

Analysis of Learning Tools Based on Personal and Social Teaching Responsibility to Cultivate Responsibility

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Abstract

This study aims to 1) analyze the feasibility of teaching tools based on the TPSR model in fostering student responsibility during PJOK learning in junior high school, 2) analyze the effectiveness of the TPSR model in fostering student responsibility during PJOK learning in junior high school. This study is a research and development using the steps of 4D, namely: define, design, development and disseminate. The research subjects were 8th grade students of junior high schools in Moyudan District. The trial conducted included two stages, namely a small-scale trial conducted on 32 students and a large-scale trial conducted on 64 students. The research instrument used observation guidelines. The data analysis technique used was quantitative data analysis in the form of the Aiken index, normality prerequisite test and paired sample t-test homogeneity test. The results of the study revealed that: (1) the product of the learning tool to foster personal and social responsibility of 8th grade students produced was feasible by meeting valid and practical criteria. The average V value = 0.95 with high criteria. (2) based on data analysis, the module product effectively fosters personal and social responsibility in junior high school students with the results of the paired sample t test obtaining a value of 0.000 which is less than 0.05, so there is a significant influence of the TPSR model soccer material learning device on personal and social responsibility. Based on the results of the research above, it can be concluded that the TPSR-based soccer game learning device in fostering the value of personal and social responsibility in junior high school students, and is feasible, practical, and effective for use in fostering the value of personal and social responsibility in junior high school students.

Keywords: Responsibility, Social, Students, Junior High School, 4D Model

Introduction

Physical education at the junior high school level has a strategic role in forming students holistically, including physical, cognitive, and social development affective, and social. Physical education is not only oriented towards mastery motor skills and improving physical fitness, but also functions as pedagogical vehicle for instilling social values and character in students planned and sustainable. Cognitive development includes knowledge of facts, concepts, reasoning and problem solving. Affective development includes traits psychological and complete personality elements (Komarudin, 2016).

In the context of 21st century education, strengthening social skills becomes part of important part of the goals of physical education because it contributes directly to physical readiness. Students in social life (Bailey et al., 2009). Social skills such as cooperation, responsibility, empathy, discipline, and mutual respect are essential competencies that can be developed effectively through learning experiences which is meaningful in physical education learning (Adelia, 2024).

One of the physical education materials that has great potential in development of students' social skills is football. As a team sport, Football demands a high level of social involvement through teamwork, communication between members, collective decision

making, and compliance with the rules of the game. The game of football contains many educational values, such as: the affective aspect of football demands that every player plays fair play and respects others. rules made, responsibility for duties (Lee, Hyun Suk, 2021). Then According to Larsen et al., (2021), the cognitive aspect of the game of football is related to knowledge, understanding, application of rules in the game. then Farkash et al., (2022) from the psychomotor aspect, winning in playing football is determined by the conditions playing skills and physical fitness of the players.

Learning through team games allows students to learn managing emotions, resolving conflicts, and developing a sporting attitude in authentic situations (Harvey et al., 2016). However, without an authentic learning design, planned and pedagogically oriented, football activities have the potential to give rise to behavior negative aspects such as individual dominance, conflict between students, and low social responsibility in groups.

Teaching Personal and Social Responsibility (TPSR) is one of the models learning that is theoretically and empirically relevant to integrate development of social skills in physical education. The TPSR model emphasizes learning personal and social responsibility through designed physical activities consciously, progressively, and reflectively. TPSR develops five levels of responsibility, namely respect, participation and effort, self-direction, caring and leadership, and transfer of values to in everyday life. Various studies show that the application of TPSR consistently able to increase personal responsibility, prosocial behavior, and active involvement of students in physical education learning (Hellison, 2011). In addition, the results of Dedi's research (2020: 313) stated that the TPSR research aims to explore students' attitude of responsibility through the TPSR model which is implemented in activityadventure education.

In PJOK learning, there are character values that support it. character building, including: honesty, responsibility, respect for others, fairness play, hard work, friendship, cooperation and never give up, (Soedjatmiko, 2015: 54). Learning Physical Education, Sports and Health is able to develop the domain affective aspects of students such as appreciation, discipline, respect, and responsibility (Wright et al., 2019). Regarding the effectiveness of the TPSR model in changing responsibility in children children, previous studies found that this model was able to foster responsibility responsibility, social skills, development of social status and others (Cryan, M., & Martinek, T. (2017).

Although the TPSR model has been widely recommended in educational literature physical education, its implementation in schools still faces various practical obstacles. One of them the main obstacle is the limited learning tools that are systematically integrating TPSR syntax into teaching materials, including in football learning. Empirical findings show that physical education teachers still tend to focus on mastery of technical skills and performance results, while planning and social skills assessment has not been formulated explicitly and measurably (Gordon & Doyle, 2015). This condition causes the implementation of TPSR in schools to often be partial. and less than optimal.

Researchers conducted a preliminary study with the aim of obtaining information about the model. learning carried out by teachers in teaching Physical Education subjects at school, In this study, the sample was 10 junior high school physical education teachers in Sleman Regency, engineering data collection using questionnaires and interviews. With the following results: (1) The preparation of learning objectives related to attitudes or behavior has been leading to a responsible attitude, 60% stated always, 30% stated often, and 10% said sometimes. (2) The learning model implemented teachers in teaching PJOK use direct learning models (60%), interactive learning models game-based learning (25%), inquiry learning model (15%).

This condition shows that there is a gap between pedagogical potential TPSR-based football learning with learning practices that take place in schools. Therefore, it is necessary to develop learning tools that are capable of integrate the TPSR model completely into football

materials. The device The learning developed needs to include learning planning, activities learning, as well as valid, practical, and effective social skills evaluation instruments so that TPSR implementation can run systematically and sustainably (Casey & MacPhail, 2018).

Some literature also shows the positive effects of using the TPSR Model. towards students' sense of personal and social responsibility at school. Gustine Literature (2020: 55), the results of a literature review of the application of the model Teaching Personal and Social Responsibility(TPSR) in physical education learning in big ball games it can be said that the application of the model has increased, especially in the aspects of aspects of responsibility that students have in carrying out learning.

Based on this description, this research aims to develop and analyzing social skills-based football learning devices using Teaching Personal and Social Responsibility (TPSR) model in Public Schools in the sub-district Moyudan. Evaluation of learning devices is carried out to assess the level of validity, practicality, and its effectiveness in improving students' social skills. Research It is hoped that this will provide a theoretical contribution to the development of studies TPSR-based physical education learning and practical contributions for teachers in implementing meaningful and goal-oriented football learning strengthening students' personal and social responsibility (Metzler, 2017)

Method

Research Design

This research is a Research and Development (R&D) study which aims to develop and evaluate football-based learning tools social skills using the Teaching Personal and Social Responsibility model (TPSR). The development model used is the 4D model proposed by Thiagarajan, and Semmel (in Astuti, et al, 2022) which includes four main stages, namely Define, Design, Develop, and dissemination. The 4D model was chosen because it is systematic and suitable for development. learning tools that emphasize the validity, practicality, and effectiveness of the product. The details are as follows:

1. Definition define

At the define stage, it is used to determine and define the needs and information related to the product to be produced for. In the definition stage there are 5 main steps including:

a. Initial Analysis

This initial analysis aims to determine the application of the Teaching Personal model. and Social Responsibility (TPSR) to support PJOK learning activities in junior high schools in Moyudan District in developing attitudes and responsibility of students. The research method used is descriptive research. qualitative descriptive. The respondents of this study were junior high school physical education teachers in the area Moyudan sub-district as many as 3 people. Purposive sampling technique provisions This research used cluster random sampling. Data collection research using interviews. The results of the study show that learning Physical Education in schools has not yet implemented the TPSR model to foster positive behavior. personal and social responsibility. Learning activities created by physical education teachers still limited to the goal of making students actively move and not yet leads to the application of certain character traits such as personal responsible behavior and social.

b. Student Analysis

student analysis is very important to implement in planning, this analysis carried out by observing the characteristics of students in the form of individual and group abilities. The indicators are as follows following: (1) Carry out individual tasks well. (2) Accept the risks for all actions taken, (3) Not accusing or blaming others without accurate evidence. (4) Returning borrowed items (5) Admitting and apologized for his mistake.

(6) Keep promises. (7) Don't blame others for your own mistakes. (8) Carry out what is said without ordered/requested.

Based on this grid, the researcher compiled questions regarding responsibility. Student answers consist of factual and valence questions of which there are 16 questions with 4 answer choices (Strongly Agree, Agree, Disagree, Strongly Disagree) Agree). The number of samples in this study was 320 students. Technique Data collection using research instruments using questionnaires. Analysis techniques The data used is descriptive statistics with percentages. The results obtained were as follows, the moderate category was 166 students (52%), then in the less category 80 (25%) and the high category 74 students (23%).

The results obtained from the data analysis of junior high school students in the District Moyudan is in the moderate category at 52% and is approaching the less category at 25%.

2. Planning design

The design stages are as follows: (a) preparation of instruments; (b) media selection; (c) format selector; and (d) initial design. The steps in the design phase are detailed as follows :

a. Preparation of Instruments

In this study, the arrangement of football game activities aimed at to foster a sense of personal and social responsibility, as well as design student assessment in implementing the learning.

The basic techniques of football in this research are passing and dribbling. This technique was chosen because the implementation of this technique can be successful if carried out together or with teammates. In addition, players learn that a team's success depends on their ability to work together and rely on each other.

b. Media Selector

The choice of media or devices during development is central to research. Media selection is carried out to determine learning media which is relevant to the characteristics and needs of students. The media is selected to meet the needs of student analysis, conceptual analysis and analysis tasks, and characteristics of target users. So that it can help students in achieving learning outcomes.

c. Format Selector

Format selection is done to ensure that the selected format consistent with the content being studied. The presentation format used adapted to the learning media used. By selecting the format This development is designing learning content, selecting tools and resources. learn, organize and design this learning tool.

d. Initial Design

The initial design is the design of the learning device made by the researcher, given to practitioners, researchers obtain input to be used improve the learning devices before production. Then make revisions after getting suggestions for improvement from practitioners and then continued the design process to the validation stage.

3. Development Stage

The development phase consists of two steps: (a) validation of the device by experts, followed by revision; and (b) development trials.

a. Device validation by experts

Validation by expert lecturers serves to validate learning devices PJOK with the TPSR model before the trial and validation results will be carried out used to revise the initial product. Learning tools that has been compiled and then assessed by expert lecturers in the material and expert lecturers in the media, so that it can be known whether the device is suitable for implementation or not.

b. Development trials

After expert validation, a limited field trial was conducted. to find out the results of applying learning devices in learning PJOK, includes measuring the level of personal and social responsibility of participants students using an observation questionnaire. The results obtained from the observation stage This is a revised learning tool.

4. Dissemination

This stage includes four steps: (a) user analysis, (b) strategy determination, (c) timing, and (d) media selection.

a. User analysis

Usage analysis is the first step in the dissemination stage to find out and determine the users of existing products developed. Product users can consist of individuals or groups consisting of from teachers, teachers' associations, organizations, and so on. Using the sheet

b. Determining strategy

strategies for achieving product distribution for potential product users development.

c. Selection of time

timing of distribution is important, especially for product users in determining whether the product will be used or not

d. Media selection

In the product distribution process, various media can be used to dissemination interests. Media that can be used include: journals education, conferences, magazines

Place and time of research

This research was conducted in the odd semester of the 2024-2025 academic year at SMP N 1 Moyudan and SMP N 2 Moyudan, Sleman Regency, Special Region of Yogyakarta. Location selection research is based on the suitability of school characteristics to research objectives and physical education teachers' readiness to implement learning tools TPSR based.

Research Sample

The sample in this study were students in class 8 A at SMP N 1 Moyudan and class 8 B at SMP N 2 Moyudan with a total of 64 students. This class was chosen because the class It has a large percentage of students who have a responsible character. is heading towards less.

Data Collection and Analysis Techniques

Data collection techniques were carried out through questionnaires and observations to measure students' social skills during the TPSR-based football learning process. The data analysis technique used in this study is quantitative descriptive analysis. which was carried out to analyze the following data:

- a. Data from the results of the student responsibility instrument test to determine the level of validity using content validity from the results of expert assessments of the instrument using the Aiken Index.
- b. Data from the assessment results of material experts and media experts on the draft learning tools TPSR-based football. To prove the level of validity of the learning device TPSR-based football in this study uses content validity, namely opinion from experts and practitioners who have the competencies according to the assessment needs. To prove the level of validity in research using Index analysis Aiken.
- c. Data from the results of product usage trials during initial trials and main field trials. The data analysis technique in this stage uses descriptive data analysis techniques. quantitative with the Aiken Index.

d. Data from the results of the effectiveness test using the one group pretest posttest design method. The data collected is in the form of scores from critical thinking ability assessments and basic motor skills. The effectiveness of the product in this study was tested using paired-sample tests. sample t test to determine the effect of TPSR-based football learning devices towards students. The prerequisite test uses normality test and homogeneity test.

Product Development Plan

This research uses a 4D development model consisting of the define stage, design, develop, and disseminate. At the definition stage, researchers aim to knowing the needs and problems related to PJOK learning. This stage begins with an initial analysis which shows that PJOK learning in junior high schools Moyudan District has not yet implemented the model Teaching Personal and Social Responsibility. The learning that takes place is still focused solely on physical activities and has not been directed at forming attitudes of personal and social responsibility in students. In addition, student analysis was carried out to determine the level of responsibility through questionnaire filled out by 64 students. The results of the analysis showed that most of the participants students are in the medium responsibility category at 52%, and there are still participants students who are in the less than category are 25%.

The planning stage is carried out through the preparation of learning instruments, selection media, format determination, and initial design preparation. At this stage, the researcher designs soccer game activities that emphasize technique passing and dribbling, because of the technique. This requires cooperation between players so that it can foster a sense of responsibility within the team. The learning media and format are selected according to student characteristics so that learning objectives can be achieved effectively and efficiently.

The development stage includes the process of validating learning devices by validators, material experts and media experts, which is then followed by revisions based on suggestions and the input provided. After that, a limited trial was conducted to see the effectiveness

learning tools to foster attitudes of personal and social responsibility learners. The final stage is dissemination, which aims to introduce and disseminating learning products to potential users, such as teachers and organizations education. Distribution is carried out by determining the strategy, time, and media that appropriately, for example through publications in educational journals, seminars or conferences, as well as scientific magazine.

Results and Discussion

Before the field trial, an initial draft of the learning development model TPSR-based soccer game to foster personal and social responsibility for junior high school students, it must first be validated by 6 experts material, and 3 media experts. The results of the validation by material experts and media experts on the initial draft of the model development of TPSR-based soccer game learning to foster personal and social responsibility for junior high school students. Experts materials and media still require additions and reductions to concepts contained in the model.

The results of the validity test are in the range of 0.80-1.00 and indicate a level of validity. high in the TPSR-based soccer game learning development model which consists of 6 games with each Aiken result as in the table below This:

Table 1. Results of the Learning Device Draft Test by material experts

No	Product	V	Category
1	TPSR Model Learning Tools	0,95	Tall

Table 2. Results of the Learning Device Draft Test by media experts

No	Product	V	Category
1	TPSR Model Learning Tools	0,96	Tall

After going through the validation stage, the initial product or draft finally gets approval. recommendations from experts and practitioners for small-scale trials at SMP N 3 Godean. TPSR-based soccer game learning development model for fostering personal and social responsibility of students at SMP N 3 Godean by total of 32 students. Furthermore, the data obtained were analyzed using statistical analysis. Aiken index with each Aiken result as in the table below:

Table 3. Results of the Draft Learning Device Test on a small-scale test

No	Product	V	Category
1	TPSR Model Learning Tools	0,90	Tall

The table above shows the results of the small-scale model trial of the development model. TPSR-based soccer game learning reached 0.9 with the category high, meaning the TPSR-based soccer game learning development model to foster personal and social responsibility, it is necessary to follow up with tests try on a large scale.

Table 4. Input from Practitioners on the Draft Learning Tools in Small-Scale Testing

No	Practitioner Input
1.	In the TPSR model learning tool, the size of the field is adjusted so that teachers can estimate the size that suits the conditions of the field that the school has.
2.	It is necessary to add codes or image captions so that the image is better understood and does not appear busy.

The input from these practitioners is then used as a basis for perfecting the development of the TPSR model learning device model. Then Large-scale trials of game learning development model products TPSR-based football, the results of large-scale trials, were implemented in February 2025. Places for carrying out large-scale trials include SMP N 1 Moyudan and SMP N 2 Moyudan with 64 students. Results of a large-scale practicality test presented in the table below:

Table 5. Results of the Draft Learning Device Test in Large-Scale Testing

No	Product	V	Information
1	TPSR Model Learning Tools	0,91	Tall

From the table above, it is known that the results of the large-scale trial of the Development model Large-scale TPSR-based Football Game Learning reaches figures 0.91 with the High category. In the large-scale trial stage, there was also input from practitioners as follows:

Table 6. Input from Practitioners on the Draft Learning Tools for Large-Scale Testing

No	Practitioner Input
1.	The need for a personal approach to increase the level of responsibility of students at school
2.	Adjustment of field size, because each school has a different field.
3.	The amount of learning time, there needs to be a time span and it should not be too fixed like in the teaching module.
4.	Illustration images need to be given a Movement code category below the image.

The increase in trial results can be attributed to the learning development model. TPSR-based football games on a large scale are increasingly receiving input which makes the product even better. Then, after the results are revised, validation by material experts and media experts, as well as small and large scale trials, the next step is to conduct operational product trials or product effectiveness tests. With the results pretest of students' basic movement behavior before implementing the soccer game model based on TPSR, namely 69. Then the

results of the posttest on students' responsible behavior after implementing a TPSR-based football game model of 75. Based on the results obtained in the pretest and posttest it is known that the results increased from 69 to 75.

Table 7. Normality Test Results

Results	Sig	Information
Pretest- Posttest	0,1300	Normal

Table 8. Results of Homogeneity Test

Results	Sig	Information
Pretest- Posttest	0,400	Normal

Table 9. Results of the Test of the Influence of Football Games on Responsibility

Pretest	Posttest	Sig Value
69	75	0.000

The final product of the soccer game-based learning development model TPSR consists of several main components, namely: (1) conceptual design model development of football game learning that integrates approaches Teaching Personal and Social Responsibility (TPSR); (2) six forms of games that designed as an implementation of the model, including a cone dropping game, deer hunting, rescue ball, dribbling box, and pass-drib test; and (3) assessment sheets for product of the development of a TPSR-based soccer game learning model compiled and packaged in the form of a guidebook. This manual contains explanations complete regarding the conceptual design of the game learning development model TPSR-based football as a reference in implementing learning.

Discussion

The final product is a conceptual design of a learning development model. TPSR-based soccer games show that the integration of responsibility values personal and social can be designed systematically in educational learning physical. This design emphasizes the relationship between learning objectives, TPSR syntax, game activities, and social skills evaluation, making it easier for teachers understand TPSR as a structured pedagogical framework, not just an approach value. This finding is in line with the views of Hellison and Walsh (2002) and Casey and MacPhail (2018) who emphasized the importance of model-based learning design for ensure consistent internalization of the value of responsibility in physical education. Thus, the conceptual design developed has the potential to become a guideline applicable and contextual learning at junior high school level.

The results of the development of six forms of games: dropping cones, deer hunting, rescue ball, dribbling box, and passrib test show that the soccer game activity can be modified to stimulate social skills explicitly. Each games are designed not only to train technical skills, but also to foster cooperation, communication, responsibility, and compliance with rules. This finding strengthens the research results of Harvey et al. (2016) which stated that Team sports, when designed with clear learning objectives, have the potential great importance in developing prosocial behavior and social values in education physical.

Analysis of the game implementation shows the active involvement of participants. education and increasing social interaction during the learning process. Game activities TPSR-based encourages students to support each other, share roles, and complete tasks. tasks collectively, which reflects the achievement of the initial level of TPSR, especially respect as well as participation and effort. In addition, some games also open up opportunities development of higher levels of TPSR, such as self-direction and caring, through demands for

independent decision-making and concern for team members. These findings consistent with the research results of Hemphill et al. (2015) which showed that TPSR effective in increasing personal and social responsibility through physical activity structured.

The existence of a product assessment sheet packaged in the form of a guide book make an important contribution to the consistency of model implementation and objectivity social skills evaluation. TPSR-based assessment indicators enable teachers carry out a more focused and comprehensive assessment of students' social behavior, not limited to the aspect of presence or technical skills alone. This is in line with Richards and Gordon's (2017) view which emphasizes that the effectiveness of the model physical education learning is very much determined by the harmony between planning, implementation, and evaluation. Overall, the integration of conceptual design, activities games, and assessment instruments make a model for learning soccer games TPSR-based is conceptually feasible, practical to use, and potentially effective in improve the social skills of students in junior high school.

Conclusion

Based on the results of the development and evaluation that has been carried out, the device physical education, sports and health (PJOK) learning based on Personal Teaching and Social Responsibility (TPSR) was declared suitable for use in learning at junior high school level. The suitability of the device is demonstrated through its suitability learning design with student characteristics and device capabilities in systematically integrate the values of personal and social responsibility into PJOK learning activities. Thus, the developed device has potential as an alternative learning oriented towards strengthening the character of participants educate.

In addition, TPSR-based PJOK learning devices have also proven to be effective in fostering personal and social responsibility in class VIII middle school students First. The effectiveness of the device is reflected in the increased involvement of students in learning, cooperative behavior, compliance with rules, and mutual respect during the learning process. These results show that the application of the learning model TPSR in the PJOK learning tool not only supports the achievement of goals learning motor skills, but also contributes significantly to character development and social skills of students.

References

Asmawi. A., & Alam M., S. (2024). Qualitative research: Understanding its underlying philosophies. *Forum for Education Studies* 2024, 2(2), 1320. <https://doi.org/10.59400/fes.v2i2.1320>

Bailey, R., Armour, K., Kirk, D., Jess, M., Pickup, I., Sandford, R., & BERA Physical Education and Sport Pedagogy Special Interest Group. (2009). The educational benefits claimed for physical education and school sport: An academic review. *Research Papers in Education*, 24(1), 1-27. <https://doi.org/10.1080/02671520701809817>

Casey, A., & MacPhail, A. (2018). Adopting a models-based approach to teaching physical education. *Physical Education and Sport Pedagogy*, 23(3), 294-310. <https://doi.org/10.1080/17408989.2018.1429588>

Cryan, M., & Martinek, T. (2017). Youth sport development through soccer: Anevaluation of an after-school program using the TPSR model. *The Physical Educator*, 74(1), 127-149. doi: 10.18666/TPE-2017-V74I1-6901

Dedi Supriadi. (2020). Peningkatan tanggung jawab: teaching personal and social responsibility dan aktivitas adventure education. *Jurnal Sportif: Jurnal Penelitian dan Pembelajaran*, 6(2), 304-315

Farkash, Ebraheem., Zayed, Wadii., & Bali, Naila. (2022). The effect of using the two competitive teaching styles and stations on learning some basic football skills for

physical education students. *Physical Education of Students*, 26(6), 308-315. doi: 10.15561/20755279.2022.0605

Gordon, B., & Doyle, S. (2015). Teaching personal and social responsibility and transfer of learning: Opportunities and challenges for teachers and coaches. *Journal of Teaching in Physical Education*, 34(3), 479-495. <http://dx.doi.org/10.1123/jtpe.2013-0184>

Gustine, A. (2020). Penerapan model teaching personal and social responsibility (TPSR) dalam pembelajaran pendidikan jasmani dalam permainan bola besar. Skripsi, Universitas Pendidikan Indonesia, 2020. http://repository.upi.edu/58761/7/S_SDp_1607503_Title.pdf

Hellison D. (2011). Teaching responsibility through physical activity (3th ed.). Human Kinetics, University of Illinois at Chicago

Hemphill, M. A., Templin, T. J., & Wright, P. M. (2015). Implementation and outcomes of a responsibility-based continuing professional development protocol in physical education. *Physical Education and Sport Pedagogy*, 20(4), 398-419. <http://dx.doi.org/10.1080/13573322.2012.761966>

Harvey, S., Kirk, D., & O'Donovan, T. M. (2016). Sport education as a pedagogical application for ethical development in physical education and youth sport. *Physical Education and Sport Pedagogy*, 21(1), 1-17. <http://dx.doi.org/10.1080/13573322.2011.624594>

Komarudin. (2016). Membentuk kematangan emosi dan kekuatan berpikir positif pada remaja melalui pendidikan jasmani. *Jurnal Pendidikan Jasmani Indonesia*, 12(2), 67-75.

Larsen, Malte Nejst., Elbe, Anne-Marie., Madsen, Mads., Madsen, Esben Elholm., Ørntoft, Christina., Ryom, Knud., Dvorak, Jiri., & Krustrup, Peter. (2021). An 11-week school-based 'health education through football programme' improves health knowledge related to hygiene, nutrition, physical activity and well-being—and it's fun! A scaled-up, cluster-RCT with over 3000 Danish school children aged 10-12 years old. *British Journal of Sports Medicine*, 55 (16), 906-911. DOI: 10.1136/bjsports-2020-103097.

Lee, Hyun Suk., & Lee, Junga. (2021). The effect of elementary school soccer instruction using virtual reality technologies on students' attitudes toward physical education and flow in class. *Sustainability* (Basel, Switzerland), 13 (6), 3240. doi: 10.3390/su13063240.

Metzler, M. W. (2017). Instructional models for physical education (3rd ed.). New York: Routledge. <https://doi.org/10.4324/9781315213521>

Richards, K. A. R., & Gordon, B. (2017). Socialization into physical education teaching: Acculturative factors shaping teacher beliefs and practices. *Journal of Teaching in Physical Education*, 36(4), 1-20. DOI:10.1080/18377122.2016.1272424

Soedjatmiko. (2015). Membentuk karakter peserta didik sekolah dasar menggunakan pendidikan jasmani dan olahraga. *Journal of Physical Education, Health and Sport*, 2(2), 57-64.

Wright, Paul M., R. Richards, K. Andrew., Jacobs, Jennifer M., & Hemphill, Michael A. (2019). Measuring perceived transfer of responsibility learning from physical education: Initial validation of the transfer of responsibility questionnaire. *Journal of Teaching in Physical Education*, 3 (4), 316-327.