

Publication state: Japan
ISSN: 2189-7603

Publisher: J-INSTITUTE
Website: <http://www.j-institute.jp>

Corresponding author
E-mail: Kangms@jnue.kr

Peer reviewer
E-mail: editor@j-institute.jp

<http://dx.doi.org/10.22471/crisis.2018.3.3.10>

© 2018 J-INSTITUTE

Study on the SAFETY Accidents in Korean Elementary School Physical Education Classes

Park Su-ul¹

Kyungwoon University, Gumi, Republic of Korea

Kang Min-soo^{2*}

Jeonju National University of Education, Jeonju, Republic of Korea

Abstract

This study investigates safety accidents in physical education classes which account for the largest part of the elementary school safety accidents and increasing year by year. This study is carried out in order to provide general understanding of the concept of safety accidents in elementary school physical education classes and to suggest ways to prevent safety accidents in elementary school physical education classes through previous research results and literature data. The purpose of this study is to investigate the concept of safety accidents in elementary school physical education classes based on previous studies and literature data and to suggest measures against safety accidents in elementary school physical education classes after analyzing the actual conditions of safety accidents occur in physical education classes.

The concept of safety accidents in physical education classes collectively refers to all kinds of accidents in relation to physical education classes. Assuming that daily physical educations are resting on elementary school physical education classes, positive experiences in physical education are expected to have great effects on a child even after he/she is grown up. Therefore, physical education classes must be safe and safety management for physical education classes must be in place.

Safety accident occurrences in physical education classes were observed to be increasing every year. It was also found that nearly half of the teachers had experienced safety accidents. Also, male teachers had more incidents of safety accident than female teachers.

Higher rate of safety accident occurrences in elementary school was observed in students in higher grades. Fractures were the most frequent, followed by lacerations, tooth(mouth) injuries, sprains, and concussions. Among all bodily injuries head injury showed the highest number of 9,836 incidents, followed by hands, feet, teeth(mouthy), legs and thoracic abdomen.

Some of the safety accidents in elementary school physical education classes were caused by students' carelessness, failures to follow instructions and mischievous behaviors. And some others were caused by teachers' carelessness, insufficiency in managing children and lack of safety training and facilities and teaching aids that are old, inadequate and nonconforming.

In order to improve safety in elementary school physical education classes, firstly, safety awareness should be raised and training for physical education classes must be continuously made. Secondly, prevention systems such as safety inspections should be strengthened and safety management of facilities should be improved. Thirdly, safe and enjoyable physical education classes should be conducted through implementing new teaching aids.

[Keywords] Elementary School, Physical Education School, Safety, Safety Accident, Safety Training

1. Introduction

It was found that physical education class is the most preferred subjects to elemen-

tary school students among all other subjects[1] and 66.5% of elementary school students like physical education classes[2]. It is reported that elementary school physical education classes is a cornerstone of lifelong

physical education, and positive physical education experiences in elementary school have great impacts on the students even after they become adults. It is consistent with the social atmosphere encouraging lifelong physical education for a healthy life[3]. Therefore, physical education classes must be safe. However, the incidence of safety accidents in elementary school physical education classes is reported to be increasing every year.

Class safety issues in elementary school cause conflicts between parents and schools. From the stand point of teachers who actually run the class at schools, it seems inevitable to avoid or passively participate in physical education classes which can cause conflicts with parents and face various administrative and legal problems. Also, as students who have lost interests in physical education classes due to unexpected accidents and injuries might not participate in physical education classes as actively as before the incidents, it is imperative to find the causes of safety accidents in physical education classes and taking urgent measures against such accidents.

Therefore, this study is conducted to provide general understanding of the concept of safety accidents in physical education classes based on previous studies and literature data and suggest ways to improve safety in elementary school physical education classes.

The purpose of this study is to investigate the concept of safety accidents in elementary school physical education classes based on previous studies and literature data and to suggest measures against safety accidents in elementary school physical education classes after analyzing the actual conditions of safety accidents occur in physical education classes.

2. The Concept of Safety Accidents in Physical Education

Safety can be defined as making human lives comfort and perfect. In the standard Korean dictionary, it is defined as "State in which there is no danger or accidents." [4]

An accident refers to an 'unexpected bad incident' which describes an unexpected condition or state causing damages and losses by interfering the normal course of activities. Such accidents can be caused by a number of sources. These sources can be categorized into three factors of physical, human and environmental[5].

A safety accident can be defined as an accident that can be caused by inadequate safety training, violation of safety regulations and carelessness, causing damages to a person or property.

Sports safety, a concept similar to physical education class safety, means to prevent safety accidents and injuries that may occur in sports activities and cope with them appropriately.

A safety accident in physical education classes can be a small incident in which the children were treated in the school nursing room or a major accident requiring hospitalization due to an unexpected accident during a physical education class apart from various other safety accidents occurring in schools. In other words, safety accidents in physical education classes collectively refer to safety accidents occurring in relation to physical education classes.

Especially, safety accidents in physical education classes have a risk of accidents due to mischievous behaviors made by students while moving to a different classroom, unlike other classes. It can also include safety accidents occurring prior to physical education classes while preparing teaching aids and after the classes putting teaching aids back in the place[6].

Safety accidents in physical education classes can occur by physical movement characteristics or physical contacts with others depending on the contents of classes. Also, insufficient preparatory exercise, lack of performing skills, excessive motivation, disturbance, excessive tension, opponent's foul play, defective equipment or facility, place or climate can cause such accidents[7].

3. Statistics of Safety Accident Occurrence in Elementary Physical Education Class

In March 2015, the Ministry of Education and the Ministry of Culture emphasized the revitalization of school physical education in the 'Major Work Plan for Physical Education in School', and to achieve it, they expanded the business by placing professional instructors in physical education classes and supporting school sports club registrations[8].

However, safety accidents in elementary school physical education classes are on the rise every year. According to the statistics of the School Safety and Insurance Federation, safety accidents in schools occur most frequently during physical education classes. Moreover, the number of safety incidents is increasing every year - 7,724 cases in 2009, 8,414 cases in 2013 and 9,477 cases in 2016 [9].

According to "Heewon Seo(2007)", 46.8 % of teachers have experienced safety accidents, affecting about half of the teachers. Especially, more male teachers were found to experience safety accidents compared to female teachers. In fact, it is reported that the higher grader students experience the more safety accidents and more accidents rates were found among children who show lower physical skills[10].

The most common types of injuries among elementary school safety accidents were fractures, followed by lacerations, tooth injuries, arthritis, and concussion. With 9,368 cases injuries, head was found to be the most frequently injured body part, followed by hands, feet, teeth(mouth), legs and thoracic abdomen.

Some of the safety accidents in elementary school physical education classes were caused by students' carelessness, failures to follow instructions and mischievous behaviors. And some others were caused by teachers' carelessness, insufficiency in managing children and lack of safety training and facilities and teaching aids that are old, inadequate and nonconforming In addition, the Ko-

rea Consumer Protection Board(2006) reported in the result of detailed analysis of the causes of accidents that students were injured by exercise equipment(41.7%) and in particular higher rate of accidents by equipment used in soccer, dodge ball and baseball was reported[11].

4. Improvement Plan for Safety Accidents in Elementary School Physical Education Classes

Elementary school physical education class is the most preferred subject by the students. However, in reality, schools are not operating as expected. The reason can not be precisely known, but it can be caused by difficulties in giving guidances due to the risk of safety accidents, aged facilities, and reduced interest due to accidents. Therefore, it is sought to analyze statistics of safety accidents occurring in physical education classes in order to propose the following improvement measures.

1) Safety awareness and safety training for physical education classes should be continuously carried out.

In order to prevent disasters caused by safety accidents in physical education classes, not only securing safe facilities is necessary but also raising knowledge, functions and attitude about of safety must be carried out. In particular, teachers in the field are highly interested in safety accidents and require safety accident training. Therefore, regular training sessions and instructional materials are required from the school side, and it is urgent to develop and implement safety accident prevention programs for the prevention of school safety accidents by educational administration institutions.

It is also necessary to provide safety training not only to teachers but also to parents and children in order to strengthen prevention promotion activities. It is imperative to continuously conduct safety training which helps students protect themselves from safety accidents and raise safety awareness through continuous training of safety instructions for school facilities and teaching aids.

2) Safety management of physical education facilities should be improved and prevention system including frequent safety inspection should be strengthened.

According to the cause analysis of safety accidents in physical education classes, many accidents occurred due to aged facilities and lack of facilities. Some were caused by sharp and hard material teaching aids or inappropriate use of teaching aids. Playground where physical education class takes place was also identified as a cause of safety accidents. Therefore, education authorities should make efforts to create a better environment, to secure equipment and to establish basic facilities[12].

3) A safe and enjoyable physical education classes should be implemented through new teaching aids for physical education classes.

Another cause of safety accidents in physical education classes can be found in relation with educational environment. Using aged and inappropriate teaching aids has been identified as one of the major causes of safety accidents in physical education classes[13].

Therefore, schools must reinforce support systems based on teaching aids securing plan to deal with aged teaching aids. To prevent using inappropriate teaching aids, teaching knowledge to use teaching aids depending on personal and gender differences.

5. References

5.1. Journal articles

[12] Lee JC. An Analysis on Safety Accidents Occurring during School Life. *Korea Society of Safety Education*, 8(2), 225-237 (2012).

5.2. Thesis degree

[1] Jung HJ. A Comparative Study on Elementary Students' Interest and Preference Levels Regarding Physical Education. Ewha Womans University, Master's Thesis (2017).

[2] Chang HK. An Analysis of Sixth Grade Students' Preference and Its Reason about Physical Education Classes. Seoul National University, Master's Thesis (2002).

[3] Lim KG. Difference in the Perception of Physical Education between Elementary School Boys and Girls. Seoul National University, Master's Thesis (2000).

[5] Lee BI. A Study on the Safety Accidents in Elementary School Physical Education Classes. Seoul National University, Master's Thesis (2000).

[7] Jeong SB. Safety Accident Prevention Activities & Actual Conditions According to Physical Education Teacher's Value Orientation. Korea National University, Master's Thesis (2004).

[10] Seo HW. Research about the Actual Conditions and Prevention Measure of Accidents in Physical Education Classes of Elementary School. Korea National Sport University, Master's Thesis (2007).

[13] Kim CY. The Analysis of the Cause of Negligent Accidents in Elementary School Physical Education Classes. Gyeongin National University, Master's Thesis (2010).

5.3. Additional references

[4] <http://stdweb2.korean.go.kr/main.jsp> (2018).

[6] <http://www.ssif.or.kr/> (2011).

[8] <http://www.sportsafety.or.kr/kssf/html/intro.jsp/> (2016)

[9] <http://www.ssif.or.kr/> (2018).

[11] <http://www.kca.go.kr/index.do/> (2006).

<p>Lead Author Park Su-ul / Kyungwoon University Professor B.A. Keimyung University M.A. Keimyung University Ph.D. Keimyung University</p> <p>Research field - Influence of Exercise Desire of Golf Participants on Fun Factor & Continued Participation Intention, <i>Korea Journal of Golf Studies</i>, 9(1) (2015). - Analysis and Research on Occurrence of Safety Accident in TAEKWONDO Training Center in KOREA, <i>International Journal of Sport</i>, 1(2) (2016).</p> <p>Major career - 2006~2010. Woosuk University, Adjunct Professor - 2017~present. Kyungwoon University, Professor</p>
--

Corresponding Author

Kang Min-soo / Jeonju National University of Education
Professor

B.A. Woosuk University

M.A. Woosuk University

Ph.D. Woosuk University

Research field

- Development of Dance Program for People with Intellectual Disabilities, Jeonju University of Education Elementary Education Research, 2(2) (2016).
- A Study on the Current of Art Instructors Dance Education Jeollabuk-do, Jeonju University of Education Elementary Education Research, 1(1) (2017).

Major career

- 2008~present. Jeonju National University of Education
Professor