








The effect of student-centred learning approaches in physical education on positive youth development

^{1,2abcde}Aris Risyanto* , ^{1ad}Herman Subarjah , ^{1ad}Amung Ma'mun , ^{1bd}Nuryadi , & ^{3d}Indra Prabowo 

¹Department of Sports Education, Postgraduate Programme, Universitas Pendidikan Indonesia, Bandung, Indonesia

²Department of Physical Education, Faculty of Teacher Training and Education, Universitas Subang, Subang, Indonesia

³Department of Physical Education, Faculty of Teacher Training and Education, Universitas Majalengka, Majalengka, Indonesia

Received 09 October 2023; Accepted 18 December 2023; Published 08 January 2024



ABSTRACT

Background Problems: Recognising the pivotal role of holistic development and positive youth development in empowering young individuals, physical education emerges as a crucial component for fostering comprehensive growth in children. **Research Objectives:** This study seeks to provide valuable insights to enhance the implementation of physical education programmes in schools, aiming to facilitate positive growth among teenagers in both physical and psychosocial dimensions. **Methods:** Employing a play-teach-play (PTP) treatment, this research engaged students from Public Junior High School in Sidamulih. The study population comprised four classes of class VIII students, totaling 94 participants. The students were divided into two groups: Class VIII B (experimental group, n = 23) and Class VIII D (control group, n = 23). These groups were given the PTP treatment, and the independent sample t-test was used to compare changes in Positive Youth Development (PYD) between the two groups at the statistical level. **Findings/Results:** The study revealed a significant difference in PYD growth between teenagers participating in the play-teach-play programme and the control group. These results underscored the efficacy of the PTP strategy in promoting healthy teenage development within the realm of physical education. **Conclusion:** This research provides compelling evidence supporting the effectiveness of the play-teach-play (PTP) approach in fostering positive youth development (PYD) during adolescence. The data emphasises the impactful role of student-centred learning methods in adolescent development. The study's findings underscore the importance of incorporating such approaches into instructional strategies to empower students to achieve their academic potential fully. This contributes significantly to the evolving body of knowledge and practices in the field of education.

Keywords: Learning approach; student centered; physical education; positive youth development

*Corresponding Author

Email: arisrisyanto@unsub.ac.id



[10.25299/es:ijope.2024.vol5\(1\).14532](https://doi.org/10.25299/es:ijope.2024.vol5(1).14532)

Copyright © 2024 Aris Risyanto, Herman Subarjah, Amung Ma'mun, Nuryadi, Indra Prabowo

How to Cite: Risyanto, A., Subarjah, H., Ma'mun, A., Nuryadi., & Prabowo, I. (2024). The effect of student-centred learning approaches in physical education on positive youth development. *Edu Sportivo: Indonesian Journal of Physical Education*, 5(1), 10-21. [https://doi.org/10.25299/es:ijope.2024.vol5\(1\).14532](https://doi.org/10.25299/es:ijope.2024.vol5(1).14532)

Authors' Contribution: a – Study Design; b – Data Collection; c – Statistical Analysis; d – Manuscript Preparation; e – Funds Collection



INTRODUCTION

Positive youth development (PYD) courses aim to impart transferable life skills to contexts outside the classroom. The achievement of these goals is realised through the development of positive youth development (Burkhard et al., 2021). Youthful individuals nowadays are growing up in a world full of openings and challenges. To assist bolster youth as they seize these openings and meet these challenges, families, teachers,

community organisations, and approach creators can turn to positive youth improvement (PYD) standards and hones (Ardoin et al., 2022). Currently, every teenager needs to have a good cognitive, social, and emotional understanding for the provision of life independently. Therefore, it is necessary to have a learning approach that places adolescents in learning situations to solve real learning problems so that they will support PYD (Worker et al., 2019).

These programmes value life lessons including goal setting, emotional control, self-esteem, morality, and perseverance. Socially disadvantaged children who participate in PYD programmes may benefit from difficult and unpleasant experiences that help them build and impart life skills (Newman et al., 2022). Developing quality of life, including competence, self-confidence, connection, character, and compassion, through sport is a key component of sport-based PYD programmes (Herbison et al., 2019). It has been proven that effective sports-based youth development (SBYD) programmes help young people learn life skills and encourage their application in daily activities (Jacobs & Wright, 2021) and in developing life skills (Newman, 2020). The positive effects of exercise programmes on youth psychosocial development, including academic success, teamwork, leadership, and goal setting, have been documented by research (Malete et al., 2022), aiding functional recovery, increasing physical activity levels, and increasing social connectivity in First Episode Psychosis (FEP) recovery efforts (Brooke et al., 2022). Young people who take part in sport-based life skills programmes experience successful outcomes (Williams et al., 2022). Meeting participants' basic psychological needs has been shown to be a mediating factor in the relationship between autonomy-supportive coaching behaviours in youth sport and the development of a number of life skills (Cronin et al., 2022). Organised sports offer an environment to foster positive youth development, and initiatives to encourage physical and psychosocial excellence have been undertaken (Bruner et al., 2021). To understand the utility of these programmes in developing life skills, more research is needed (Kirchhoff & Keller, 2021).

Growing adolescents benefit from student-centred physical education instruction. Adolescence is a vulnerable time for the onset of mental illness, and the world is increasingly paying attention to the need to build strong coping mechanisms (Lang et al., 2017). The task of physical education programmes is to foster enjoyable experiences, help students improve their physical abilities, increase their self-confidence (Treadwell, 2013), and meet students' psychological needs by increasing self-motivation (Washburn et al., 2016). Physical education encourages children to take an active role in their own education, and the importance of students participation and involvement in the learning process is emphasised through teacher teaching standards. Student-centred physical education teaching can improve athletic prowess, motor skills, and physical fitness (Estevan et al., 2021). Additionally, it improves cognitive abilities that are important for academic success, such as executive function and self-regulation (Birri et al., 2020). Teamwork, respect, and interpersonal interactions with peers are fostered through student-centred learning in physical education (Naul et al., 2020). Adolescents' attitudes towards physical exercise are shaped by these strategies, which also support healthy living (Rudd et al., 2019). Student-centred physical education learning, which addresses the physical, cognitive, and social aspects of adolescent growth, is critical to their positive development.

The teaching strategies used in physical education are just one of many factors that must be considered in education if it is to support the positive development of adolescents. Implementing a training cycle that pays attention to students' psychophysiological and psychological-social qualities can help adolescents develop their potential (Smyshlyaev et al., 2023). The PASS (Physical Activity and Social Skills) physical

education programme was created specifically to help preschool children acquire social emotional skills, provide opportunities for physical activity, and develop their basic motor skills (Phillips et al., 2023). Combating hate speech and encouraging the development of young people require a learning environment that is inclusive and free of discrimination in the classroom. This can be achieved by combining environmental assets, such as the atmosphere in the classroom, with personal assets, for example, social skills (Wachs et al., 2023). Schools and communities that encourage physical activity can help young people grow positively in social and emotional learning. However, there is a need to close the gap between the application of research findings and practice (Wright, 2023). For school-aged children and adolescents, participating in sport, especially when combined with non-sport activities, appears to foster psychosocial development and the transfer of skills and values to other areas of life (Almeida et al., 2023).

Daily physical activity levels among adolescents can be significantly increased through physical education (PE) (Tambalis, 2022). Compared with days without sports courses, school days with sports programmes have higher levels of physical activity (Sanz-Martin et al., 2021). Additionally, PE offers opportunities for academic success and social relationships, improving cognitive functioning, social well-being, and self-esteem (Kalajas-Tilga et al., 2020). Additionally, by fostering autonomy, which increases intrinsic motivation and moderate to vigorous physical activity (MVPA) in adolescents, PE can have a positive impact on their psychological well-being (Weedon et al., 2022). Physical education should concentrate on individual needs, offer support and challenge, and apply pedagogical tools based on motor learning and control theory to promote good growth. Increasing the amount of sport offered in schools can help prevent future generations from being less fit and healthy.

While previous research has acknowledged the significance of physical education in the psychosocial development of teenagers (Xiangjialin, 2023), our study fills a specific need by examining the efficacy of a new programme or teaching style, addressing the pressing demand for evidence-based practices. Previous research has demonstrated the beneficial effects of physical education on self-esteem, social functioning, and cognitive functioning (Batista et al., 2022; Steffansson & Pehkonen-Elmi, 2022). Nonetheless, the limited practical implementation of these results highlights the necessity of bridging the research-practice gap. Our study aims to provide important insights to improve how physical education programmes are implemented in schools, promoting teenagers' positive growth in both physical and psychosocial aspects.

We can create more efficient and robust educational programmes to build competitive, skilled, and holistically healthy young people if we have a better understanding of the impact of student-centred learning methods in physical education. The aim of this research is to develop competence, self-confidence, connection, character, and awareness through physical education using the play-teach-play model. Besides, this study aims to shed additional light on this line of inquiry, which is important in the modern educational environment, and to inspire the reader.

METHOD

The aim of this research is to measure the values of sports development in a group of students who were deliberately given treatment in the form of play-teach-play (see Table 1). The method used in this research was an experimental method that aims to investigate possible cause-and-effect relationships and try treatment in the experimental group using a quasi-experimental control group pre-post test design (Siedlecki, 2020). The treatment given was the content of competence, self-confidence, connection, character, and caring, which were tested by two experimental groups.

Participants

The population came from class VIII students at Public Junior High School in Sidamulih, totaling 4 classes consisting of 94 students. In this study the sampling technique used was cluster random sampling. Here the researcher carried out random assignment to take one experimental class and one class for the control class. The students involved in this research were 2 classes consisting of 23 people in class VIII B and 23 people in the control class, class VIII D. So the total number of samples in this study was 46 people.

Instrument

The instrument used in this study uses the PYD instrument after being adjusted (Lopez et al., 2015). Regarding PYD, it is divided into 5 indicators, which include aspects of competence, confidence, connection, character, caring, and compassion (Lopez et al., 2015). For student learning, PYD questionnaire grids can be seen in Table 3. The questionnaire rating scale uses a Likert scale with five alternatives (Joshi et al., 2015).

Table 1. The Play-Teach-Play (PTP) Learning Approach Programme based on the Curriculum in Indonesia

3rd meeting	Material/Learning Focus
1	Learning materials for soccer games
2	Learning materials for volleyball games
3	Learning materials for basketball games
4	Learning materials for softball
5	Learning materials for middle distance running
6	Learning materials for javelin throwing
7	Learning materials long jump
8	Learning materials pencak silat
9	Learning materials physical fitness
10	Learning materials floor gymnastics
11	Learning materials rhythmic gymnastics
12	Learning materials freestyle swimming

Table 2. Scenario examples of the Play-Teach-Play (PTP) Learning Material Approach

Scenario	PTP	Time
Introduction	a. Pray	20 minute
	b. Students line up (not in groups)	
	c. Absence	
	d. Apperception	
	e. Warmup	
Core	a. Play 1: <ul style="list-style-type: none"> • Students observe the goals, rules, and playgrounds explained by the teacher (either in the form of videos or demonstrations) • Students are given the opportunity to ask questions, discuss, and divide into groups to play games • Exploratory students play games between 10-15 minutes • Students stop playing 	50 minute
	b. Teach <ol style="list-style-type: none"> 1.Improve understanding of movement skills: <ul style="list-style-type: none"> • Discussion, identification, and problem formulation in each group • The discussion formulates and determines several alternative answers 2.Drill movement skills: <ul style="list-style-type: none"> • Try and practice various movements in response to the problems that arise 	

Scenario	PTP	Time
	<ul style="list-style-type: none"> Agree on a move as the answer will be displayed 	
	c. Play 2: <ul style="list-style-type: none"> Practice the results of discussions and exercises in games against other groups 	
Closing	a. Cooling b. The teacher evaluates the learning material provided and provides solutions to solve problems that arise. c. Pray	10 minute

Table 3. PYD Grid

Variable	Indicators	Definition	Potential Items
Positive Youth Development	Competence	Member will illustrate abilities freely within the ranges of social, cognitive, scholastic wellbeing, and work	<ul style="list-style-type: none"> I appreciate school I am great at PE I like learning I get great grades
	Confidence	Members will create self-worth, positive self-esteem, and a sense of possession	<ul style="list-style-type: none"> Feeling glad Being great at certain exercises Being well known or being enjoyed by peers
	Connection	Members will create important connections with Bridge and the expansive community	<ul style="list-style-type: none"> I have grown-ups I can conversation to My companions bolster me I know how to form friends I just like the staff at Bridge
	Character	Members will illustrate authority and civic engagement with a center on positive behaviors and future objectives	<ul style="list-style-type: none"> Being able to characterize right from off-base; capacity to overcome disappointment and arrange for end of: the I battle with other kids I get into inconvenience I take after the rules
	Caring and Compassion	Members will see exterior themselves and create the idea of human rights and regard for the environment and all living things	<ul style="list-style-type: none"> I offer assistance out neighbors I offer assistance out grown-ups I offer assistance out other kids I stand up for my companions

Data Analysis

The calculation of the instrument validity test was carried out in three stages with the goal of increasing the level of validity. The results of the final stage of the instrument validity test can be seen in Table 5. The validity calculation was carried out several times until each test item was completely valid. Based on the calculation results, 23 test items were declared valid and represented five indicators of PYD, so these test items were used as research instruments. The results of calculating the reliability test of the instrument used the formula Cronbach's alpha of 0.908, or 90.8%, or more than 0.60, or 60%, mean that this instrument was reliable.

Data analysis techniques used mean and standard deviation as statistical descriptions were calculated. The normality test is a prerequisite test to determine whether the data is normally distributed or not. The research significance test is to determine whether PTP has a positive effect or not by using a paired two-sample means t-test. All calculations are calculated with the help of IBM SPSS Statistics 18 (Ho, 2014).

RESULTS AND DISCUSSION

Finding the difference in the increase in Positive Youth Development (PYD) between two groups—one exposed to the Play-Teach-Play (PTP) programme (experimental group) and the other not exposed to this programme (control group)—was the main goal of the analysis carried out using the independent sample t-test. Initially, tests for homogeneity and normality were performed to evaluate the homogeneity of variances and the data distribution, respectively.

The two groups—the integrated PTP programme group and the non-integrated PTP group—showed normal data distribution, it means that the data in the groups did not significantly deviate from the normal distribution, according to the results of the normality test using the Kolmogorov-Smirnov test ($p > 0.05$). Additionally, Table 4's homogeneity of variance test findings demonstrated that the non-integrated PTP group and the groups took part in the integrated PTP programme had homogeneous variances ($p > 0.05$). These results validated the assumption of homogeneity of variance in the statistical analysis, which showed that the variations between the two groups were not statistically different. As a result, the group's ability to meet fundamental statistical analysis assumptions increased the dependability of the study result interpretation. Results for normalcy showed that extreme values did not significantly skew the data, and homogeneity of variance gives assurance that changes between groups were due to treatment effects rather than variations in baseline variance. Confidence in the outcomes of the statistical analysis performed in this study increased if these presumptions were met.

The results of the independent sample t-test between the integrated PTP group and the non-integrated PTP group are shown in Table 6. The integrated PTP group's mean PYD score was 216.93 ± 7.75 , whereas the non-integrated PTP group's mean score was 189.47 ± 7.18 . A significance score of 0.00 (< 0.05) indicated that the alternative hypothesis (H1) was accepted and the null hypothesis (H0) was rejected. This lent credence to the finding that there was a noteworthy distinction in the rise in PYD between adolescents who participated in the Play-Teach-Play programme and those who did not.

Table 4. Normality Test Calculation

Variable	Kolmogorov-Smirnov ^a	Probability	Information
Integrated PTP	0,931	> 0.05	Normal
Non-integration of PTP	0,881	> 0.05	Normal

Table 5. Homogeneity Test Calculation

Variable	P-value	Probability	Information
Integrated PTP	0,391	> 0.05	Homogeneous
Non-integration of PTP	0,560	> 0.05	Homogeneous

Table 6. Independent Sample T-Test Results

Data Group	N	$\bar{x} \pm Sd$	Significance	Notes
Integrated PTP	23	216.93±7.75	0.00	0.05
Non-integration of PTP	23	189.47±7.18	0.00	0.05

Consequently, the outcomes attested to the Play-Teach-Play (PTP) programme's efficacy in promoting positive youth development in the setting of physical education. The statistical analysis, which emphasises the significant influence of the PTP programme in promoting PYD among adolescents, lends support to the acceptance of the research hypothesis.

The application of PTP with competency, self-confidence, connection, character, and caring content in its development is better than PTP without competency, self-confidence, connection, character, and caring content. Therefore, a content-strengthening programme for competence, self-confidence, connection, character, and caring is implemented in the physical education learning model. This research provides important implications for the development of physical education learning in schools so that students have the ability and potential to complete their academic assignments. Apart from that, curriculum development and learning processes must be adapted to students' needs based on the current situation and circumstances. Regarding sports development aiming to positively develop youth as a goal, there are results of coaching on the Wave (CotW) research as an updated model. YSL will be better equipped to develop deliberate training practices to facilitate sports becoming PYD (Newman et al., 2018).

The play-teach-play (PTP) learning model has stages in use, which include formulating tactical problems, starting learning in the form of games, identifying play-teach-play (PTP) and the skills of each student, asking students questions related to the learning material, and providing communication that is clearly appropriate to the task: situational tasks in learning, observing, and providing feedback, evaluation, and assessment (Metzler, 2017). This learning focuses on achieving learning targets by providing training on competency, self-confidence, connection, character, and caring content, which are closely related to PYD targets. This student-oriented learning approach can be applied to learning techniques. Learning techniques are the steps that teachers take during learning to deliver learning material (Yulianto et al., 2023).

The learning used is a student-centred learning model, a play-teach-play (PTP) learning model, namely a play-teach-play learning scenario. In this way, children gain additional experience to do other activities. Through games, children can learn skills related to basic life skills, such as communication skills, socialising, negotiating, and working in teams (Thompson et al., 2018). Thus, learning and playing have an equally important role, and the two are interrelated (Coates & Pimlott-Wilson, 2019). The game is very suitable for use as a learning medium for teenage children's education. A good game is one that generates a lot of benefits. After playing the game without realising it, there are many benefits. Good games must also be ensured that they are safe for children, make children relax, and do not increase tension.

At the learning stage, the first stage is that each student in the group makes a presentation related to the material provided by the teacher. The presentation begins with describing a new idea or ability, followed by a graphic depiction of the work at hand and actions in a real game to ensure knowledge. The second stage is structured practice, starting with guiding groups of students with movement tasks in games, then having students respond with questions, and ending with students in their groups evaluating mistakes and then reinforcing correct practice. The third stage is practice under the teacher's supervision, where students practice independently in their groups through real-game activities, and then the teacher provides feedback in the form of instructions. The fourth stage is independent practice.

Traditionally, coaches, instructors, and students have given less attention to the importance of sport values, which provide benefits for everyone's growth when participating in sports activities. Intentionally organised programmes outperformed unstructured programmes on the quality of positive youth development activities, with purposeful sports scoring much better in some cases (Bean & Forneris, 2016). The findings of this research indicate that sport may be fostered through a well-planned leadership program.

It is critical to acknowledge any shortcomings or restrictions in the research. The study has had a restricted sample size or concentrated on a particular demography, for example, which could have affected how broadly the findings could be applied. Although the study backs up the PTP model's effectiveness, various interpretations could consider the effects of other factors or the differences in teaching approaches on PYD. Subsequent studies might examine the PTP model's long-term impact on PYD, consider a variety of demographics, or look at the application of comparable programmes in various educational contexts.

CONCLUSION

Based on these results, PYD is significantly impacted by a student-centred approach to physical education, such as the PTP programme. This research has ramifications beyond the local setting and offers insightful information for creating classroom instructional strategies. This method gives pupils the tools and potential to finish their academic assignments successfully. Additionally, the curriculum and instructional strategies must be adaptable and sensitive to the particular requirements that students may have in various contexts. Coaches can benefit from the sports education paradigm exemplified by the PTP programme in addition to students. This method can be used in non-formal educational institutions, such as sports clubs and elementary schools, as well as in school settings. It can also be used in university settings. In summary, the study's goals have been effectively met, and the conclusions reached are consistent with the findings that have been presented. To promote good teenage growth and improve overall learning experiences, future educational practices consider using student-centred approaches, like the PTP programme.

This study's conclusions might only apply to some teenage populations because it concentrated on a particular group or region. A short observation duration may have constraints for PYD readings. It is worthwhile to consider using longitudinal study designs in subsequent studies to monitor long-term progress. Subjectivity in the PYD measurement technique may be limited. Future research can consider a combination of quantitative and qualitative methodologies to obtain a deeper understanding. Uncontrollably changing external circumstances like the home environment, the state of the economy, or shifts in educational policy may impact research findings. Thus, the hypothesis is tested and can be accepted. So the research reveals that a student-centred physical education learning approach has an effect on positive adolescent development (PYD). This research provides an important impression for the development of learning in schools so that students have the ability and potential to complete their academic tasks. In addition, the development curriculum and learning process must be adapted to the needs of students based on the current situation and circumstances. The sports education paradigm is good for students and coaches, and it may be used in sports clubs as well as informal educational institutions spanning from elementary school to university level.

ACKNOWLEDGEMENTS

Thank you to all parties who have helped complete this research. Especially to the promoters, co-promoters, and members who have dedicated their time to guiding researchers and to all students of Public Junior High School in Sidamulih, Pangandaran Regency, West Java.

CONFLICT OF INTEREST

All authors declare that there is no conflict of interest in this manuscript.

REFERENCES

- Almeida, L., Dias, T., Corte-Real, N., Menezes, I., & Fonseca, A. (2023). Positive Youth Development Through Sport and Physical Education: a Systematic Review of Empirical Research Conducted with Grade 5 to 12 Children and Youth. *Physical Education and Sport Pedagogy*, 1–27. <https://doi.org/10.1080/17408989.2023.2230208>
- Ardoin, N. M., Bowers, A. W., Kannan, A., & O'Connor, K. (2022). Positive Youth Development Outcomes and Environmental Education: a Review of Research. *International Journal of Adolescence and Youth*, 27(1), 475–492. <https://doi.org/10.1080/02673843.2022.2147442>
- Batista, M., Ramos, L., Santos, J., Serrano, J., Petrica, J., & Honório, S. (2022). Exercise Influence on Self-Concept, Self-Esteem and Academic Performance in Middle-School Children. *Revista Romaneasca Pentru Educatie Multidimensionala*, 14(4 Sup.1), 369–398. <https://doi.org/10.18662/rrem/14.4sup1/678>
- Bean, C., & Forneris, T. (2016). Examining the Importance of Intentionally Structuring the Youth Sport Context to Facilitate Positive Youth Development. *Journal of Applied Sport Psychology*, 28(4), 410–425. <https://doi.org/10.1080/10413200.2016.1164764>
- Birri, M. S., Hariyanto, A., & Tuasikal, A. R. S. (2020). Development of Traditional Sport Game Model “Bentengan” for Student’s Physical Fitness in Sports and Health Physical Education Learning (Case Study on Class IV MI Students of Maduran Lamongan District). *Budapest International Research and Critics in Linguistics and Education (BirLE) Journal*, 3(3), 1614–1622. <https://doi.org/10.33258/birle.v3i3.1251>
- Brooke, L. E., Gucciardi, D. F., Ntoumanis, N., Chapman, M. T., Lines, R. L. J., Perry, Y., Gilbey, D., Formby, T., Phillips, T., & Lin, A. (2022). Enhancing Functional Recovery for Young People Recovering from First Episode Psychosis Via Sport-Based Life Skills Training: Outcomes of a Feasibility and Pilot Study. *Health Psychology and Behavioral Medicine*, 10(1), 1136–1158. <https://doi.org/10.1080/21642850.2022.2147073>
- Bruner, M. W., McLaren, C. D., Sutcliffe, J. T., Gardner, L. A., Lubans, D. R., Smith, J. J., & Vella, S. A. (2021). The Effect of Sport-Based Interventions on Positive Youth Development: a Systematic Review and Meta-Analysis. *International Review of Sport and Exercise Psychology*, 16(1), 368–395. <https://doi.org/10.1080/1750984X.2021.1875496>
- Burkhard, B. M., Robinson, K. M., Murray, E. D., & Lerner, R. M. (2021). Positive Youth Development: Theory and Perspective. *The Encyclopedia of Child and Adolescent Development*, 6(June), 1–15. <https://doi.org/10.1002/9781119171492.wecad310>
- Coates, J. K., & Pimlott-Wilson, H. (2019). Learning while playing: Children’s Forest School experiences in the UK. *British Educational Research Journal*, 45(1), 21–40. <https://doi.org/10.1002/berj.3491>
- Cronin, L., Ellison, P., Allen, J., Huntley, E., Johnson, L., Kosteli, M. C., Hollis, A., & Marchant, D. (2022). A self-determination theory based investigation of life skills development in youth sport. *Journal of Sports Sciences*, 40(8), 886–898. <https://doi.org/10.1080/02640414.2022.2028507>
- Estevan, I., Bardid, F., Utesch, T., Menescardi, C., Barnett, L. M., & Castillo, I. (2021). Examining Early Adolescents’ Motivation for Physical Education: Associations with Actual and Perceived Motor Competence. *Physical Education and Sport Pedagogy*, 26(4), 359–374. <https://doi.org/10.1080/17408989.2020.1806995>

- Herbison, J. D., Vierimaa, M., Côté, J., & Martin, L. J. (2019). The Dynamic Nature of Connection and its Relation to Character in Youth Sport. *International Journal of Sport and Exercise Psychology*, 17(6), 568–577. <https://doi.org/10.1080/1612197X.2017.1423507>
- Ho, R. (2014). *Multivariate Data Analysis with IBM SPSS*. Chapman and Hall/CRC. <https://doi.org/10.1201/b15605>
- Jacobs, J. M., & Wright, P. M. (2021). Thinking about the Transfer of Life Skills: Reflections from Youth in a Community-Based Sport Programme in an Underserved Urban Setting. *International Journal of Sport and Exercise Psychology*, 19(3), 380–394. <https://doi.org/10.1080/1612197X.2019.1655776>
- Joshi, A., Kale, S., Chandel, S., & Pal, D. (2015). Likert Scale: Explored and Explained. *British Journal of Applied Science & Technology*, 7(4), 396–403. <https://doi.org/10.9734/BJAST/2015/14975>
- Kalajas-Tilga, H., Koka, A., Hein, V., Tilga, H., & Raudsepp, L. (2020). Motivational Processes in Physical Education and Objectively Measured Physical Activity among Adolescents. *Journal of Sport and Health Science*, 9(5), 462–471. <https://doi.org/10.1016/j.jshs.2019.06.001>
- Kirchhoff, E., & Keller, R. (2021). Age-Specific Life Skills Education in School: A Systematic Review. *Frontiers in Education*, 6(June), 1–15. <https://doi.org/10.3389/feduc.2021.660878>
- Lang, C., Feldmeth, A. K., Brand, S., Holsboer-Trachsler, E., Pühse, U., & Gerber, M. (2017). Effects of a Physical Education-Based Coping Training on Adolescents' Coping Skills, Stress Perceptions and Quality of Sleep. *Physical Education and Sport Pedagogy*, 22(3), 213–230. <https://doi.org/10.1080/17408989.2016.1176130>
- Lopez, A., Yoder, J. R., Brisson, D., Lechuga-Pena, S., & Jenson, J. M. (2015). Development and Validation of a Positive Youth Development Measure. *Research on Social Work Practice*, 25(6), 726–736. <https://doi.org/10.1177/1049731514534899>
- Malete, L., McCole, D., Tshube, T., Mphela, T., Maro, C., Adamba, C., Machuve, J., & Ocansey, R. (2022). Effects of a Sport-Based Positive Youth Development Program on Youth Life Skills and Entrepreneurial Mindsets. *PLOS ONE*, 17(2), e0261809. <https://doi.org/10.1371/journal.pone.0261809>
- Metzler, M. (2017). *Instructional Models in Physical Education*. Routledge. New York. <https://doi.org/10.4324/9781315213521>
- Naul, R., Dahl, S., Neuber, N., Fahlenbock, M., & Möllenbeck, D. (2020). Monitoring Of Physical Education and Other Standards of a Whole Active School Approach and Assessment of Learning Outcomes: a PE Teacher and PE Student Pilot Study of the Eupeo Project in Germany. *AUC Kinanthropologica*, 56(1), 7–18. <https://doi.org/10.14712/23366052.2020.2>
- Newman, T. J. (2020). Life Skill Development and Transfer: “They’re Not Just Meant for Playing Sports”. *Research on Social Work Practice*, 30(6), 643–657. <https://doi.org/10.1177/1049731520903427>
- Newman, T. J., Kim, M., Alvarez, M. A. G., & Tucker, A. R. (2018). Facilitative coaching: a guide for youth sport leaders. *Leisure/Loisir*, 42(2), 129–148. <https://doi.org/10.1080/14927713.2017.1415165>

- Newman, T. J., Santos, F., Black, S., & Bostick, K. (2022). Learning Life Skills Through Challenging and Negative Experiences. *Child and Adolescent Social Work Journal*, 39(4), 455–469. <https://doi.org/10.1007/s10560-021-00739-y>
- Phillips, M., Tsuda, E., & Wyant, J. (2023). Promoting Motor Skill Development and Social-Emotional Learning among Preschoolers in Physical Education. *Journal of Physical Education, Recreation & Dance*, 94(3), 29–34. <https://doi.org/10.1080/07303084.2022.2156941>
- Rudd, J. R., O'Callaghan, L., & Williams, J. (2019). Physical Education Pedagogies Built upon Theories of Movement Learning: How Can Environmental Constraints Be Manipulated to Improve Children's Executive Function and Self-Regulation Skills? *International Journal of Environmental Research and Public Health*, 16(9), 1630. <https://doi.org/10.3390/ijerph16091630>
- Sanz-Martin, D., Ruiz-Tendero, G., & Fernández-García, E. (2021). Contribution of Physical Education Classes to Daily Physical Activity Levels of Adolescents. *Physical Activity Review*, 9(2), 18–26. <https://doi.org/10.16926/par.2021.09.18>
- Siedlecki, S. L. (2020). Quasi-Experimental Research Designs. *Clinical Nurse Specialist*, 34(5), 198–202. <https://doi.org/10.1097/NUR.0000000000000540>
- Smyshlyaev, D. V., Kazin, E. M., Kirichenko, V. V., Panina, T. S., & Koshko, N. N. (2023). Features of the Development of the Personal Potential of Adolescents in the System of Additional Education of Physical Culture and Sports Orientation. *Siberian Pedagogical Journal*, 3, 46–57. <https://doi.org/10.15293/1813-4718.2303.05>
- Steffansson, M., & Pehkonen-Elmi, T. (2022). P08-13 Physical activity increases social inclusion. *European Journal of Public Health*, 32(2), 8-13. <https://doi.org/10.1093/eurpub/ckac095.126>
- Tambalis, K. D. (2022). Physical Activity, Physical Education, and Health Benefits in Children and Adolescents. *European Journal of Public Health Studies*, 5(1), 28–55. <https://doi.org/10.46827/ejphs.v5i1.112>
- Thompson, S. R., Ryals, K. B., Spencer, K. A., Sears Taylor, M., & Hol-Loway, V. J. (2018). Play is Hard Work: Using Integrated Play Therapy to Build Social Skills. *Journal of Education and Social Development*, 9829, 68–76. <https://doi.org/10.5281/zenodo.1495530>
- Treadwell, S. M. (2013). Student-Centered Physical Education on a Shoestring Budget. *Journal of Physical Education, Recreation & Dance*, 84(2), 27–32. <https://doi.org/10.1080/07303084.2013.757188>
- Wachs, S., Valido, A., Espelage, D. L., Castellanos, M., Wettstein, A., & Bilz, L. (2023). The Relation of Classroom Climate to Adolescents' Countering Hate Speech Via Social Skills: a Positive Youth Development Perspective. *Journal of Adolescence*, 95(6), 1127–1139. <https://doi.org/10.1002/jad.12180>
- Washburn, N., Richards, K. A. R., & Sinelnikov, O. (2016). Advocating for More Student-Centered Physical Education: The Case for Need-Supportive Instruction. *Strategies*, 29(6), 37–39. <https://doi.org/10.1080/08924562.2016.1234162>
- Weedon, B. D., Liu, F., Mahmoud, W., Burden, S. J., Whaymand, L., Esser, P., Collett, J., Izadi, H., Joshi, S., Meaney, A., Delextrat, A., Kemp, S., Jones, A., & Dawes, H. (2022). Declining Fitness and Physical Education Lessons in UK Adolescents. *BMJ Open Sport & Exercise Medicine*, 8(1), e001165. <https://doi.org/10.1136/bmjsem-2021-001165>

- Williams, C., Neil, R., Cropley, B., Woodman, T., & Roberts, R. (2022). A Systematic Review of Sport-Based Life Skills Programs for Young People: the Quality of Design and Evaluation Methods. *Journal of Applied Sport Psychology*, 34(2), 409–435. <https://doi.org/10.1080/10413200.2020.1792583>
- Worker, S. M., Iaccopucci, A. M., Bird, M., & Horowitz, M. (2019). Promoting Positive Youth Development Through Teenagers-as-Teachers Programs. *Journal of Adolescent Research*, 34(1), 30–54. <https://doi.org/10.1177/0743558418764089>
- Wright, P. M. (2023). Sport and Physical Activity for Positive Youth Development Related to Social and Emotional Learning: Reflections From the Know-Do Gap. *Kinesiology Review*, 12(1), 19–27. <https://doi.org/10.1123/kr.2022-0038>
- Xiangjialin, L. (2023). Research on the Application of Juvenile Psychological Development and Sports Acquisition Law System in Physical Education Teaching. *Journal of Psychology Research*, 13(5), 195–201. <https://doi.org/10.17265/2159-5542/2023.05.001>
- Yulianto, A. G., Hendrayana, Y., & Mahendra, A. (2023). Analysis of Intentionally Structured Programs to Improve Life Skills Through Out of School Activities. *JUARA : Jurnal Olahraga*, 8(1), 73–89. <https://doi.org/10.33222/juara.v8i1.2593>