



The experience and substance of aquatic activities learning in elementary schools from the perspective of physical education teachers

Hedi Ardiyanto Hermawan*, Subagyo, Nur Sita Utami

Faculty of Sport Science, Universitas Negeri Yogyakarta. Jl. Colombo Yogyakarta No.1, Karang Malang, Caturtunggal, Depok, Sleman, Daerah Istimewa Yogyakarta 55281, Indonesia
Corresponding Author. E-mail: hedi_ardiyanto@uny.ac.id

Received: February 03, 2022; Accepted: April 11, 2022; Published: April 25, 2022

Abstract: The objective of this phenomenological research is to describe the substance of aquatic activities learning based on the experience of elementary school physical education teachers in Yogyakarta City in carrying out aquatic activities learning. Ten elementary school physical education teachers in Yogyakarta City agreed to participate in this study. The research subjects were selected with the snowball sampling technique. A qualitative approach was used in data collection and data analysis. Open interviews were conducted based on the interview guide instrument. Data analysis techniques based on the Miles and Huberman model include data reduction, data display, and conclusion drawing/verification. The data obtained are the experience of physical education teachers in carrying out aquatic activities learning and the substance of aquatic activities learning for physical education teachers. Every word during the interview was recorded and rewritten for further analysis. The grouping process used Atlas.ti 22 software. The themes that emerge from the analysis consist of: (1) the learning process of aquatic activities; (2) parental support; (3) obstacles to learning aquatic activities; and (4) the substance of aquatic activities learning. The researchers see this phenomenon based on the Theory of Planned Behavior. The teachers' decision to conduct aquatic activities learning does not depend on its substantiality only. However, aquatic activities learning needs the support of parents and schools.

Keywords: substance, aquatic activities learning

How to Cite: Hermawan, H. A, Subagyo, S., Utami, N. S. (2022). The experience and substance of aquatic activities learning in elementary schools from the perspective of physical education teachers. *Jurnal Keolahragaan*, 10 (1), 53-62. doi: <https://doi.org/10.21831/jk.v10i1.47826>



INTRODUCTION

The objectives of the education curriculum in Indonesia (Permendikbud, 2018) include four competencies, namely: (1) spiritual attitude competencies, (2) social attitudes, (3) knowledge, and (4) skills. The subject which incorporates the four competencies into movement learning are Physical, Sports and Health Education. This subject, in terms of science, refers to physical education. The aims of physical education, sports science, and sports programs are optimizing the quality of life by encouraging people to commit throughout their life to do physical activity and gain sports experiences so that they have a change in attitude and behavior towards a healthy lifestyle (Lumpkin, 2017). Physical education aims to shape a person into "Physically educated person". The term refers to someone who is able to integrate knowledge and skills to carry out regular physical activity throughout their life to achieve peak of health (Metzler, 2017). The research results showed that physical activity affect cognitive performance (Padulo et al., 2019). Agility was moderately correlated with English, Italian, math, music, and sports scores, while jumping was correlated with English, math, sports, and technology (Padulo et al., 2019). Sprint was moderately correlated with math, sports, and technology. There was a strong correlation between sports scores and physical tests (Padulo et al., 2019).

The scope of physical education in the 2013 curriculum in Indonesia (Kebudayaan, 2016) includes: (1) basic locomotor, non-locomotor, and manipulative movements; (2) big ball and small ball game activities; (3) athletic activities; (4) martial arts activities; (5) physical fitness development



activities; (6) gymnastic activities; (7) rhythmic movement activities; (8) aquatic activities and personal safety; and (9) health. Basic competencies in big and small ball games are marked with one star (Permendikbud, 2018). Schools can choose the type of big ball game and small ball game based on each school's conditions. Types of big ball games include football, volleyball, basketball, and other big ball games. Small ball games can be exemplified by *kasti*, rounders, badminton, table tennis, and other small ball games. The athletic activities are chosen based on the availability of facilities and infrastructure of each school. Basic competencies in the martial arts field marked with a two star means that schools can choose the types of martial art such as *pencak silat*, karate, taekwondo, or other types of self-defense according to the competence of educators (Permendikbud, 2018). Aquatic activities and personal safety are marked specifically with three stars (Permendikbud, 2018). The meaning of the three-star is that aquatic activity learning can be carried out in accordance with the availability of facilities and infrastructure. If any aquatic activity cannot be carried out, other physical activities which are included in the scope of the material may be exercised (Permendikbud, 2018). This policy is enforced considering that not every elementary school in Indonesia has swimming pool facilities. If the school can organize aquatic activity learning, then the study materials ought to include skills in one of the swimming styles and basics of self-rescue (Kebudayaan, 2016).

The 2013 Curriculum Policy provides flexibility for each school whether to carry out aquatic activity lessons or not. On the other hand, a skill of a swimming style and the basics of self-rescue are needed as contingency for life. The importance of learning how to swim is widely recognized by the community. Parents and schools in general regard swimming as an important life skill. However, the implementation of swimming lessons is often seen as a complicated process (Lawton, 2013). Swimming pool infrastructure is absolutely necessary for aquatic activities learning. However, each school's access to swimming pools varies, and the entrance fees are a burden for some parents. In addition, the limited number of physical education teachers made parents worried about the safety of their children in the pool. The results of a study found that socio-economic factors were closely related to children's swimming abilities (Löhmus et al., 2022). Lower socioeconomic status at individual and school levels is associated with lower swimming ability in children (Löhmus et al., 2022). The results of this study are in accordance with previous research which stated that sinking is the main cause of child mortality in the world regardless of income levels of each country. Nevertheless, low and middle income countries made up 90% of the number globally (Meddings et al., 2017). Family socioeconomic conditions that affect children's involvement in physical activity (Brockman et al., 2009).

Swimming is one of the best aquatic activities that people from young to old can partake in (Bay, 2016). Participants can swim regularly for a long time until old age. This is because of the minimal collision risk in swimming. In addition, the characteristics of swimming movements are focused on the effectiveness of the technique and movement. Swimming has physical and psychological benefits. The physical benefits of swimming include building muscle, improving heart and lung function (cardiovascular system), burning calories, and improving blood circulation. While psychologically, swimming can increase self-confidence, personal safety or reduce worries if accident happen in aquatic environment, and make the mind more relaxed (Pratiwi, 2015).

The characteristics of swimming movements are focused on the effectiveness of the technique and movement. Baby Boomers are the first generation to strive to maintain lifelong fitness as part of their lifestyle (Laughlin, 2015). As they enter early middle age, they begin to choose lower-impact physical exercises to maintain fitness. Freestyle swimming became a preferred lower-impact physical training option because they are able to complete more laps per hour of exercise. Therefore, supporting facilities and infrastructure are needed in order to achieve swimming benefits.

Based on observations in the city of Yogyakarta, it is not difficult to find a swimming pool. Municipal Waterworks (PDAM) provides for Umbang Tirto swimming pool which is located at the Kridosono Stadium. Many hotels in the city of Yogyakarta provide swimming pools which can be accessed by public visitors. Moreover, the swimming pool of Yogyakarta State University is located 4 km from Tugu Yogyakarta. This condition provides opportunities for elementary school physical education teachers in the city of Yogyakarta to teach aquatic activity lessons. However, not all physical education teachers in Yogyakarta City carry out their aquatic activity lessons in swimming pools. The 2013 Curriculum Policy gives an option for teachers to choose not to conduct aquatic activity learning. Based on this phenomenon, the researchers wanted to understand the experience of elementary school physical education teachers in carrying out aquatic activity learning. Subsequently,

the researchers wanted to understand the substance of aquatic activity learning for elementary school physical education teachers in the city of Yogyakarta.

METHOD

This research used qualitative methods with phenomenological approach. The research framework is focused on the experiences of elementary school physical education teachers in Yogyakarta in carrying out aquatic activity learning, and in the substance of aquatic activity learning for physical education teachers. The three basic components of the theory of planned behavior include (1) attitudes; (2) subjective norms; and (3) perceived behavioral control (Sussman & Gifford, 2019) used to develop interview guidelines. The three primary research questions are as follows: (1) Do the informants conduct aquatic activity lessons?; (2) How is the implementation of aquatic activity learning?; and (3) How did the informants interpret aquatic activity learning based on teaching experience?

The data for this research was obtained from ten elementary school physical education teachers in Yogyakarta City. The research subjects were snowballed, consisting of 5 men and 5 women. Every teacher came from different elementary schools. The subject teaching experience is in the range of three to twelve years. Data were collected through in-depth interviews focusing on information gathering about the experience of the informants in conducting aquatic activity learning. Each informant was interviewed in separate places. All interviews were recorded and transcribed for analysis. Data analysis was carried out using thematic analysis. The procedure was carried out by reading the interview transcript, assigning significance of each statement to the appropriate code, grouping the related codes into categories, and identifying themes from the categories. The grouping process used Atlas.ti 22 software. The themes emerged from the analysis are: (1) the learning process of aquatic activities; (2) parental support; (3) obstacles to learning aquatic activities; and (4) the substance of learning aquatic activities. The data analysis used in this research is the Miles and Huberman model (Hashimov, 2015).

RESULT AND DISCUSSION

There are four themes that emerge from the results of the data analysis using Atlas.ti 22 software. The four themes include: (1) the learning process of aquatic activities; (2) parental support; (3) obstacles to learning aquatic activities; and (4) the substance of aquatic activities learning. The description of the data analysis results of the four themes is as follows.

The World Health Organization (WHO) policy calls for member countries to provide basic swimming skills, water safety, and basic rescue skills (Meddings et al., 2017). This appeal has not been fully implemented in Indonesia, for not every school across the country have aquatic activity learning facilities and infrastructure. This fact has become a consideration for the 2013 curriculum policy in Indonesia, thereby freeing physical education teachers whether to conduct aquatic activity learning (Kebudayaan, 2016). Informants consisting of 10 physical education teachers have different ways of implementing the policy. This difference is due to the different capacities of schools in carrying out aquatic activity learning.

There are three differences in the learning process of aquatic activities organized by each of the 10 informants. These differences are: (1) never conduct aquatic activity lesson; (2) had conducted aquatic activity lesson through theory alone; and (3) had conducted aquatic activity lesson. The difference in the implementation of aquatic activity learning in general is based on whether there is support from schools and parents.

An informant has never conducted an aquatic activity lesson before, even though informants has had 11 years of experience teaching physical education. The reason for this is because the school location is far from the local swimming pool. Moreover, the school and parents do not support aquatic activities learning to be taught in swimming pools. The school objected to the cost of renting a swimming pool and deemed it impossible for the rental fee to be borne by the students' parents. The average economic capability of the students' parents is on the lower-middle to lower economic class range. This also influenced informant decision not to teach the theory of aquatic activities. Informant's attitude is in line with the Theory of Planned Behavior (Ajzen, 2011)

The implementation of learning aquatic activities through theory alone and without practice in the swimming pool was conducted by two informants, namely informants 1 and informants 2. Informant 1 was a physical education teacher for 12 years at the same elementary school. The large number of parallel classes makes it impossible to manage the learning of aquatic activities in swimming pool. It takes more time for students to shower and change locations from the swimming pool to school. On the other hand, learning hours are limited because of other school subjects. This fact was revealed by informants, "For aquatic learning before the pandemic we did have theory lessons but for practice we did not conduct it because of the learning schedule and the large number of students." The implementation of aquatic activities learning is disallowed during the Covid-19 pandemic, "During the Covid-19 pandemic, aquatic learning materials are removed because the subject are circumscribed and divided equally with other subjects." Aquatic activities learning is taught through theory covering the materials regarding the courage to be active in water and personal safety. During the Covid-19 pandemic, remote learning is implemented. Physical, Sport and Health Education is scheduled only once every two weeks. This became the basis for an agreement for the school to reduce study materials, one of which was the theory of aquatic activities learning. Another informant conducting aquatic activities learning through theory alone was informant. Aquatic activity learning materials for lower grades include introduction to water, walking in water, and how to breathe. The study materials of introduction to swimming styles are taught for the upper grades. The materials were presented using learning media with PowerPoint software and distributed via WhatsApp Group. The materials were also presented in print out form. According to informants "For the provision of materials we used Power Points presentations which were distributed via WhatsApp and sometimes we provide print outs of materials the students can pick up at school." Aquatic activities learning is only taught in theory because the school conducted swimming extracurricular for practice. This extracurricular is sought after by students. However, during the Covid-19 pandemic, swimming extracurricular is cancelled. The informants are still trying to teach the theory of swimming in physical, sports and health education learning.

Practical learning of aquatic activities in the swimming pool was conducted by seven informants. The seven informants have teaching experience in elementary schools for a varied period from three to eleven years. The aquatic activities learning process is held in a swimming pool not owned by the school.

The seven informants have not fully implemented constructivism in the learning of introduction to water. Constructivism is known to be appropriate for teaching physical activity done in groups, not individually. However, there are studies that suggest constructivism can be applied in swimming lesson and training. The goal is for students to be more independent in understanding effective movement techniques to develop personal skill (Light & Wallian, 2008). The main teaching style applied by the informants was command style with demonstration method. The reason this particular teaching style is applied is for effectiveness and efficiency in learning, for the number of students is bigger than the number of educators. The command style of teaching makes it easy for teachers to manage students in the pool, while demonstration teaching method helps students conform their perception of movements to those demonstrated by the teacher. Drill and practice approaches are applied alternately during the learning process. The practice approach is carried out at the beginning of learning, namely warming up and going to the core material. The drill approach is carried out when learning the core material. These learning steps were conducted by informants, "We went straight to the pool to play some game in the water and then we went to the basic study materials for swimming according to each grade's level." Another informant applied the same teaching style and approach as explained by Agas, "The method used is command and practice."

The aquatic activity study materials presented by the seven informants referred to the 2013 Curriculum. The study materials intended for lower grade students were related to personal safety and procedures for using basic movements in water introduction. The sequence of learning materials for aquatic activities was explained by informants, "Study materials were given from the most basic, for example, gliding, swimming pool rescue, and pool game activities." The informant who can only hold water activity lessons once a year is informant, "Aquatic lessons for swimming are conducted once a year." The focus of the study materials is on providing experiences for students to do aquatic activities safely. The learning activities were described by informants, "The study materials given catered more to swimming pool games, because the classes taught were of lower grades. For example, jogging in

the pool, playing catch ball in the water and so on.” The material for the upper grades include basic swimming skills. The informant who has the privilege to hold aquatic activity lessons once a month for each class was informants, “It is done once a month for every class.” Swimming is a mandatory extracurricular activity at the school where informants teaches. He teaches each class swimming every afternoon. This measure was taken to anticipate the effectiveness of learning time. If the extracurricular is conducted during learning hours, it will interfere with the period of other school subjects. Even though it is extracurricular in nature, the study materials taught refers to the 2013 Curriculum. informants explained, “The materials are adjusted for each grade level. The fourth grade learns freestyle swimming, the fifth grade learns breaststroke, and the sixth grade learns backstroke.”

During the Covid-19 pandemic, the practice of aquatic activities in swimming pool was stopped. However, the informants still tried to teach the theory of aquatic activities. Power Point as a learning media is preferred for remote learning, and is shared via WhatsApp Group. One of the informants gave an assignment to record the student’s swimming practice on land. However, some students sent videos of them practicing in swimming pool. This statement on the experience when receiving said assignments from students was, “There are some children who submit their assignments in video form. They’re swimming in a swimming pool.” The interaction between teachers and students fosters a sense of empathy needed to support successful swimming lessons (Lémonie et al., 2016).

The results of the interview show that the policy for the implementation of aquatic activities learning in schools is different from other school subjects or study materials. The implementation of aquatic activity learning practices is an agreement between the principal, the parents of the students, and the physical education teachers. Economic factors are the determining factors for the prospect of conducting aquatic activity lessons. For the teachers who have the opportunity to hold aquatic activity lessons, the study materials used ought to conform to the basic competencies. Even if the frequency of aquatic activity lessons is different for each school, it should be conducted at least once a year. This fact is contradictory to the result of the research which suggests improvement on students' swimming competence is ought to be done with giving more opportunities to students to engage in swimming practice. Subsidized swimming learning programs should prioritize families from low socioeconomic status to address disparities in children's participation and swimming competence (Chan et al., 2020).

Parents are the main reason aquatic activity lesson for children can be held. This lesson requires swimming pool infrastructure, and thus funds are needed for entry fees and passes. In addition, funding is also needed to purchase swimsuits and swimming goggles. It is parents who make the decision for their children whether to participate in aquatic activity learning at school. informants, a physical education teacher, held water activity lessons in the swimming pool every semester before the Covid-19 pandemic. His school can conduct aquatic activity lesson regularly more than once per semester because of the enthusiastic support of the parents. “They support school activities, and when a new semester begins, they always ask about how many times will the swimming lesson be held informants.” Parental support of aquatic activity learning provides an opportunity for schools to organize swimming extracurricular. The school where informants teach gets parental support to hold water activity lessons. “The parents support the program, swimming lessons are conducted in regular school hours and as extracurricular in the afternoon.” According to informants, parents are supportive because they feel that swimming is a physical activity needed by children and is beneficial for their health and personal safety. Parental support for aquatic activities learning is also given to the school where informants teach. “The parental support is evident for even though there is no swimming lesson practice in the pandemic, the parents take their children to hotels’ swimming pool so that they can practice the theory given.”

A study done in 2016 concluded that parents who provide opportunities for their children to learn aquatic activities from an early age actually helped the children's mental readiness of the transition from toddlerhood to school age (Jorgensen, 2016). Aquatic activities learning provides benefits to children's physical and social development. The children’s physical performance is improved in terms of strength and agility, and they become more confident as they play with their school peers. Aquatic activities learning experience provide children with insight into choosing sports and activities to fill their free time in the future (Allen et al., 2021).

On the other hand, some parents in other schools are worried about their children's safety when they take part in aquatic activities at school. This became the basis for the school's policy to conduct

aquatic activity lesson with a frequency of only once a year. “We only hold the lesson once a year because sometimes we get permission from the parents and sometimes we don’t. Some parents are not supportive because they are worried about the safety of their children. Sometimes the school itself don’t support them because they are worried that something unwanted will happen. The transportation used is public transportation so it is not very safe. Moreover, there are only a few teachers accompanying the children (Widiastuti).” Parents’ concerns are not one of the factors aquatic activity lesson is not conducted in informants’ school. Rather, economic factor is the deciding factor as to why the school where informants teacher does not hold aquatic activity lesson.

Obstacles to learning aquatic activities faced by elementary school physical education teachers in Yogyakarta City are not intentional. On the contrary, the obstacles come from factors outside of the teacher, including: (a) the safety risk of commuting from school to the swimming pool; (b) the fund for swimming pool rental; and (c) the safety risk of students in the swimming pool. The three obstacles can be overcome by the support of parents and teachers. However, there are also teachers who choose not to carry out aquatic activity lessons because they do not get the support of parents and schools.

The risk of travel safety from school to the swimming pool and the cost of renting a pool are obstacles for informants, “The obstacles in aquatic learning are that the lesson is conducted outside of the school so it takes time to go to the swimming pool and it also cost a hefty fee.” Nevertheless, informants have tried to organize aquatic activities learning in the swimming pool. The travel safety risks and classroom management in the swimming pool are the concerns of informants. “The obstacle to aquatic learning is not only the risk when commuting to the swimming pool, but also when the students are in the swimming pool. Because of this, many parents are less supportive of aquatic learning of swimming. There’s also a lack of supervision of the children during the swimming lesson.” This condition is a consideration for informants to conduct face-to-face aquatic activities learning only once a year. The problem of financing swimming pool rentals from parents and schools has resulted in informants never conducting aquatic activities learning.

The obstacle faced by almost all informants is the risk of student safety in the swimming pool. This is because schools have a limited number of physical education teachers. In addition, getting teacher aides/swimming trainers depends on the funding capacity of each school. This kind of impediment does not occur only in Yogyakarta, but also is a common obstacle faced internationally. In high-income countries in Western Europe and North America, teacher-to-student ratios are decreasing and it is becoming increasingly difficult to hire trained swimming instructors (Stallman, 2019). In low- and middle-income countries, the ratio is also very low and allows only a few to receive formal swimming lessons (Stallman, 2019). Generally, schools do not have swimming pools and tend to use public swimming pools instead. Physical education teachers have to work hard to manage the class because the pool area is also used by general visitors. This obstacle was complained by informants, “The obstacle to managing the class is that it is difficult to control students because they pool is mixed with the public so control is hard to maintain.” The solution informants come up with was to use the service of swimming coaches to help manage aquatic activities learning classes. “The problem with our school is that there are more or less three study groups per lesson. In public places, children are difficult to manage. We use the service of a swimming coach to help the learning process informants.” Informants collaborate with students from the Faculty of Sports Science to manage the class, “The problem with using the public swimming pool is that sometimes our swimming lesson coincides with that of other schools. We use the assistance of the students from the Faculty of Sports Science to help teach swimming.” Informants felt the benefits of using the services of swimming assistants. “There were kids doing as they please, and there are those who were scared. However, we employ the assistance of aides so students can be persuaded to take part in aquatic activity lessons.”

The design of the physical education curriculum is made by referring to the educational goals which include cognitive, affective, and psychomotor domains (Howell, 1978). The term affective domain in the 2013 Curriculum in Indonesia (Permendikbud, 2018) includes spiritual and social attitude competencies. The cognitive domain is understood as knowledge competency and the psychomotor domain as skill competency. The ten informants expressed different comprehension of the substance of aquatic activities learning. There are informants who interpret aquatic activities learning from one, two, or three domains.

The substance of aquatic activities learning from one domain. There are five informants who interpret aquatic activities learning from one domain only. There are different domain perspectives,

there are cognitive, affective, or psychomotor domains. The substance of aquatic activities learning based only on the cognitive domain was expressed by informants, "The substance and purpose of aquatic learning is to introduce children to various kinds of sports, one of which is swimming." On the other hand, the substance of aquatic activities learning based on the affective domain is interpreted as a learning activity to form children's character informants. There are three informants who viewed the substance from the same domain, which is psychomotor. The three informants are informants 1, informants 2, and informants 3, interpret aquatic activities learning as basic swimming movements learning for students.

The substance of aquatic activities learning from two domains, namely cognitive and affective. Informants 1 and informants 2 defined aquatic activities learning as an activity to form children's mental and character (affective). In addition, as an activity to introduce children to aquatic environment (cognitive). Slightly different from Informants, "The substance and purpose of aquatic learning are to introduce water sports to children (cognitive) and for children's growth as well as a recreational activity for children because their learning schedules at school is too packed already (affective)."

The meaning of learning water activity from three domains includes cognitive, affective, and psychomotor. The meaning of learning water activities as a motion learning activity, fostering courage thanks to the community in the water, and improving the fitness of the student body informants. Informants have the same meaning as informants from the affective domain. The meaning of the cognitive and psychomotor domains for informants, the learning of water activities equips students with the knowledge and skills to save themselves in the water.

The substance of aquatic activities learning from three domains includes cognitive, affective, and psychomotor. The substance of aquatic activities learning is as a movement learning activity, to grow courage to be active in water, and to increase fitness of the student informants. Informants have the same perspective as informants in the affective domain. The substance of cognitive and psychomotor domains for informants is that aquatic activities learning equips students with knowledge and skills to rescue themselves in water.

Physical education teachers interpret aquatic activities learning with the objectives of physical education as reference. Said objectives are also linear with the goals of the education curriculum in Indonesia. Substance is emphasized in one, two, or three domains.

Description of the substance of aquatic activities learning from one domain. The substance of aquatic activities learning from the perspective of the cognitive domain, is perceiving aquatic activities learning as an introduction to one of water sports, namely swimming. The substance of aquatic activities learning from the perspective of the affective domain is a learning to shape children's character. The substance of the psychomotor domain represents aquatic activities learning as a learning of the basic movements of swimming.

Physical education teachers who interpret aquatic activities learning from two domains, which are cognitive and affective. There are two different points of view. On one side, the substance of aquatic activities learning from the cognitive domain is to introduce the water environment. Affective domain, forming mentality and character of children. The other perspective views aquatic activities learning from the cognitive domain as aquatic activities learning itself, and the affective domain understand it as entertainment.

Physical education teacher who interprets aquatic activities learning from three domains at once. Based on the cognitive domain, it is interpreted as learning to move and learning personal safety in the water. The perspective of the affective domain is fostering courage to be active in the water. The meaning of the psychomotor domain is the activity of maintaining body fitness and safety skills in water.

Essentially, physical education teachers interpret aquatic activities learning as a means to develop cognitive, affective, and psychomotor domains of the students. Such interpretation indicates that the informants believe that aquatic activities learning needs to be given to students. This belief is in line with research which stated that aquatic physical activity is a means for the development of cognitive and motor domains: decision-making and sensory-motor intelligence are the basis for the development of verbal and cognitive intelligence. There is continuity between intelligence and the process of biological adaptation to the environment (Stallman, 2017). Swimming is a skill that is useful for life and can improve a person's health from a very young age (Invernizzi et al., 2021).

The implementation of aquatic activities learning in schools by physical education teachers depends on school policies and parental support. When parents understand the importance of aquatic activities learning for the growth and development of children, and if parents can economically provide the operational costs, the schools will easily adopt policies for physical education teachers to organize aquatic activities learning. The learning context allows the lesson to be able to be held not only in school hours, but also be conducted as extracurricular activities. The reason of parents for choosing extra swimming lessons for children is to support their physical development and for children to learn swimming skills (Invernizzi et al., 2021). The conditions will be the opposite if parents and schools complain about the operational costs. Physical education teachers will have minimal opportunities to organize aquatic activities learning. Parental support is very much needed in the implementation of aquatic activities learning in elementary schools. Support in the form of operational financing includes transportation fees from school to the swimming pool, swimming pool entrance fees, and swimming coach fees. Subsequently, the parents can entrust the school to manage students in the swimming pool.

Student safety is the top priority in aquatic activities learning. The economic capacity of each school is different. This impacts the decision of whether physical education teachers use additional swimming coach services or not. Swimming coach services are needed to facilitate the learning process and maintain student safety. Teachers who organize aquatic activity lessons have a limited number of aides. Thus, the command learning style tends to be used. This style makes it easier for the teacher to observe and control the students. Although, in the current era, it is recommended that learning be student-centered (Metzler, 2017). The 2013 Curriculum Policy provides an opportunity for physical education teachers not to conduct aquatic activities learning. Swimming pools in Yogyakarta City are easy to find. However, not all physical education teachers in Yogyakarta City carry out aquatic activities learning in swimming pools.

The researchers viewed this phenomenon based on the Theory of Planned Behavior (Ajzen, 2011). Behavioral beliefs, physical education teachers have a good perspective toward aquatic activities learning. This learning is substantial as supporting the development of students' cognitive, affective, and psychomotor domains. Aquatic activities learning can provide the experience of moving in the water with confidence and safety consideration. Aquatic activities learning can be a reference for a physical activity to maintain fitness throughout life. Subjective norms, the opportunity for teachers to organize aquatic activities learning depends on the support of parents and school policies. Behavioral control, physical education teachers choose to carry out aquatic activities learning if they get support from parents and schools. Physical education teachers choose not to hold aquatic activities learning if parents and schools is averse to it.

CONCLUSION

The 2013 curriculum gives elementary school physical education teachers the choice to conduct aquatic activities learning or not. Not all elementary school physical education teachers in Yogyakarta City conduct aquatic activities learning. Although they view aquatic activities learning as meaningful for the development of students' cognitive, affective, and psychomotor domains, teachers may not conduct aquatic activities learning because of the economic conditions of parents and schools. Operational costs are needed to carry out aquatic activities learning.

REFERENCES

- Ajzen, I. (2011). The theory of planned behaviour: Reactions and reflections. *Psychology and Health*, 26(9), 1113–1127. <https://doi.org/10.1080/08870446.2011.613995>
- Allen, G., Velija, P., & Dodds, J. (2021). 'We just thought everyone else is going so we might as well': middle-class parenting and franchised baby/toddler swimming. *Leisure Studies*, 40(2), 169–182. <https://doi.org/10.1080/02614367.2020.1820555>
- Bay, S. (2016). Swimming Steps to Success. In *Modern Steel Construction* (Vol. 43, Issue 2). Human Kinetics, Inc.

- Brockman, R., Jago, R., Fox, K. R., Thompson, J. L., Cartwright, K., & Page, A. S. (2009). “get off the sofa and go and play”: Family and socioeconomic influences on the physical activity of 10 - 11 year old children. *BMC Public Health*, 9, 3–9. <https://doi.org/10.1186/1471-2458-9-253>
- Chan, D. K. C., Lee, A. S. Y., & Hamilton, K. (2020). Descriptive epidemiology and correlates of children’s swimming competence. *Journal of Sports Sciences*, 38(19), 2253–2263. <https://doi.org/10.1080/02640414.2020.1776947>
- Creswell, W. J., & Creswell, J. D. (2018). Research Design: Qualitative, Quantitative and Mixed Methods Approaches. In *Journal of Chemical Information and Modeling* (Vol. 53, Issue 9). [file:///C:/Users/Harrison/Downloads/John W. Creswell & J. David Creswell - Research Design_ Qualitative, Quantitative, and Mixed Methods Approaches \(2018\).pdf%0Afile:///C:/Users/Harrison/AppData/Local/Mendeley Ltd./Mendeley Desktop/Downloaded/Creswell, Cr](file:///C:/Users/Harrison/Downloads/John%20W.%20Creswell%20&%20J.%20David%20Creswell%20-%20Research%20Design%20Qualitative,%20Quantitative,%20and%20Mixed%20Methods%20Approaches%20(2018).pdf%0Afile:///C:/Users/Harrison/AppData/Local/Mendeley%20Ltd./Mendeley%20Desktop/Downloaded/Creswell,%20Cr)
- Hashimov, E. (2015). Qualitative Data Analysis: A Methods Sourcebook and The Coding Manual for Qualitative Researchers. *Technical Communication Quarterly*, 24(1), 109–112. <https://doi.org/10.1080/10572252.2015.975966>
- Howell, J. (1978). Exercise Science—Balancing Cognitive, Affective, and Psychomotor Objectives for Physical Education. *Journal of Physical Education and Recreation*, 49(1), 49–49. <https://doi.org/10.1080/00971170.1978.10617669>
- Invernizzi, P. L., Rigon, M., Signorini, G., Alberti, G., Raiola, G., & Bosio, A. (2021). Aquatic physical literacy: The effectiveness of applied pedagogy on parents’ and children’s perceptions of aquatic motor competence. *International Journal of Environmental Research and Public Health*, 18(20). <https://doi.org/10.3390/ijerph182010847>
- Jorgensen, R. (2016). Early years swimming: a way of supporting school transitions? *Early Child Development and Care*, 186(9), 1429–1437. <https://doi.org/10.1080/03004430.2015.1096785>
- Kebudayaan, kementerian P. dan. (2016). Kementerian Pendidikan dan Kebudayaan. *Silabus Mata Pelajaran Sekolah Dasar/Madrasah Ibtidaiyah (SD/MI)*, Mei. <http://kemdikbud.go.id/main/?lang=id>
- Laughlin, T. (2015). *Swim Ultra-Efficient Freestyle The Fishlike Techniques From Total Immersion by Terry Laughlin (z-lib (p. 177))*. Total Immersion, Inc.
- Lawton, J. (2013). *Complete Guide to Primary Swimming*.
- Lémonie, Y., Light, R., & Sarremejane, P. (2016). Teacher–student interaction, empathy and their influence on learning in swimming lessons. *Sport, Education and Society*, 21(8), 1249–1268. <https://doi.org/10.1080/13573322.2015.1005068>
- Light, R., & Wallian, N. (2008). A constructivist-informed approach to teaching swimming. *Quest*, 60(3), 387–404. <https://doi.org/10.1080/00336297.2008.10483588>
- Löhmus, M., Osooli, M., Pilgaard, F. I. H., Östergren, P. O., Olin, A., Kling, S., Albin, M., & Björk, J. (2022). What makes children learn how to swim? – health, lifestyle and environmental factors associated with swimming ability among children in the city of Malmö, Sweden. *BMC Pediatrics*, 22(1), 1–9. <https://doi.org/10.1186/s12887-021-03094-0>
- Lumpkin, A. (2017). Introduction to Physical Education, Exercise Science & Sport. In *McGraw-Hill Education*.
- Meddings, D., Altieri, E., Bierens, J., Cassell, E., Gissing, A., & Guevarra, J. (2017). Preventing drowning: an implementation guide. In *World Health Organization*. <http://apps.who.int/iris/bitstream/10665/255196/1/9789241511933-eng.pdf?ua=1>
- Metzler, M. W. (2017). Instructional Models. In *Self-regulated learning: from teaching to self- ...* (Vol. 84, Issue 3). <http://books.google.com/books?hl=en&lr=&id=FQnLHRQJUccC&oi=fnd&pg=PA1&dq=three+phase+%22self+regulation%22+zimmerman&ots=DCH->

YStyY0&sig=sVel0v_idfASir_T0bMHqGgM2Vs

- Padulo, J., Bragazzi, N. L., De Giorgio, A., Grgantov, Z., Prato, S., & Ardigò, L. P. (2019). The effect of physical activity on cognitive performance in an Italian elementary school: Insights from a pilot study using structural equation modeling. *Frontiers in Physiology, 10*(March), 1–9. <https://doi.org/10.3389/fphys.2019.00202>
- Permendikbud. (2018). Permendikbud RI Nomor 37 tahun 2018 tentang Perubahan atas Peraturan Menteri Pendidikan dan Kebudayaan Nomor 24 tahun 2016 tentang Kompetensi Inti dan Kompetensi Dasar Pelajaran pada Kurikulum 2013 pada Pendidikan Dasar dan Pendidikan Menengah. *JDIH Kemendikbud, 2025*, 1–527.
- Pratiwi, I. (2015). SEKOLAH RENANG DI KOTA SEMARANG DENGAN PENEKANAN DESIGN SUSTAINABLE ARCHITECTURE Isna. *Journal of Architecture, 4*(2), 1–9.
- Stallman, R. K. (2017). From Swimming Skill to Water Competence: A Paradigm Shift. *International Journal of Aquatic Research and Education, 10*(2). <https://doi.org/10.25035/ijare.10.02.02>
- Stallman, R. K. (2019). Crises in the aquatic profession. *International Journal of Aquatic Research and Education, 11*(4). <https://doi.org/10.25035/ijare.11.04.07>
- Sussman, R., & Gifford, R. (2019). Causality in the Theory of Planned Behavior. *Personality and Social Psychology Bulletin, 45*(6), 920–933. <https://doi.org/10.1177/0146167218801363>