist their children in acquiring basic movement skills in kindergartens; The style of teaching encompasses the style of guided discovery, with a component and entire method approach supported by visual medias. This research used an experimental design with convenience sampling of 40 children from two classes in kindergarten. The experimental study is an investigation into the effects of video media in children's and other supervised subjects on fundamental movement abilities. Twenty children assigned to an experimental treatment, in which the researchers studied findings on children development on basic movement skills. Other children (N = 20) were assigned to a control group. Instrumentation for the Research-based on observation to gather data, the observation made by a researcher to find items that are needed. Moreover, The Bruininks-Oseretsky Second Edition Motor Capability Test ((Bruiniks and Bruiniks, Bruininks-Oseretsky Test of Motor Proficiency> Second (Edition manual), Pearson Assessment, 2005)) and The Test of Gross Motor Development (TGMD) used in this research. Blinding teaching methods in kindergarten physical education using visual media showed increase the basic mobility skills of the kindergarten sample. Physical Education teachers using blinding methods in classroom provide their special children with more effective learning skills in the Basic Movement Skills in the kindergarten. In addition, video media tools showed improvement in basic movement skills of school lay-up children. The outcome of this research provided advice to practitioners and researchers on how to incorporate video in their teaching with a view to promoting the development of important motor skills in children.

Keywords Basic Movement Skills · Physical activity · Preschool · Video Media

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1 Introduction

Technology has become a significant educational resource. Computer-based systems are very exciting both as a way to expand access to information and gives the opportunities for communication and collaboration. Information technology (IT) has emerged to spread shared knowledge and is a primary driving force behind education reforms (Haleem et al (2022). Public creativity is generated from the ability of Information Technology (IT) to centralize and connect vast groups of knowledge; people are excited about the possibility of communication networks such as the Internet, which link children around the world to learner communities. What was not well known yet, computer-based technology, not only rich knowledge sources and extensions of human capacities and contexts for social experiences promoting learning, can be effective pedagogical devices (Kaur, 2017). The method of using technology to enhance learning is never just a technological matter, dealing exclusively with educational software and hardware resources. Educational technology – whether a virtual science simulation or an interactive reading exercise – is a feature of a social atmosphere like a textbook and any other cultural object, mediated by learning interactions between peers and professors (Deci et al., 1994).

Videos are commonly used in teaching and learning. Video delivered over the internet-based video and associated material, is one of the fastest growing technologies in school, which promote learning. It offers a popular, easy-to-use teaching material because almost children have access to a video player in their homes and are common in school. Audio tools help more children reach higher standards and are more persuasive. In addition video content improves student and teacher performance, and changes student–teacher interaction in ways that facilitate student achievement (Thorpe, 2006).

Video also focuses on its subject instantly and in a specific way. Video brings emotion alive and thus instructive for observation when isolated. It can be used to demonstrate a technique and to demonstrate artifacts which need to be understood visually. Video will make the most of a dilemma and demonstrate the variety of issues that cannot be properly represented only by words (Mohamad et al., 2008).

The critical aspect of early childhood education are basic motor skills (BMS). BMS is a fine pattern of movement; large muscle groups are used in gross movement patterns; and smaller muscle groups are activated in BMS. Typically, the major motor abilities are divided into locomotives, manipulate structures and stability. Specialist movement patterns (e.g. symmetric, asymmetrical, and lateral) are used to maneuver the body through the space; object control is provided either through projection or receipt; the stability abilities include the stabilization of the body's centers of gravity. In order to translate more meaningful patterns that allow life-long movement experiences, the establishment of skills in a broad array of BMS is important (Webster et al., 2019).

Higher screen time can discourage children from participating in Physical Activity (PA) experiences; however, no connection between the amount of screen

time spent by young children and any intensity or amount of PA was observed in Bingham´s study. Such results are consistent with the recent longitudinal review in which the existence of screens in the home did not contribute to PA behavior, while two-thirds of the studies analyzed had a positive link with sedentary behavior (SB) (Bingham et al., 2016). In addition, a second systematic analysis found no clear evidence between the teaching conduct of children in the pre-school (i.e., television viewing) and PA participation, similar to the results at present (Bingham et al., 2016).

Generally based on the displacement of the physically active play, the position, background and form of screen-time operation may affect the relation between display time and Total Physical Activity (TPA). A previous study of the children in Pause and Play, for instance, found that the policies and procedures of the childcare centers in terms of minimizing supervision are linked to higher PA and fewer SB when children visit the Centre (Staiano et al., 2018).

While child display time outside childcare diversifies to include physically active screen time, outer screen time, mobile screen times in the car, when children are not usually physically active, and interaction with a variety of varieties. This negative correlation between screen-time and PA is because potential studies should examine whether or not particular devices, contents and programs displayed on such devices have communicated with the child during viewing time and whether such media devices have a PA feature or not.

In childhood years the correlations between screening and adverse health habits and health effects found in later years are also not observed. For instance, the Moderate-Vigorous Physical Activity (MVPA) and Vigorous Physical Activity (VPA) were inversely linked to obesity in International Study of Childhood Obesity, Lifestyle and the Environment (ISCOLE. child sample and TV watching was positively connected to obesity (Katzmarzyk et al., 2015).

The research was conducted using the Discovery Learning Method. The Discovery Learning Method is a constructivist theory that implies that children develop a sense of the world by experiencing and reflecting on these experiences Glaser (1966). An engaging practical style of learning. Instead of passively receiving knowledge, children participate actively. Children interact with their environments through object analysis and manipulation, questions and conflict, or experimentation. They are encouraged to consider, ask questions, presume, guess and collaborate with others. They build confidence in the solution of problems and are encouraged to use their own expertise.

The discovery learning approach takes into account that all children have some background information that they can apply to the current subject, rather than being an empty vessel for an instructor to fill in the information. The Discovery Learning Method is a constructivist theory that implies that children develop a sense of the world by experiencing and reflecting on these experiences Glaser (1966).

The basic problem that the researcher sought to find the answer was using Video Media effect on kindergarten to learn basic movement skills.

2 Research problem

The kindergarten learners often have some difficulties in the nine basic movement skills: run, gallop, hop, horizontal Jump, leap, striking a stationary ball, stationary dribble, catch, and overhand Throw. This study was an attempt to find a solution to this problem through the use of Video Media. Learners would face a great deal of difficulty in their basic ability to move.

3 Research question

In order to address this issue, the present research attempted to answer the following main question:

Can the use of Video Media have an influence on Basic Movement Skills in kindergarten?".

In attempting to answer the above question, the following sub-questions were also answered:

- What are Video Media components that these kindergarten learners should have? (added in methodology)
- To what extend the Teaching style that includes discovery teaching style with part and whole method approach assisted by visual media affect in Basic Movement Skills?

4 Literature review

Fundamental motor skills are common motor activities with specific observable model.

An important part of a comprehensive physical education program is instruction in fundamental motor skills (FMS). Fundamental movement skills are gross and fine movement patterns; gross movement patterns involve large muscle groups and FMS involve the activation of smaller muscle groups. Gross motor skills are locomotor, object control, and stability skills (Clark and Metcalf (2002).

Locomotor skills is a transfer the body in space (walking, running, jumping, sliding, hopping, and leaping), and object control skills is to manipulate and project objects (throwing, catching, striking, bouncing, kicking, pulling, and pushing) (Barnett et al., 2009) & Cools et al., (2009)

Shilpa and Sunita (2013) note, the role of multimedia devices focused on the education of kids, the kind of schools, and the position of school teachers was seen from the report. Awareness of the teacher has improved comprehension by multimedia during early childhood education. Early learning standard of multimedia devices. TV is beneficial for improved awareness of early childhood universal values. In interactive ways, computers have accurate information. Videos primarily rely on real

conditions that are easily interactive with children. The animation is highly influenced, and their academic success is enhanced in children's minds. Slide projection presentations increase the interest of youngsters. This shows that dependent and independent variables are correlated with each other. Consequently, the theory was accepted.

Foulkes et al. (2015) study explored the competence of BMS in preschool boys and girls living in the low SES region of North-West England. Low levels of ability were observed across all abilities, except for jumping, leaping, and sliding, although children performed better on locomotive skills than on object-control skills. No major gender differences were observed for either the total or the locomotive score, while boys were found to have a significantly higher object-control score than girls. Such findings support the hypothesis of the study and are consistent with previous research in young children (Barnett et al., 2015). In addition, gender differences were observed for individual skill scores, with boys more proficient in jumping and kicking and girls more proficient in running, hopping, and galloping. At the component level, girls were more skilled in components requiring correct leg movement/feet positioning, while boys were more proficient in components requiring leg coordination and correct trunk movement/body position. These results can be compared to the small evidence base available for BMS competence among pre-school children in low SES areas.

Obrusnikova and Rattigan (2016) presented guidance to practitioners and researchers on how to incorporate video self-modeling (VM), (Dowrick, 1999) and VP in their instruction with the goal of encouraging the development of essential motor skills in children. While it seems at first that the hard-work nature of such a method is daunting, particularly when it comes to editing video after it has been filmed, authors believe that the benefits are worthwhile. These advantages include model accuracy, clarification from which to communicate, channeling the attention of children (removing distracting sound or motion in video models), and the freedom and empowers of the children. In addition, recent developments have also made their use even more usable and user-friendly in video grabbing and editing. For the effectiveness of this instructional strategy, the combination of VM or VP, direct instruction, and support in natural environments is crucial.

Weir and Connor (2009) states that in the view of the project participants the use of digital video was a valuable tool for the educational process. It was considered a valuable tool to learn and to keep children interested. Structured interviews with the Project Implementation (PI) team also indicated that digital video cannot be implemented at risk or unplanned. Rather, the role of the teacher and the learner in the learning process must be fundamentally reassessed to maximize his potential. The optimum use of the technology requires knowledge and knowledge not only of technology, pedagogy, and content, but all three taken together, namely, technological and teaching content knowledge, as pointed out by (Cox et al., 2003; Mishra & Koehler, 2006) have also indicated the technology should promote the underlying educational approaches, in order for Information and Communication Technology(ICT) to have a positive effect on children achievement, and should not mean an absence of organized structure through effective utilization of ICT. An atmosphere in which children actively engaged and involved in the process of learning at all levels is the

learning environment where the teacher acts as an enabler in a carefully structured lesson (Ringstaff & Kelley, 2002) is the best environment for digital video use. findings that the development of high-quality digital video and feedback facilities in a large school minority has a major impact on the progress of pupils.

Potdevin et al., (2018a, 2018b) Literature on the role of feedback in motor learning is extremely rich but usually studied in controlled laboratory contexts during experiments. Focusing on its use of real-life teaching conditions means becoming fully conversant with the different dimensions of input and the multiple effects it can have depending on the learning stage. The results of this study showed how the use of simplified VFB-based learning aid, combined with a self-assessment assignment, in real-life teaching conditions during an ongoing PE programmer, contributed to the development of motor skills, self-assessment skills and motivational profiles in novices over a short period of time. As Dutta et al. (2012) have pointed out, the question is not whether or not new technologies should be used. The scientific challenge is to seek out the different technological solutions with the aim of making them the levers of success in PE programmers in order to enhance the learning experience of individuals.

Webster et al. (2019) declares that Drawing on an evidentiary study and the findings of the American Academy of Pediatrics, past literature indicates a negative correlation between a large number of screen-based activities, cognitive/developmental delay for young children, high weights, and poor sleep. Excess screen exposure, PA, and BMS directionality have not been well studied at this time. Their study showed that screen time is adverse with manual dexterity, not with other BMS or PA; however, more screen time over a longer period can be correlated with progressive damage in PA and BMS growth that can be identified in children later. The underlying question is also: is all screen time bad for the development of children? Screen-based applications, based on current rates, can be used as a strategy for improving long-term health, including building BMS confidence and can PA to young children. It continues to be a priority to find ways of using these screen devices for young children without impairing key basic skills and without replacing PA.

The results of this study are several practical implications, which warrant further study. In the first place, gender differences in the pre-school age children were found in PA, SB, and BMS, favoring healthier boy pathways. This finding is an important part of goal interventions during childhood which can reduce these health differences, in particular by enhancing BMS, PA, and SB for girls, as well as focusing on developing fine motor skills for boys. Second, time-screen was much higher than the age group recommendations. In pre-school, PA did not seem to have been impaired at an early age, but the BMS components were reversed to greater screen time. More VPA also had to do with higher BMS. Excess screen time tends to influence BMS abilities, and whether it indirectly affects the PA of children at a lower level of BMS is a matter of longitude practice. Preschool years are perfect for targeting health-related behaviors, particularly at children's health care centers, where all 3 health behaviors studied in this study have been shown to have an effect. In addition, because screen time can be a home-based practice, potential work must concentrate on the home environment, in order to increase the competence in PA and BMS and minimize the excessive screen and SB time among young children.

The results of Lindsay et al. (2020) study were remarkable and provide a much-needed contribution to the intervention literature. As far as the authors are aware, this research is the first of its kind to interfere in multiple measures of motor coordination and growth in a population of children that were apparently typically developed. These multiple systems include the static weight (balance measure), dynamic balance and posture control (hops), the ability to move (12-skills), and the convergence of the midline (motor coordination and control). In addition, the essence of the intervention) dance and music) were all created in a way that also promotes fun and enjoyment in a moving environment. Historically, the motor skill intervention literature (Logan et al., 2012; Morgan et al., 2013) This appears to focus on one or two aspects of child development (e.g., only gross motor skills development or increased physical activity behavior). However, it fails to recognize the established antecedents of gross motor skills development and physical activity behavior (e.g., static and dynamic balance, posture control and motor coordination).

- Radich (2013) provides educators with general guidelines on technology and digital media developmentally acceptable activities. The instructor must make educated, deliberate, and reasonable decisions on whether, how, and when technology and media are used for children from birth to age 8 in early childhood classrooms. Technology and interactive media are not meant to replace other important educational experiences in early childhood such as imaginative play, outdoor activity, and social interactions with peers and adults. Educators should coordinate activities in young children 's programs, and technology and media are useful resources to broaden and promote meaningful, realistic, innovative, and sincere contributions to and around the world when used actively with children. Professional assessment in the evaluation and usage of software and media should be used by educators just like any other learning method and knowledge and they should prioritize active participation, not passive, non-interactive uses. They should measure the cost of technology, media, and other learning tools against the resources of their programs and compare digital and technological resources against the use of the natural and conventional materials and objects to achieve a balance in their programs and schools. They need to weigh the costs of technology, media, and other learning content against the resources of their curriculum in order to maintain balance in their courses, schools, and to address the uses of new and technological technologies with the use of natural and conventional materials and objects.

It is extremely important to help early childhood practitioners. Educators need affordable, cost-effective, and usable media technologies, as well as access to research results, online tools and conations, and a professional practice network. Given in-depth and realistic technical knowledge, continuous encouragement, and access to the new technology instruments and digital media should involve professional development and treatment. Educators will need concrete examples of how technology has been chosen, used, implemented, and tested effectively in early childhood courses to promote and strengthen the use of technology and digital media in early childhood programs.

More research is needed to better understand the use of technology and digital media by young children and to better understand any short-term or longer-term impacts. Work is also important for promoting evidence-based realistic use of

technology and digital media in an efficient and effective way as resources in early childhood learning and development.

5 Discovery learning

- Saputra et al. (2018) The children who teach with a guided discovery teaching style using a whole system approach with the support of visual media were better than the children who teach with an overall process, with the aid of the visual media, the learning results of children who were better prepared to learn with a higher level of motor skillfulness were better the following. PETE inquiry-based learning has shown that children improve their physical and cognitive learning through both body and cognitive experience, as well as communicative skills. On the basis of the findings reported in this paper and the results of research in science-related learning in other environments, it can be concluded that even though the PE inquiry may not be well developed or defined, it certainly has the potential to inspire children to learn and build competencies to pursue physical activities.

6 Challenges of using an inquiry-based learning approach in physical education

- Østergaard (2016) showed that investigational PE learning tends to be capable of integrating body and cognitive information in a way that facilitates engagement and participation by children. However, the approach used in practice poses a variety of significant challenges. The relevant is that PE teachers should be experienced teachers or new teachers with strong motivation who can help and assist children in the course of the investigation unit (Hmelo-Silver et al., 2007). The teachers should make learning easier and more driven, for example by encouraging higher-ranking thought and reflection, by providing information in the form of literature references or by demonstrating equipment that can support and allow them to further their study. When researching the position of traditional PE teachers, it is important to emphasize that the position of a facilitative, guiding, and personal coach is reversed. This transition involves a positively prepared mindset, and it can take hours before this approach feels easy to practice inquiry-based learning (Harlen & Allende, 2009). The present analytical and communication skills of the children are another obstacle to work with the research-based learning approach. The children must be able to debate, speak and analyze, focus on, and respond objectively to their own activities, as well as other children, regardless of whether the approach is used at a school or a teaching college. In working with a research-based learning approach, communications and related skills are crucial (Østergaard, 2012) and difficulties may arise when, for instance, the communication skills of primary school children are not yet fully established (Burleson, 2007). The instructor should be aware of his / her reflection and communication skills in directing and encouraging the children and will need to facilitate these skills in various methods first, for example by posing unanswered questions and acknowledging contradictory interpretations. Despite

this difficulty, these issues can all be solved by designing learning environments that promote the approach to inquiry-based learning and by educating children (Harlen & Allende, 2009).

7 Research questions and objectives

- Measure The Influence of Using Video Media on Basic Movement Skills in kindergarten.
- Educators use different methods to facilitate the acquisition of Basic Movement Skills in kindergarten by their children.

8 Research hypotheses

There is a statistically significant difference between the mean scores of the students of the control and experimental groups in Using Video Media on Basic Movement Skills in kindergarten of the students of the experimental group.

There is a statistically significant difference between the mean scores of students of the control and experimental groups in Basic Movement Skills in kindergarten.

9 Research methodology (Sample – Tools—Design)

9.1 Method

9.1.1 Design

The research conducted an experimental design with sampling convenience.

The experimental study was study that is used to investigate the impact of video media on basic movement abilities in kindergarten throughout observation. on our experimental study, there were two groups (experimental & control). Experimental group was a group which receives the test variable(s) that is measured in the experiment. The control group, on the other hand, the group which does not obtain the variable(s) that measured in the experiment. The research focued the nine basic movement skills: Run, Gallop, Hop, Horizontal Jump, Leap, striking a stationary ball, Stationary Dribble, Catch, and Overhand Throw.

Kindergarten children age were five years (5y) in KG2, forty children (40), 23 females and 17 males from two kindergarten classes. Class (1) was an experimental group which consist of 20 male and female children. Class (2) was a controlled group which consist of 20 male and female children (experimental: 20 children, Control: 20 children).

The study was assessed and approved by the Division Rapporteur & Member of the College of Education Board “Dr. Al-Shammari, S.” at Kuwait University.

9.1.2 Participants

The research used the selective sampling method from two kindergarten classes. The study sampling consisted of 20 children from total of 40 kindergarten children from two different classrooms in first term 2018/2019 in Kuwait.

9.1.3 Instruments

The Bruininks-Oseretsky Second Edition Motor Capability Test (Bruiniks and Bruiniks (2005)) offers the most accurate and exhaustive measurement of both fine and gross motor capabilities. It incorporates game-like objectives and sub-testing and is very easy to manage. Two raters simultaneously scoring each child determined inter-rater reliability. Test–retest reliability was determined by assessing each child on a second occasion. The test–retest reliability (median interval between tests being 35 day) for BOT-2 form sheet outcomes ranged from 0.62(95% CI, 0.34—0.80) to 0.73 (95% CI, 0.50 – 0.86) indicating fair to good reliability.

The Test of Gross Motor Development (TGMD) allows developers to build framework to assess, in terms of movement patterns, the performance of the nine (9) core movement abilities. Such capabilities include locomotive capabilities (running, galloping, hopping, sliding, sapping, and skills for object management) for successful physical training and playground situations (striking and kicking a stationary ball, dribbling, catching, throwing and rolling). Test–retest reliability had high ICC agreements for the locomotor 0.88 (95% CI, 0.82- 0.92), ball skills using intra-class correlation coefficients 0.88 (95% CI, 0.87–0.95), and total TGMD-3 0.95 (95% CI, 0.92—0.97). For validity measures, the TGMD-3 had above acceptable item difficulty (range = 0.41–0.81) and item discrimination values (range = 0.43–0.77). EFA supported a one-factor structure of gross motor skill competence for the TGMD-3 with 78.82% variance explained.

9.1.4 Procedure

This research used experimental method, Control group that will teach by Discovery learning and experimental Group that will teach by Discovery learning and videos. Design: For this design, subjects were randomly assigned to the 2 groups, both were presented, but only the experimental group were treated. Both groups are evaluated after careful evaluation, in order to assess each group's degree of improvement. The sampling technique was by the selective sampling method and the sample was 20 children from the total of 40 children in first term 2018/2019. Data analysis techniques in this research used T-Test in significance level $\alpha = 0.05$.

In the process of the research, the first stage of the research which had been conducted was the researcher conducted a motor ability test by using The Bruininks-Oseretsky Test of Motor Proficiency test instrument. For determining the height and low of the Motor Ability level which were obtained by the sample.

In the second stage, the researcher conducted Test of Gross Motor Development, Second Edition assessment and initial test based on cognitive, psychomotor and affective aspects related to the learning materials by using pencak silat

basic skills assessment tool. Then performed the third stage of implementing physical education penjasorkes learning program in accordance with lesson plan (RPP) by implementing guided discovery teaching style with part and whole method approach assisted by visual media (Bruiniks and Bruiniks (2005)).

The researcher developed nine short videos for the nine basics movement was used for the study.

10 +Research results: (I think this title needs to be removed.

Data were organized, tabulated and statistically analyzed using SPSS package system, version 21 and the following was the statistical method used:

1. Descriptive statistics as mean and standard deviation calculated for quantitative variable.
2. T-test for the difference between the mean scores of the control and experimental groups
3. Cohen's effect size, (Cohen's d) for measuring the effect size of variable of each group.

The Bruininks-Oseretsky engine development tests are tools to evaluate smooth and gross movement development. They are used to classify individuals with moderate or mild motor control deficiencies. For individuals between the ages of 4 and 21 the test is acceptable. The entire BOT-2 consists of 53 components and is divided into 8 different test modules. Fine motor accuracy (7 objects), high motor integration (8 components), manual dexterity (5 elements), bilateral coordination (7 items), equilibrium (9 elements), and agility (5 items) are the following components. Things gradually get harder in every subtest. A short BOT-2 is used as a screening instrument to measure motor skills quickly and easily. The BOT-2 Short Form is a subset of 14 items in the entire BOT-2 Form and is based on data collected by Bruiniks standardization, but the research only focused on the nine basic movement skills: Run, Gallop, Hop, Horizontal Jump, Leap, striking a stationary ball, Stationary Dribble, Catch, and Overhand Throw (Cools et al., 2009).

The following criteria were used for selecting the items:

- to provide a general and comprehensive view of a child's development of movement abilities.
- to represent important motor behavioral aspects.
- offer the opportunity to distinguish between a wide range of engine abilities.
- to fall into the mentally retarded children's possibilities of mild and moderate.
- Are you calling for limitations in the child's memory and vocabulary?
- Easy transportation of the material.

11 Gross engine development test, second edition

The TGDM-2 tests gross movement efficiency on the basis of qualitative aspects. The test is structured to recognize children with severe motor development behind their peers, to schedule interventions to develop skills for children with disabilities and to measure improvements in the light of the age, experience, instruction or intervention. Age range (3 to 10 years) represents the time when the greatest improvements occur in the growth of a child's gross movement skills (Ulrich, 2000). The test includes locomotion and object control skills. The locomotive segment consists of 6 things in a row: trip, skip, hop, leap, and drop but the research will focus on the nine basic movement skills: Run, Gallop, Hop, Horizontal Jump, Leap, striking a stationary ball, Stationary Dribble, Catch, and Overhand Throw.

Six consecutive things are included: Run, Gallop, Hop, Horizontal Jump, Leap, striking a stationary ball, Stationary Dribble, Catch, and Overhand Throw. Every item must be played twice by the child. Incorrect scores are 0 if the outcome is right, 1 score is marked. The total of the two results is the final outcome for individual products. Standard values can be determined, with age equivalents extracted, for both locomotive and object control sections. The test is carried out in 15 to 20 min and includes widely used equipment during PE.

11.1 Statistical analysis

Table 1 shows the descriptive statistics of the data, Results of the T-test for the difference between the mean scores of the control and experimental groups and Cohen's effect size, in the post application of the test of Motor Development (TGMD-2).

As shown in Table 1 & Figs. 1 & 2 it becomes clear that by calculating the value of (T) for the difference between the two averages, using test (T); It turns out that the value of (t) calculated for the Locomotor = (6.33) and the Object Control = (8.91), and the total test = (12.09) which is greater than the tabular value of (t) which is equal to (2.02) at the level of significance (0.05), and with degrees of freedom (38), which indicates On the existence of a statistically significant difference between the mean scores of the control and experimental groups in the post application of the test of Motor Development (TGMD-2) in favor of the experimental group.

The effect size of Cohen's results, for all skills are large and huge except for two skills (Gallop and Horizontal_Jump) that came in the size of the effect (Small), while the skill (Overhand Throw) came with the effect size (medium).

Looking at the total skills of (Locomotor), we found that the Cohen's d value = 2.009 with effect size (huge), on the other hand, the total skills of (Object Control) with the value of Cohen's d = 2.826 with effect size (huge), indicating that the total skills of (Object Control) were more effective than Locomotor.

In total skills, Cohen's d = 3.822 came with large effect size, indicating that the effect size is large in favor of the experimental group.

Table 1 shows descriptive statistics of the data, Results of the T-test for the difference between the mean scores of the control and experimental groups and Cohen's effect size, in the post application of the test of Motor Development (TGMD-2)

Skills	Group	N	Mean	Std	df	T	P-value	Cohen's d	Effect Size
Run	Control	20	6.65	0.81	38	3.51	0.001	1.114	Very large
	Exp		7.40	0.50					
Gallop	Control		7.10	0.97		1.27	0.211	0.402	Small
	Exp		7.45	0.76					
Hop	Control		8.00	1.30		-3.60	0.001	1.139	Very large
	Exp		9.25	0.85					
Horizontal_Jump	Control		7.20	0.89		1.14	0.260	0.361	Small
	Exp		7.50	0.76					
Leap	Control		4.50	1.24		4.47	0.000	1.412	Very large
	Exp		5.80	0.41					
Total (Locomotor)	**Control**		**33.45**	**2.23**		**6.33**	**0.000**	**2.009**	**Huge**
	Exp		**37.40**	**1.66**					
Striking_astationary_ball	Control		8.35	1.50		3.20	0.003	1.011	large
	Exp		9.55	0.76					
Stationary_Dribble	Control		6.20	1.11		6.07	0.000	1.920	Huge
	Exp		7.80	0.41					
Catch	Control		4.55	1.05		3.83	0.000	1.211	Very large
	Exp		5.55	0.51					
Overhand_Throw	Control		6.40	0.99		2.39	0.022	0.756	medium
	Exp		7.10	0.85					
Total (Object Control)	**Control**		**25.50**	**1.93**		**8.91**	**0.000**	**2.826**	**Huge**
	Exp		**30.00**	**1.16**					
TOTAL	**Control**		**58.95**	**2.39**		**12.09**	**0.000**	**3.822**	**Huge**
	Exp		**67.40**	**2.01**					

- Statistically significant difference at P value ≤ 0.05

- Effect Size of Cohen's standard is little (< 0.20), small (≥ 0.20- < 0.50), medium(≥ 0.50- < 0.80), large (≥ 0.80- < 1.10), Very large (≥ 1.10- < 1.50), huge (≥ 1.50), (Hassan, 2011)

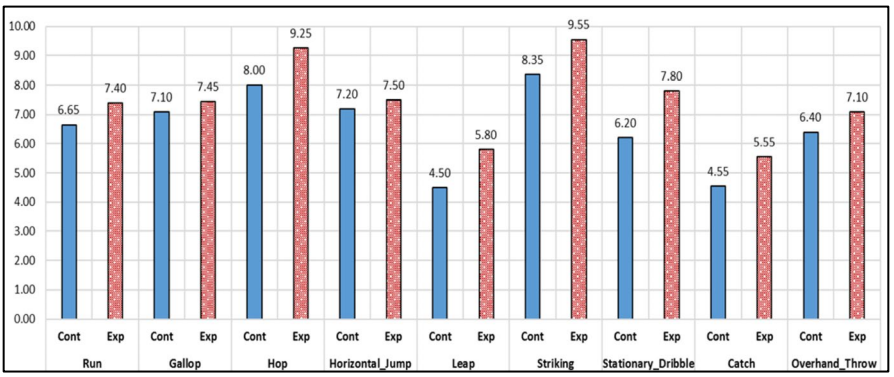

Fig. 1 Indicating the differences between the two groups in the sub-skills of the test

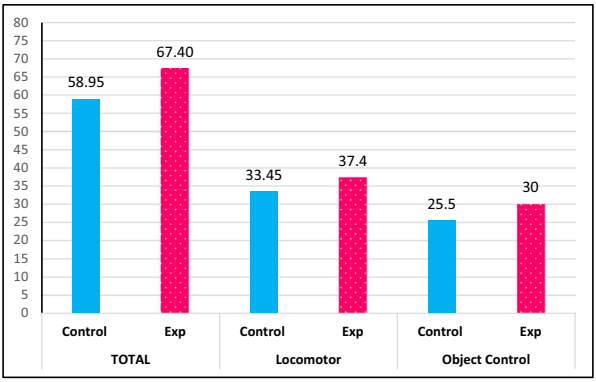

Fig. 2 Indicating the differences between the two groups in total skills

12 Results

The study looked at the reality of the object and found that all of the above is right, using video media to improve basic movement skills in kindergarten, to improve a literature review and to provide researchers with more knowledge, to help educators use different approaches to promote the learning of basic movement skills in kindergarten by their children and motor skills, including high. That was shown by the disparity between the experimental group and the control group which was 18.000 (TGMD-2 graph).

The study has some findings that obtained from the statistics in Table 2

The study clarifies some findings that obtained from the above study steps:

Teachers should use video media as a medium to improve the basic skills of children's movement. For teachers to help their special children with poor basic movement skills to be learned more efficiently in kindergarten by using video resources to enhance the basic movement skills of basic movement children. In order to enhance knowledge about basic movement skills methods, researchers with different variables will also be needed for more researchers such as Manual Coordination (Manual Dexterity and Upper limb coordination): Body Coordination (Bilateral Coordination and Balance): Strength And Agility, and Strenght).

The research has the same view as the other studies on some points:

- The role of multimedia devices focused on the education of kids and the position of school teachers was seen from the report.

Table 2 The disparity between the experimental group and the control group:

Cohen's d	The Value(T)	Control/Experimental Groups
2.009	6.33	Locomotor Total
2.826	8.91	Object control Total
3.822	12.09	Total test

- Awareness of the teacher has improved comprehension by multimedia during early childhood education.
- Videos primarily rely on real conditions that are easily interactive with children.
- The use of digital video was considered to be a valuable tool for the educational process. It was considered a valuable tool to learn and to keep children interested.

This article provided guidance to practitioners and researchers on how to implement using video media to improve basic movement skills in kindergarten in their training with the aim of promoting the acquisition of essential motor skills in children. While teaching process may seem overwhelming at first, especially when it comes to editing video after recording, the authors believe that the benefits are worth the effort. These advantages include the accuracy of the model, the continuity of the voiceover directions, the channeling of student attention (removal of distracting sound or motion in video models), and the independence and empowerment of the learner. In addition, recent advances in video recording and editing technology have made their use considerably more available and user-friendly.

In order for a student to improve his or her performance as a motorist, three factors must be kept in mind. One is that students need a clear understanding of the essential components of their skills. Two, they need a lot of chances to try their talents. And three, regular and reliable feedback needs to be provided. All three of these aspects can be accomplished by incorporating video replay technology and peer-to—peer instruction. PE teachers and coaches will give students and athletes the opportunity to develop their motor skills. Most importantly, they're going to have fun while they learn.

There are other findings to utlizing videos such as, offer students the controls, let students pick up their teammates, let students learn about the technology, don't take over, set up a personal challenge, and complete a comprehensive warm-up.

13 Discussion

Children today are surrounded by both old and new types of digital media. The usage of digital media, such as interactive and social media, has increased over the last decade, and research indicate that these newer media are beneficial to children and teenagers' health (Reid Chassiakos et al., 2016). The use of the media can be used for children as a tool to raise the children's basic mobility skills. Teachers can enhance their skills in the basic movement skills in their children's kindergartens by means of video media tools to improve the fundamental movements of school-educating children. For further researchers, the development of knowledge of basic methods of motion skills should be carried out using certain variables. A study of O'loughlin et al. (2012) supported our study by indicating that using digital video for feedback and assessment in PE has shown to enhance children's motivation and improve their skill performance. In addition, using digital video helps teachers effectively support assessment for learning and self- assessment processes in PE ((Liu et al., 2019; O'loughlin et al., 2012).

Who needs to read this research? Researchers, teachers and parentis who want to know the nine basic movements, and using video media to find a solution to the students' difficulties in the fundamental ability to move. This research provided advice to practitioners and researchers on how to incorporate video in their teaching with a view to promoting the development of important motor skills in children. The evidence suggests that video feedback (VFB) acted as a key augmented informational constraint to drive the transition in motor learning (F. Potdevin (2018).

The research tested, the role of multimedia devices in the education of children was seen in the report and the position of school teachers, teacher awareness during early childhood training improved understanding of multimedia, videos rely primarily on real and child-friendly conditions, and the use of digital video was regarded as a valuable educational tool, and It was a valuable tool for learning and caring for children. It was expected that intervention children would increase their movement skills more than development alone and that preschoolers would increase their movement abilities significantly. As previously stated, All 4 Kids dramatically improved all elements of the children's lives. These findings were not unexpected, given that therapies are usually efficacious (Morgan et al., 2013). However, a finding not commonly reported looked into the effects of biological sex, race, and age on certain outcomes.

The research findings can be utilized in other countries such as, making use of videos, including checks, allowing students to pick up their teammates, allowing students to know the technology, not taking over, creating a personal challenge, and completing a thorough warm-up. This study's findings are unique and make a significant contribution to the intervention literature. This is the first study of its sort to intervene on numerous measures of both motor coordination and development in a cohort of children who appeared to be generally developed. Furthermore, the intervention was designed in such a way that it supported fun and enjoyment in a movement setting. The motor skill intervention literature has a history of focusing on one or two components of child development while ignoring recognized antecedents of gross motor skill development and physical activity behaviors. As a result, this work makes a significant and practical contribution to the literature.

The research main results were Teachers can help with their special children's poor basic movement skills by using video resources to improve the fundamental movement abilities of elementary movement children. Researchers with different variables are also needed for more researchers to increase knowledge about basic movement skills methods. This paper provided guidance for practitioners and researchers on how to use video media in their training to enhance basic movement skills in kindergartens to promote children's motor skills. Although the teaching process may at first appear overwhelming, especially when it comes to video editing following recording, the authors believe that this effort is worthwhile. These benefits include model accuracy, voiceover continuity, channelling student attention, and the independence and empowerment of the student. Three factors have to be taken into account to improve a student's performance as an automobile driver. The first is that students need to know clearly which components of their skills are essential. Secondly, they need a lot of opportunities to experiment with their talents. Three

feedbacks must be provided regularly and reliably. All 3 can be achieved through the use of video playback technology and peer-to-peer training. PE teachers and coaches will give the chance to develop their motor skills for students and athletes. Especially when they learn, they will have fun.

14 Limitations

This study had limitations, despite the importance of the data. Despite the use of two models that enabled testing, the role of societal culture, the teacher's function, and the student's economic status were not appropriately focused. However, within the social-ecological paradigm, this study cannot clearly explain how much of the site variance was assigned to the instructor, the built environment, and/or other previously examined variables (culture, family, etc.). Furthermore, though the majority of the participants in the study came from a variety of socioeconomic backgrounds, the authors acknowledgedthat the findings may not be generalizable to the entire community. The authors also recognized that testing the instrument with additional populations, both nationally and internationally, would be advantageous. There will be a need to repeat the study in the future to address these difficulties and dig deeper into the intricacies of the intervention to provide precise evidence-based recommendations for maximizing learning and delivering it with accuracy. The consistency of findings across time, on the other hand, implies that all kids is effective at increasing movement abilities.

15 Recommendation

While this systematic analysis provides a timely and comprehensive examination of the impact of physical activity on preschool children's motor abilities, there are certain limitations to be aware of when interpreting the results that lead to a number of recommendations:

- Apply the research while considering a variety of factors, including the role of societal culture, the teacher's function, and the student's economic status.
- Apply the testing instrument with additional populations, both nationally and internationally, would be advantageous.
- There will be a need to repeat the study in the future to address the consistency of findings across time, on the other hand, implies that all kids is effective at increasing movement abilities.

16 Conclusion

This is the first known study evaluating video media in Kuwait City. This research provided researchers with guidance on incorporating video into their teaching to promote the improvement of essential children's motor skills. While the labor-intensive

nature of such a process may seem daunting at first, especially when it comes to editing video after recording, the authors believe that the benefits are worth the effort. Such advantages include the accuracy of the model, the continuity of the voiceover directions, the channeling of child attention (i.e. the absence of distracting sound or motion in video models), and the freedom and confidence of the learner. Furthermore, recent improvements in video recording and editing technologies have enabled their use considerably more available and user-friendly. The combination of direct guidance and structured assistance within naturally occurring settings is essential to the success of this instructional strategy.

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Data availability The datasets generated or analyzed during the current study are available from the first and corresponding authors of this paper on reasonable request.

Declarations

Conflict of Interest None.

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