



Perceptions of physical education students and teachers on physical education learning

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ABSTRACT

Teachers are required to be aware of their students' perceptions of physical education in addition to their own perceptions of the subject's current teaching experience. The qualitative approach is the approach used in this study with the constant comparison method by coding, categorizing, and finding themes in the interview transcripts. The results of this study were designed to find out students' perceptions of physical education and teaching difficulties in 63 elementary schools in Yogyakarta, Indonesia. A cross-sectional sample included 127 students (1st to 3rd graders of the elementary schools) and their physical education teachers (n = 68). Most students agreed they like sports or physical activities (95.6%). Few students like game-based physical education activities (18.89%). Most teachers showed great perception toward the multilateral movement (70.58%). Students preferred to learn physical education through games and that they believed learning the subject has brought many benefits such as having a stronger and healthier body and increasing their motivation to be an outstanding athlete. Teachers had learned multilateral movement but they were still limited by their low capacity to create engaging learning experiences and manage students in the learning processes.

Keywords: curriculum, elementary school, physical education, teachers' competency, students' perceptions

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INTRODUCTION

Learning Physical activities affect the psychological state (Parfitt & Eston, 2005; Parfitt, Pavey, & Rowlands, 2009). Considering this potential advantage, Indonesia requires students to exercise at least 4 hours a week (Kemdikbud, 2013, p. 3); an important policy considering that several studies have highlighted the need for students to do exercise. For instance, a survey in Temanggung district, Indonesia, shows that 74% of students aged 6 - 9 years had a low fitness level according to the results of the Indonesian Physical Fitness Test (Tes & Tes, 1984); a testing system that includes 30-meter sprint, pull-up, sit-up, vertical jump, and 600-meter run (Sani, 2013).

Primary schools have been consistently supporting students to carry out physical activities to make them healthier and happier (Fairclough & Stratton, 2005). In this case, physical education teachers' role is to improve their competence and knowledge of the subject because their poor competency often results in the lack of opportunities given to students to do physical activities (poor teach-coach teacher) (Domville, et al., 2018; Sloan, 2007). Their competency can be developed through the Teacher Professional Education (PPG), a program aiming at improving teachers' competency in their respective fields of study. This training can be carried out either indirectly or directly in primary schools with general teachers (Jones & Green, 2017), although until now little has been known about whether this has an impact. Besides coaching skills, teachers also need to improve their pedagogical skills such as planning, implementing, and evaluating to be able to motivate and encourage their students to learn and participate in activities (Griggs,

2010). This shows that the teachers' teaching approaches influence the level of students' motivation in physical education.

An oft-cited theory related to motivation in the field of physical education is Self-Determination Theory (SDT) (Ryan & Deci, 2000). SDT distinguishes between controlled motivation and autonomous motivation (Deci & Ryan, 2008). Controlled motivation is derived from external pressures (punishment and gifts) or internal pressures (mistakes and pride) that affect a person's interest in doing certain activities (Deci & Ryan, 2008). By providing good physical education, the emerging controlled motivation can reduce negative feelings such as boredom and unwillingness to progress (Taylor et al., 2010). Autonomous motivation, in contrast, is characterized by voluntary involvement in which students participate in physical education of their own choice. Autonomous motivation is associated with an increase in psychological comfort, interest, and long-term behavior (Ryan & Deci, 2000). It is also related to the increased enjoyment of participating in physical education and increased physical out-of-school activities designed by teachers (Jaakkola et al., 2017).

The most important form of autonomous motivation is intrinsic motivation, which is characterized by internal satisfaction (Ryan & Deci, 2000). Passion is an important part of intrinsic motivation and is associated with pleasure. Intrinsic motivation plays an important role in students' physical activities (Sebire, Jago, Fox, Edwards, & Thompson, 2013) because physical experiences at an early age greatly affect future physical activities (Kirk, 2005). The quality of early learning experiences is not only able to develop physical competence but also crucially increases motivation to participate (Kirk, 2005). In terms of the length of time spent doing sports, perceived athletic competence and enjoyment in sports appear to be lower in girls than in boys. Boys will continue to enjoy physical education when the duration of learning is consistently extended, compared to girls who tend not to enjoy the extra time (Cairney et al., 2012; Jaakkola, Yli-Piipari, Barkoukis, & Liukkonen, 2017). PISA 2018 data also show that athlete is the second most popular profession among boys, only second to being a policeman (OECD, 2019, pp. 43–44). Thus, a positive initial physical education experience impacts the habits of students' physical activities.

Psychological conditions in motivation specifically indicate the application of SDT in increasing students' motivation toward physical education (Sebire et al., 2013). Three basic psychological needs in SDT are competence (the ability to perform tasks effectively), autonomy (perception of self-determination behavior), and acceptance (social acceptance from peers and teachers) (Ryan & Deci, 2000). Teachers and peers have a big influence on the development of students' perception, motivation, enjoyment, and anxiety in conducting physical education (Cox, Duncheon, & McDavid, 2009). Teachers who help students to evaluate themselves and plan their learning activities and who think that they themselves are also learners will provide help, instructions and sense of purpose for their students (Sierens, Vansteenkiste, Goossens, Soenens, & Dochy, 2009). Teachers can support students' autonomy by offering meaningful choices, reducing the use of language that only functions to strictly control students (Reeve & Halusic, 2009), offering relevant structure, support and feedback, socializing clear guidelines and expectations (Sierens et al., 2009) and encouraging, listening, and seeing the perspective of students (Haerens, Aelterman, Vansteenkiste, Soenens, & Van Petegem, 2015).

Students' motivation is formed through the selection of variations in movement learning prepared by the teacher. This variation of learning motion is called multilateral movement. Multilateral movement is a combination of various basic movements and basic movements of sports skills. Basic motion is divided into three main types of motion, namely: locomotor motion, non-locomotor motion and manipulative motion (Johnson, 2006). In the next stage, these movements are given more complexly with a higher level of difficulty and finally the forms of these movements can lead to the basis of sports movements. However, it is necessary to examine the mastery of teachers in designing multilateral-based learning.

There is a lack of research that invites primary school students to participate. This is unfortunate because, as is well known, students' perception is an important factor that increases enjoyment. In addition, physical education (in relation to teacher training programs in Indonesia) gives an experience for students which will in turn influence their motivation. This study used

qualitative methods to investigate specific contexts in which many interesting phenomena occur (Krueger & Casey 2009). This research employed a qualitative approach to investigate students' views of physical education and to find out what physical education students expect from primary schools in Indonesia. In addition, it also aims to investigate teachers' views on the teaching of multilateral movements and the obstacles encountered in teaching it to elementary school students in Indonesia. The bulk of qualitative research on this topic shows that physical education fundamentally supports students' psychology associated with pleasure and freer behavior (Haerens et al., 2015; Sun, Li, & Shen, 2017). Students' perception is an important factor in increasing the level of enjoyment, and how physical education (in relation to teacher training programs in Indonesia) impacts on experiences which will then motivate students.

METHOD

Design

This study employed qualitative methods to investigate specific contexts in which many interesting phenomena occur (Krueger and Casey 2009). The first stage was to conduct a survey of students' perceptions of physical education in 63 elementary schools, both public and private schools, in Yogyakarta. There are 127 participants in Grade 1 to 3 in primary education. The next stage was to carry out in-depth semi-structured interviews in the same month with the students who learn physical education every week. The final stage was to conduct in-depth interviews with 68 physical education teachers (they were teaching for more than four years in elementary school) about their knowledge of multilateral movements, and various problems they were facing in creating interesting and varied learning approaches for students.

The survey item for students' perceptions towards physical education at school was "Do you like physical education at school?". Then, at the interview stage, the students' expectations were asked in regard to physical education with the questions "How should physical education be conducted?" and "What do you expect from physical learning?". After that, two questions asked in interviews with teachers were related to their knowledge about multilateral movements and obstacles they were facing: "Do you know about multilateral motion?" and "What are the problems/ obstacles in carrying out physical education?" Those questions were asked directly in interviews with students and teachers. It turned out that the learning process was less effective in the use of time and learning methods, meaning that the learning process was not utilized optimally. This is evidenced by the acts of disobedience that students performed when doing movement activities. On top all of these, multilateral-based games are expected to be varied in physical education learning in order that the learning becomes more interesting and able to enhance students' motivation to be more enthusiastic in participating in physical education learning.

Before the data were collected, permission was asked from the schools to conduct the research. The researchers explained the purpose and asked for a permission verbally from the principal and physical education teachers to allow us to interview randomly selected students. The semi-structured interviews were conducted in Indonesian language and were audio recorded.

The results of the interviews were included in the data and analyzed by ATLAS.ti 9. The qualitative data analysis by interview transcripts were reviewed and inferred as part of the questions leading to the theme. The inductive method was used as a guide in conducting interviews. The general codes of each investigator were combined into one code book. The codes were then given to all interview data using the code book as the reference to see the reliability of the data, before comparing and discussing them further if there were differences in results.

FINDING AND DISCUSSION

Finding

Researchers successfully conducted surveys in 68 elementary schools in Yogyakarta. The results show that there were only 4.40% of students who did not like sports or physical activities. Respondents' perceptions towards physical education are presented in Table 1.

Table 1. Students' perceptions towards physical education

| Parameter | Respondents (n) | Frequency (%) |
|---|-----------------|---------------|
| Total | 127 | |
| Students who like sports | 87 | 95.6 |
| Students who like game-based physical education | 24 | 18.89 |

Based on the data in Table 1, it shows that 95.6% of students prefer sports than 18.89% of students who like learning sports with games.

A survey of teachers' perceptions towards physical education found that 70.58% of teachers in 63 schools said that they had understood multilateral movement although nearly 30 percent others could not fully explain it. Physical education teachers' perceptions towards multilateral movements are presented in Table 2.

Table 2. Physical education teachers' perceptions towards multilateral movement

| Parameter | Respondents (n) | Frequency (%) |
|---|-----------------|---------------|
| Total | 68 | |
| Teachers who can explain multilateral movements | | |
| Correct | 13 | 19.11 |
| Correct (but with unclear explanation) | 35 | 51.47 |
| Incorrect | 20 | 29.41 |

Qualitative results

Interviews conducted with students and teachers include: 1) Students' expectations towards physical education; 2) Teachers' challenges in carrying out physical education.

Students' expectations towards physical education

The results of the interviews with students in primary schools show that the students' aspirations can be grouped into four: achievements, teachers, learning methods and self-needs. Their first expectation was related to achievement, where the students expected that by attending physical education, they could master one kind of sports (five students wanted to become soccer players; one student wanted to know how to roller skate; two students wanted to be runners; two students dreamed to become basketball and high jump players; two students wanted to be baseball players; four students wanted to master martial arts; and five students wanted to win particular sport events).

In addition, the students' expectations related to their teachers resulted in that three students expected the teachers would be more patient and eager to help them feel more comfortable, while other five students expected the teacher to increase the number of hours spent on exercise so that the games can be finished completely. Furthermore, the students' expectations related to the learning method implied that one student expected to be able to conduct new activities outside classrooms; another one expected a lot of activities outside the classrooms, and six others asked the teacher for more practical activities. Added to that, seven students even expected that when exercising, new and varied equipment would be provided. However, there was also one student expecting that physical education should be just theoretical, meaning that there is not any need to ask the class to do physical activities due to the reluctance to do sweaty activities. The fourth expectation is related to self-needs. Forty-one respondents believed that exercise was supposed to make them healthier and stronger. In this case, two of the students said that it could prevent them from being sick. Another student expected that exercise would make him taller while two students admitted that it could strengthen their relationships with their friends.

Teachers' challenges in carrying out physical education

The interview results show that the most common problems were related to pedagogical competence, including the ability to design, implement, and evaluate learning. The results show that twenty-four teachers had difficulties in measuring students' physical learning achievement. Meanwhile, twenty-three others found it difficult to implement the 2013 curriculum and design lesson plans in accordance with the curriculum. Six teachers were not able to write a detailed

description for the assessment report given to the students related to their outcomes of learning the movements. Then, four teachers were not able to fill in the assessment rubric. Eight teachers had difficulties in providing adequate media for teaching physical education. Furthermore, five teachers were not able to find relevant teaching aids in which three of them saying they were able to teach theories on physical education but encountered problems in conducting practice sessions. The remaining six teachers said they found it hard to be creative in teaching; one of them was not familiar with the technology used.

Constraints regarding professional competence can be seen from their difficulties in managing students' behavior. Fourteen teachers said that they were unable to control students while teaching physical education. Then, two teachers claimed they could not develop learning with a scientific approach, and one teacher mentioned that problems were related to a lack of references for developing game-based learning. In addition, four teachers said that the materials currently available were too general, and two teachers specifically believed that they found difficulties in teaching special needs students due to a lack of relevant teaching experiences. Seven respondents said they did not know how to deal with students' boredom; three of them admitted to ever see their students getting tired quickly. Regarding the issue of social competence, seven teachers were unable to establish good communication with their colleagues when designing theme-based physical education. Constraints on personality competence can be seen from a teacher's confession to often be forgetful about which materials have and have not been taught. To continue, two teachers often conducted sports practices that were not in accordance with the designed lesson plans. Added to those constraints, obstacles outward the teachers' competency, two teachers confessed that they received only a small amount of time for teaching physical education and limited relevant references, making it difficult to teach multilateral movements and other materials especially for students in the 1st to 3rd grades.

Discussion

Every student around the world has almost the same perception and expectation regarding sports. The survey of the interest and motivation of students in the 1st to 3rd grades to exercise reveals that more than half of the students liked to exercise, in contrast to the results of Phillips and Silverman's research on perceptions of elementary school students in the grade 5th and above (Phillips & Silverman, 2015). The results of this study indicate that children were not motivated to exercise because of a monotonous curriculum that includes repetitive materials, heavy emphasis on competition, and overuse of physical fitness tests. This has made students wonder if there were any purposes for doing it all, and why they should do it at all. The second factor behind students' reluctance to exercise is that exercise made them break out in sweat, making them worry that they would lose friends. Third, students considered getting an A for physical education subject an easy task, a condition that teachers must have anticipated quickly to improve the results of the learning process before students became more reluctant to learn the subject. Teachers could deal with this situation by designing interesting and challenging learning strategies. Positive perceptions of physical exercise need to be fostered early on because it will influence their level of motivation in sports in the future.

Teaching children has its own unique challenges. The teachers in this study had several challenges regarding their way of controlling children, keeping them interested and enthusiastic in doing the learning activities. There needs to be a good relationship between physical education teachers with other subject teachers, as well as with the environment, and their own understanding of students (Tsuda, Sato, Wyant, & Hasegawa, 2019). These relationships can help improve teaching success. In addition, physical education teachers' abilities are strongly influenced by their learning experience approach, self-confidence, and competence. Teacher competence influences program design which ultimately impacts children's physical activity outcomes (Cale, Harris, & Duncombe, 2016). School structuring also impacts on increasing physical activities and children's overall fitness (Goh et al., 2014). To optimize children's mental health, they need to do 60-minute exercises every day (Carlson et al., 2013; Füssenich et al., 2016; Janssen & LeBlanc, 2010; Parfitt & Eston, 2005; Ryan & Deci, 2000), not just 4 hours per week. The future of physical education lies in the teachers' professional competence and teaching abilities in developing various

activities to facilitate learning in accordance with the curriculum of physical education (Sloan, 2007). For this reason, it is important to conduct further research about teachers' professional competence and teaching abilities in elementary schools.

The availability of sports equipment also determines the active participation of children in sports activities. The provision of these tools is highly dependent on teacher preparation. Teachers must create methods of teaching physical activities that attract active participation of students (Martin & Murtagh, 2015). Physical activities increase their learning ability, enthusiasm, and motivation (Lisahunter, Abbott, Macdonald, Ziviani, & Cuskelly, 2014).

To understand students, teachers can evaluate and reflect on data about their students' physical development. Both are very important to accommodate the needs of individual students, especially those who have special needs. However, research has found that assessing children in Indonesia has proven difficult. This means that physical education teachers in Indonesia need to be given special training to develop their ability to design, conduct, and reflect on the results of the assessment, which is essential for students' development, especially those with special needs. Peer assessments can be used by teachers to help measure the students' performance. Measurements like these can help teachers assess their students' motor skills more easily (Hopper, 2015).

In addition, another factor, the rigidity of the physical education curriculum, will also determine whether the teacher will teach this subject interestingly or not. Mihajlovic (2019) proposed a flexible curriculum because it can increase the professional competence of teachers, realizing that each of them has a moral responsibility to develop their schools. The 2013 curriculum in Indonesia has been very flexible in terms of the strategies used to improve children's development, which are designed according to students' age. However, teachers need to be assisted in developing their programs to achieve this learning progress. Good teachers always try to develop their teaching techniques because this is a form of professional responsibility. This professional competence is still a big challenge for teachers in Indonesia.

Playing outside the classroom is one way to make students become more active and prevent them from becoming obese, and overweight (McManus, 2000; Robinson & Barrett, 2017). Teachers can invite students to learn the subject by playing outside the classroom so that they are not easily bored and lazy. The ability of teachers to design creative learning helps children learn to love sports which will eventually have an impact on their future performance when doing sports. Game-based physical education is considered to give better results for children in learning (Fry, Tan, McNeill, & Wright, 2010; Normand & Burji, 2019). Teachers in practice must be able to design learning with unique strategies and attract children's interests (Smith, 2011).

Teacher empowerment and peer acceptance can help maintain students' mental health in physical education (Domville et al., 2019; Groves & Laws, 2000). Both can be built on children with a negotiation approach. There needs to be openness between the teacher and students regarding what will be achieved. Teachers, as role models for children, also affect the level of student interest in learning physical education. Palmer et al. (2017) say that the ability to learn physical movements significantly influences a child's external attention. The external attention referred to here is the child's attention to the results of their learning. Children will be interested in doing certain activities or even improving their motor skills if they are shown an interesting example by their teachers or friends. Teachers also play an important role in the implementation of physical education. Children's perception towards physical education develops through conversation and writing (Brazendale et al., 2015; Carroll & Loumidis, 2001; Groves & Laws, 2003). The research results show that children's drawings reflect their preferences in one particular area including sports (Sloan, 2007).

Physical self-perceptions include four dimensions, namely sports competence, body attractiveness, physical condition and physical strength (Cairney et al., 2012; Hagger et al., 1997). Self-perceptions related to sports in physical education include being able to do all kinds of sports, feeling good enough when doing sports, being able to do a variety of new sporting activities, feeling better at their age, choosing to play rather than watching games and sports and considering outdoor games as the best way to exercise. Self-perceptions related to the body include feeling that their bodies look better than their friends, thinking that maintaining good and healthy bodies

is easy, thinking that the body looks good even when wearing pants and t-shirts only, admiring their bodies, thinking to have good-looking bodies, thinking that their bodies look cool compared to others', and feeling happy with their bodies' appearance. Self-perceptions related to conditions include feeling to always have a good fitness level, trying and taking part in energetic training whenever they can, always having fitness and strength, feeling confident when doing fitness exercises, feeling confident during fitness training, and thinking that they can always do more practices compared to their friends. Meanwhile, self-perceptions related to strength include feeling that they are stronger than other people, having stronger muscles than other people at their age, feeling to have been one step ahead when their muscles are stronger, feeling confident when doing activities that involve strength, having good muscles compared to other people, and having the best performance in competitions requiring physical strength.

CONCLUSION

Related to the students' perceptions of physical education, most of them agreed that they like sport, and some of them preferred sports activities carried out in the form of games. They expected that by attending physical education, they could excel in sports. They also expected that the teachers would provide a sense of security and the learning method would provide interesting activities. In addition, they expected that exercise they do in physical education would be beneficial for them. In terms of the teachers' perceptions of multilateral movements, almost 70 percent of them were able to explain the meaning of multilateral movement correctly, while the rest were not. Some obstacles faced by teachers in developing multilateral movements were dominated by those related to pedagogical competence. The other constraints were related to professional competence followed by social and personality competence. In addition, the teachers expected longer classroom hours for physical education since this subject plays important role in students' cognitive and affective development. The findings of this study are expected to be a consideration for policy makers in deciding the lesson hours for physical education at school. In addition, it is necessary to investigate the impact of physical education on sports achievements and other academic achievements.

The results of this study reveal that 95.6% of the elementary school students involved in this study liked sports. However, although 88.2% of the teachers had used multilateral movements in physical activity, they had difficulty in teaching physical education for several reasons. Based on these findings, increasing the competence of physical education teachers is necessary. This is done to match the needs and expectations of children in attending physical education. Schools can collaborate with various parties such as sports science faculty, physical education department, elementary school teacher education from universities and colleges in arranging and managing physical education development programs. Furthermore, Indonesian children's high interest in exercising can be accommodated by increasing the lesson hours of physical education: from 4 hours a week to 60 minutes a day. This is necessary since physical education plays important role in motivating and supporting children's learning at school in many ways.

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