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# STUDENT SELF-EFFICACY ON PERSONAL AND SOCIAL RESPONSIBILITY WITHIN A SPORT EDUCATION MODEL

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# Student Self-Efficacy on Personal and Social Responsibility within A Sport Education Model

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#### **Abstract**

Character education is so important that the essentiality is emphasized in families, schools, societies and even nations nowadays. Modern citizens should cultivate basic character education, in which responsibility is a character trait. In addition to situations, good instructional design and the application of proper instructional strategies, different experience operation in sporting activities, learning social behavior by participating in sports, and developing sportsmanship for social life are covered in character education for developing good character. Nonequivalent pretest/posttest control group design is applied in this study to precede quasiexperimental study, with total 112 students in two classes in a university in Fujian Province as the experimental research subjects. An experimental class (56 students) is taught with Teaching Personal and Social Responsibility, and the other control class (56 students) remains traditional teaching. The experimental teaching research is preceded for 32 weeks (3 hours per week for total 96 hours); Sport Education Model is integrated into the instruction in the last 16 weeks, but not the first 16 weeks. The research results are summarized as followings: Teaching Personal and Social Responsibility presents remarkable effects on sense of responsibility; Teaching Personal and Social Responsibility reveals notable effects on exercise self-efficacy; Sport Education Model appears significant effects on sense of responsibility; Sport Education Model presents remarkable effects on exercise self-efficacy; Teaching Personal and Social Responsibility integrated Sport Education Model could best enhance sense of responsibility; Teaching Personal and Social Responsibility integrated Sport Education Model could best promote exercise self-efficacy. According to the results, suggestions are proposed, expecting to cultivate good physical fitness of students and enhance the motor skills to achieve the idea of Sport for All as well as to cultivate personal responsibility and teamwork spirit of students.

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*Keywords*: teaching personal and social responsibility, sport education model, sense of responsibility, exercise self-efficacy, social behavior, social development.

#### Introduction

Focus on credentialism, parents busy at work, increase in divorce rate, and deviant value result in serious education problems in children and reveal the urgency and difficulty in moral education. Apparently, character education is so important that the essentiality is emphasized in families, schools, societies, and even nations nowadays. Modern citizens should cultivate basic character education, in which responsibility is a character trait. It is extremely important to be responsible for oneself, as a person not being able to be responsible for himself / herself could not take the responsibility for anything (Wu & Wu, 2019). For students, getting up in the morning, brushing up, sharing housework, and completing school assignment are the responsible performance (Yuan, Wu, & Flynn, 2019). Since physical education presents the characteristics of high interaction, teaching students' morality and enhancing students to present specific prosocial behavior are regarded as the critical goals of physical education.

Physical education, with the characteristics of high emotion and behavior interaction, provides good situations and opportunities for character development. The development of good character requires situations as well as good instructional design, the application of proper instructional strategies, and different experience operation in sporting activities for comprehending responsibility. The gradual transfer of right to make decisions in teaching also gives students more responsibilities to cultivate the correct responsible attitudes and perform similar responsible behaviors in other living fields. Each student should develop basic responsibility, and the degree of development relies on the growth background and learning environment. In this case, students' responsible attitudes, intention, and behavior could be developed through learning. Sports could shape the character development. In addition to healthy body and mind, the participation in sports presents deeper inner value. A part of character education is to learn social behavior and develop sportsmanship, through the participation in sports, for the social life. With the assistance of teaching activities, students would acquire more cooperation experience in the behavior and life, enhance personal and social responsibility, reinforce the efforts and commitment setting in the living experience, and present the responsibility for self-determination. Accordingly, the effects of Teaching Personal and Social Responsibility integrated Sport Education Model on students' sense of responsibility and exercise self-efficacy are discussed in this study, expecting to cultivate students' good physical fitness and enhance the motor skills to achieve the idea of Sport for All as well as cultivate students' personal responsibility and teamwork spirit.

#### Literature review

Manzano-Sanchez et al. (2020) mentioned that Teaching Personal and Social Responsibility (TPSR), also named Responsibility model (RM), mainly aimed to provide students with an incremental learning goal to assist in comprehending the responsibility in the teams through different experience operation in sporting activities. Teachers, during teaching, would gradually transfer the right to make decisions to students and give them with more responsibilities in order to cultivate the correct responsible attitudes and perform similar responsible attitude in other living fields (Wu et al., 2020a). Cryan & Martinek (2017) pointed out the content of TPSR including 1. Respect for the rights and feelings of others, 2. Effort and cooperation, 3. Self-direction, 4. Helping others and leadership, and 5. Transfer outside the gym. Ladwig, Vazou, & Ekkekakis (2018) indicated that TPSR model would assist students in cultivating responsible attitudes and sense of responsibility by changing behaviors with self-determination. Teachers, through teaching, gave students more responsibilities for enhancing sense of responsibility to present correct affection on the behavior and living and other reasonable needs and further enhance the learning of personal and social responsibility, making commitment in other living experiences, and setting living principles as well as facilitated students to achieve all-round life. Informal development activities or goals could help teachers and students apply TPSR responsibility hierarchical program, guide and evaluate students' learning, and understand personal behavior and learning effect to enhance good behavior, thinking, affection, and care as well as stress on self-orientation to achieve all-round society. Ardoin et al. (2018) regarded physical activities as the core of physical education. In addition to learning skills, teachers, in the setting of instructional objectives and operation of instructional strategies, had to present the education essence of enhancing students' behavior, emotion, and interpersonal interaction. The learning of responsibility would not appear instant effect, and the cultivation of sense of responsibility required staged learning process. Abad Robles et al. (2020) considered that TPSR would not succeed simply by learners participating in physical education, but required targeted and strategic planning and application to provide students with learning environment for personal and social development in the physical activities. Farias, Mesquita, & Hastie (2019) explained that TPSR was originated from physical education in high schools to reflect children's attitudes, value, and behavior opinions. Such a model provided an incremental learning goal for students and assisted them in comprehending responsibility through different experience operation in sporting activities, to further achieve all-round value. Particularly, it could help students, when facing personal and social problems, present more all-round responsibilities. The following hypotheses are therefore proposed in this study.

H1: Teaching Personal and Social Responsibility presents significant effects on sense of responsibility.

H2: Teaching Personal and Social Responsibility shows remarkable effects on exercise self-efficacy.

Pot, Whitehead, & Durden-Myers (2018) indicated that the major basic concept of Sport Education Model focused on "game-based education" theory, proposed the primary role of positive physical activities in cultural life, and considered that the education of physical activities allowed students understanding social life and integrating into social culture. Such an idea revealed physical education as a part of school education. Gil-Arias et al. (2020) mentioned that the basic conceptual framework of Sport Education Model was based on game-based theory to enhance motor skills and facilitate individual maturity and social adjustment in the culture, through gamification exercises, to achieve the ideal of Sport for All. Gil-Arias et al. (2020) pointed out sports as a comparatively complicated contest, which was a designed game with beginning and end. Sport games could enhance physical fitness that the sport games process also presented education meanings. Luna, Guerrero, & Cejudo (2019) explained Sport Education Model as a curriculum model based on gaming theory and developed through gamification activities. Sports, similar to contest in games, could enhance individual ability of social adjustment. Fun physical activities revealed positive value, and the game contents and rules could be combined with the goal of physical education in schools. Bessa et al. (2019) integrated sports learning and the concept of contest into physical education and considered that sports could be a type of games, suitable for physical education in schools. They further pointed out the common idea of sports and games that sports required proper comprehension, suitable concept, and appropriate practice. Simmons & MacLean (2018) stated that games were the basic meaning of sports which conformed to humans' behavior and game activities in the original life; Sport Education Model could induce students' learning motivation to actively request the teachers for more skill practice time and share the learning experience in physical education with family members. Fatima, Majeed, & Jahanzeb (2020) preceded national experiment of Sport Education Model in high schools in New Zealand with good effectiveness and discovered that students were in favor of Sport Education Model and teachers considered that students were able to take the responsibility for the sports behavior after the teaching with Sport Education Model; teachers reduced the management behavior in classes and students enhanced the interaction (Wu et al., 2020b). Valls et al. (2020) deduced the curriculum development goal of Sport Education Model in which students could plan sports events in physical education, understand the spirit of contest, learn teamwork and fair competition, and indirectly understand personal and social relationship and proficiency in motor skills, as well as experience sport fun and challenge. PE teachers mainly instructed students' learning of sports-related skills and knowledge, with classes as the units. In Sport Education Model, PE teachers played the roles of coaches and drivers of sport culture. As a result, the following hypotheses are proposed in this study. H3: Sport Education Model reveals notable effects on sense of responsibility. H4: Sport Education Model appears significant effects on exercise self-efficacy.

Self-efficacy has an important impact on teachers' development and students' learning (Liu & Wang, 2018; Song et al. 2020). McEntyre, Curtner-Smith, & Wind (2020) discovered that TPSR integrated Sport Education Model could help students learn positive affective attitudes and behavior, and team cooperative learning in Sport Education Model could remarkably enhance students' contest performance to assist students in the presentation. In addition to learning motor skills and teamwork, students could be familiar with contest rules, actively be glad to participate in contest, and further promote exercise self-efficacy. Wu et al. (2020c) mentioned that traditional physical education stressed on the learning of motor skills and could hardly appear notable effects on the learning of responsible behaviors; TPSR, on the other hand, could promote students' learning of positive affection, attitude, and behavior. Integrating TPSR into Sport Education Model would show significantly effects on students' responsible behaviors and exercise self-efficacy. In the comparison between TPSR integrated Sport Education Model and TPSR integrated traditional physical education model, Richards & Shiver (2020) indicated that TPSR integrated Sport Education Model, which stressed on affective domain learning and revealed better cooperative learning function, presented better learning effects on responsible behaviors and exercise self-efficacy than TPSR integrated traditional physical education model. Consequently, the following hypotheses are proposed in this study.

H5: Teaching Personal and Social Responsibility integrated Sport Education Model could best enhance sense of responsibility.

H6: Teaching Personal and Social Responsibility integrated Sport Education Model could best promote exercise self-efficacy.

## Methodology

### Operational definitions

Sense of responsibility: The variable and questions are referred to Sum et al. (2018) to measure sense of responsibility.

*Exercise self-efficacy*: Referring to Hung, Young, & Lin (2018), exercise self-efficacy is measured with the single dimension.

## Research subject and research design

To effectively achieve the research objectives and test the research hypotheses, nonequivalent pretest/posttest control group design is utilized for the quasi-experimental study. Total 112 students in two classes in a university in Fujian

Province are selected as the experimental subjects. An experimental class (56 students) is taught with Teaching Personal and Social Responsibility, and the other control class (56 students) remains traditional teaching model. The experimental teaching research is preceded for 32 weeks (3 hours per week for total 96 hours); and, Sport Education Model is integrated into the teaching in the last 16 weeks, but not the first 16 weeks.

#### Analysis method

Analysis of Variance is applied to discuss the effects of Teaching Personal and Social Responsibility on sense of responsibility and exercise self-efficacy as well as the effects of Teaching Personal and Social Responsibility integrated Sport Education Model on sense of responsibility and exercise self-efficacy.

#### Results

Variance analysis of Teaching Personal and Social Responsibility and sense of responsibility

Analysis of Variance is used for discussing the difference of Teaching Personal and Social Responsibility in sense of responsibility and exercise self-efficacy in this study. Table 1 shows notable differences in sense of responsibility between Teaching Personal and Social Responsibility and traditional model. Teaching Personal and Social Responsibility appears higher sense of responsibility than traditional model that H1 is supported. Teaching Personal and Social Responsibility also reveals significant differences in exercise self-efficacy from traditional model. Teaching Personal and Social Responsibility presents higher exercise self-efficacy than traditional model that H2 is supported.

*Table 1.* Variance analysis of Teaching Personal and Social Responsibility and sense of responsibility

vari	F	Р	Scheffe post hoc	
Teaching Personal and Social Responsibility	sense of responsibility	14.275	0.000**	Teaching Personal and Social Responsibility>traditional model
	exercise self- efficacy	23.168	0.000**	Teaching Personal and Social Responsibility>traditional model

<sup>\*</sup> stands for p < 0.05, \*\* for p < 0.01

#### Variance analysis of Sport Education Model and exercise self-efficacy

Analysis of Variance is utilized for discussing the difference of Sport Education Model in sense of responsibility and exercise self-efficacy. Table 2 shows remarkable differences in sense of responsibility between Sport Education Model and traditional model. Sport Education Model reveals higher sense of responsibility than traditional model that H3 is supported. Sport Education Model appears notable differences in exercise self-efficacy from traditional model. Sport Education Model presents higher exercise self-efficacy than traditional model that H4 is supported.

V	ariable	F	Р	Scheffe post hoc
Sport Education Model	sense of responsibility	17.846	0.000**	Sport Education Model>traditional model
	avaraica salf	31.283	0.000**	Sport Education Model>traditional model

Table 2. Variance analysis of Sport Education Model and exercise self-efficacy

# Effect analysis of Sport Education Model integrated Teaching Personal and Social Responsibility

Analysis of Variance is applied to discuss the difference of Sport Education Model integrated Teaching Personal and Social Responsibility in sense of responsibility and exercise self-efficacy; and, Two-way Analysis of Variance is used for discussing the effect of the interaction of Sport Education Model and Teaching Personal and Social Responsibility on sense of responsibility and exercise self-efficacy. Table 3 shows that Teaching Personal and Social Responsibility integrated Sport Education Model could best enhance sense of responsibility and exercise self-efficacy that H4 and H5 are supported.

*Table 3.* Variance analysis of Teaching Personal and Social Responsibility and learning effectiveness

variable	sense of responsibility			exercise self-efficacy		
	F	Р	Scheffe post hoc	F	Р	Scheffe post hoc
Teaching Personal and Social Responsibility	14.275	**000.0	Teaching Personal and Social Responsibility > traditional model	23.168	0.000**	Teaching Personal and Social Responsibility > traditional model

<sup>\*</sup> stands for p < 0.05, \*\* for p < 0.01

Sport Education Model	17.846	0.000**	Sport Education Model>traditional model	31.283	0.000**	Sport Education Model>traditional model
Teaching Personal and Social Responsibility* Sport Education Model	41.351	0.000**	11>12>21>22	47.162	**000.0	11>12>21>22

<sup>\*</sup> stands for p < 0.05, \*\* for p < 0.01

#### **Discussion**

The experimental research results reveal that Teaching Personal and Social Responsibility integrated Sport Education Model could help teachers smoothen classroom management, enhance harmonious climate in class, reduce fierce competition in contest, and present educational function on affective behavior learning. Teaching Personal and Social Responsibility integrated Sport Education Model is preceded in teams and presents the process of sports events that students show more rapport, often precede team practice after classes, and even transfer good responsible performance to other fields or family life. Frequent character problems of students in past years reveal the worsening social problems in youngsters. Teaching Personal and Social Responsibility integrated Sport Education Model is therefore applied to enhance the core value of students' character. Introducing students' responsibility learning into physical education in schools has become urgent in contemporary education. Teaching Personal and Social Responsibility integrated Sport Education Model has been practiced abroad for long, while it is rare domestically. Well utilizing the responsibility hierarchy of Teaching Personal and Social Responsibility, e.g. effort, self-orientation, obeying class rules, respect for others, helping others, and cooperation, as well as cognitive dialogue, team meeting, and reflective time to reinforce sense of responsibility could naturally reduce dispute and irregularities on campus, internalize in daily life, and cultivate students' multiple learning.

This research starts from the perspective of the Teaching Personal and Social Responsibility model (TPSR), and enables students to use different experiences in sports activities to help them understand their responsibilities in the team. In theorical implication, we combined two perspectives of TPSR and personenvironment fit to explain how physical education teachers develop new responsible attitudes to students in the teaching process; the results also indicated that teachers

can empower students through teaching responsibility enhances the sense of responsibility, and makes it have correct emotions and other reasonable needs for behavior and life, thereby enhancing the learning of self and social responsibility. In practical implication, we also provide schools and other teaching institutions with another way of thinking. In addition to teaching professional knowledge and skills, teachers must also be able to promote student behavior, emotions and interpersonal interaction when setting teaching goals and operating teaching strategies.

#### Conclusion

In consideration of declining social morality, selfish and indifference everywhere, and dysfunctional families causing children's lack of character learning channels, the development of good character requires situations, proper instructional design, and appropriate instructional strategies. Relevant educational units are positively integrating character education into school curriculum in order to enhance students' character. Teaching Personal and Social Responsibility integrated Sport Education Model could assist in students' development in affective field and shape good character and social behavior of students that it is worth of implementation and development in physical education in domestic schools.

#### Recommendations

Then, physical education does not simply stress on students' skill learning. In order to have students positively interact with peers in physical education, Teaching Personal and Social Responsibility integrated Sport Education Model, through fun teaching, allows students experiencing the favorite contest and playing various roles in the contest or teams. It could strengthen students' interests and motivation for active participation in sports and cultivate good interpersonal interaction ability. Fully applying such a teaching model to teaching situations could have students comprehensively understand sports.

Finally, a lot of research on Sport Education Model and Teaching Personal and Social Responsibility revealed good teaching outcomes. Teaching Personal and Social Responsibility is also suitable for integrating into Sport Education Model. In order to promote Teaching Personal and Social Responsibility and Sport Education Model teaching in schools, it is suggested to develop relevant teaching materials based on such a model, provide teachers with teaching application and reference, and invite advisory groups in relevant fields to conduct relevant seminars or establish workshops, and discuss with textbook publishers to integrate Teaching Personal and Social Responsibility integrated Sport Education Model into existing teaching materials with teaching trainings. Merely the multi-faceted cooperation

could assist in the comprehensive promotion to enhance students' learning interests and learning effectiveness in physical education.

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#### References

- Abad Robles, M. T., Collado-Mateo, D., Fernandez-Espínola, C., Castillo Viera, E., & Giménez Fuentes-Guerra, F. J. (2020). Effects of Teaching Games on Decision Making and Skill Execution: A Systematic Review and Meta-Analysis. *International Journal of Environmental Research and Public Health*, 17(2), 505. DOI: 10.3390/ijerph17020505.
- Ardoin, N.M., Bowers, A.W., Roth, N.W., & Holthuis, N. (2018). Environmental education and K-12 student outcomes: A review and analysis of research. *The Journal of Environmental Education*, 49(1), 1-17. DOI: 10.1080/00958964.2017.1366155.
- Bessa, C., Hastie, P., Araujo, R., & Mesquita, I. (2019). What Do We Know About the Development of Personal and Social Skills within the Sport Education Model: A Systematic Review. *Journal of Sports Science & Medicine*, 18(4), 812-829.
- Cryan, M., & Martinek, T. (2017). Youth Sport Development through Soccer: An Evaluation of an After-School Program Using the TPSR Model. *Physical Educator*, 74(1), 127-149. DOI: 10.18666/TPE-2017-V74-I1-6901.
- Farias, C., Mesquita, I., & Hastie, P.A. (2019). Student game-play performance in invasion games following three consecutive hybrid Sport Education seasons. *European Physical Education Review*, 25(3), 691-712. DOI: 10.1177/1356336X18769220.
- Fatima, T., Majeed, M., & Jahanzeb, S. (2020). Supervisor undermining and submissive behavior: Shame resilience theory perspective. *European Management Journal*, 38(1), 191-203. DOI: 10.1016/j.emj.2019.07.003.
- Gil-Arias, A., Claver, F., Praxedes, A., Villar, F.D., & Harvey, S. (2020). Autonomy support, motivational climate, enjoyment and perceived competence in physical education: Impact of a hybrid teaching games for understanding/sport education unit. *European Physical Education Review*, 26(1), 36-53. DOI: 10.1177/1356336X18816997.
- Hung, H.C., Young, S.S.C., & Lin, K.C. (2018). Exploring the effects of integrating the iPad to improve students' motivation and badminton skills: a WISER model for physical education. *Technology, Pedagogy and Education*, 27(3), 265-278. DOI: 10.1080/1475939X.2017.1384756.
- Ladwig, M.A., Vazou, S., & Ekkekakis, P. (2018). "My Best Memory Is When I Was Done with It": PE Memories Are Associated with Adult Sedentary Behavior. *Translational Journal of the ACSM, 3*,110-129. DOI: 10.1249/TJX.0000000000000067.
- Liu, L., & Wang, Y.S. (2018). Comparison and Promotion: Physical Education Major Undergraduates' Self-efficacy of Inclusive Physical Education between China and the United States. *Journal of Beijing Sports University*, 41(7), 86-92. (In Chinese)
- Luna, P., Guerrero, J., & Cejudo, J. (2019). Improving adolescents' subjective well-being, trait emotional intelligence and social anxiety through a programme based on the

- sport education model. *International Journal of Environmental Research and Public Health*, 16(10), 1821. DOI: 10.3390/ijerph16101821.
- Manzano-Sanchez, D., Conte-Marín, L., Gómez-López, M., & Valero-Valenzuela, A. (2020). Applying the Personal and Social Responsibility Model as a School-Wide Project in All Participants: Teachers' Views. *Frontiers in Psychology*, 11, 579. DOI: 10.3389/fpsyg.2020.00579.
- McEntyre, K., Curtner-Smith, M.D., & Wind, S.A. (2020). Negotiation patterns of a preservice physical education teacher and his students during sport education. *European Physical Education Review*, 26(1), 198-217. DOI: 10.1177/1356336X19845073.
- Pot, N., Whitehead, M. E., & Durden-Myers, E.J. (2018). Physical literacy from philosophy to practice. *Journal of Teaching in Physical Education*, *37*(3), 246-251. DOI: 10.1123/jtpe.2018-0133.
- Richards, K.A.R., & Shiver, V.N. (2020). "What's worth doing?": A qualitative historical analysis of the TPSR model. *Journal of Teaching in Physical Education*, *1*, 1-11. DOI: 10.1123/jtpe.2019-0215.
- Simmons, J., & MacLean, J. (2018). Physical education teachers' perceptions of factors that inhibit and facilitate the enactment of curriculum change in a high-stakes exam climate. *Sport, Education and Society*, 23(2), 186-202. DOI: 10.1080/13573322.2016.1155444.
- Song, H., Kim, J., Nguyen, T.P., Lee, K.M., & Park, N. (2020). Virtual reality advertising with brand experiences: the effects of media devices, virtual representation of the self, and self-presence. *International Journal of Advertising*, 1-19. DOI: 10.1080/02650487.2020.1834210.
- Sum, K.W.R., Cheng, C.F., Wallhead, T., Kuo, C.C., Wang, F.J., & Choi, S.M. (2018). Perceived physical literacy instrument for adolescents: A further validation of PPLI. *Journal of Exercise Science & Fitness*, *16*(1), 26-31. DOI: 10.1016/j. jesf.2018.03.002
- Valls, V., Tomas, I., Gonzalez-Roma, V., & Rico, R. (2020). The influence of age-based faultlines on team performance: Examining mediational paths. *European Management Journal*, DOI: 10.1016/j.emj.2020.10.008.
- Wu, T. J., Xu, T., Li, L. Q., & Yuan, K.S. (2020b). "Touching with heart, reasoning by truth"! The impact of Brand cues on mini-film advertising effect. *International Journal of Advertising*, 1-29. DOI: 10.1080/02650487.2020.1755184.
- Wu, T.J., & Wu, Y.J. (2019). Innovative work behaviors, employee engagement, and surface acting: a delineation of supervisor-employee emotional contagion effects. *Management Decision*, 57(11), 3200-3216. DOI: 10.1108/MD-02-2018-0196.
- Wu, T.J., Gao, J.Y., Wang, L.Y., & Yuan, K.S. (2020a). Exploring links between polychronicity and job performance from the person–environment fit perspective The mediating role of well-being. *International Journal of Environmental Research and Public Health*, 17(10), 3711. DOI: 10.3390/ijerph17103711.
- Wu, T.J., Wang, L. Y., Gao, J.Y., & Wei, A.P. (2020c). Social support and well-being of Chinese special education teachers An emotional labor perspective. *International Journal of Environmental Research and Public Health*, 17(18), 6884. DOI: doi. org/10.3390/ijerph17186884.

Yuan, K.S., Wu, T.J., & Flynn, M. (2019). The influence of work-family conflict on taiwanese expatriates' burnout and turnover intention in China: Guanxi as a moderator. *Revista de Cercetare și Intervenție Sociala*, 64, 140-155. DOI: 10.33788/rcis.64.12.