

A Study on the Responsibility Benefit and Interpersonal Relationship of Personal and Social Responsibility Teaching(TPSR) Course for College Students: A Case Study of Public Physical Education Students in Nanchang University, Jiangxi Province

Yujuan Huo¹, Kuotung Shih^{2*}, Junqi Wang³

^{1,2,3}International College, Krirk University, Thanon Ram Intra, Khwaeng Anusawari, Khet Bang Khen, Krung Thep, Maha Nakhon10220, Thailand
E-mail: skt168@gmail.com

Article History: Received: 11 January 2021; Revised: 12 February 2021; Accepted: 27 March 2021; Published online: 10 May

2021

ABSTRACT

The purpose of this study is to explore the relationship between personal and social responsibility (TPSR) and interpersonal relationship of college students. A total of 167 freshmen and juniors of physical education class University participated in this study, and adopted experimental teaching methods, 82 students in the experimental group and 85 students in the control group took 16 weeks of public physical education courses. The research tool is TPSR and Interpersonal Relationship Scale. After collecting data and statistical analysis by SPSS 22.0, the research results are as follows: 1. The experimental group has a higher sense of personal and social responsibility than the control group, and the college students in the experimental group are lower in interpersonal relationship than the control group; 2. Social responsibility is related to interpersonal relationship in the experimental group, while personal responsibility and social responsibility are related to interpersonal relationship in the control group; 3. Social responsibility of experimental group and control group has great influence on interpersonal relationship. The conclusion of this study indicates that TPSR teaching has an effect on college students' personal and social responsibilities, but has no effect on interpersonal relationships.

Keywords: TPSR, interpersonal relationship, public physical education class

1. INTRODUCTION

1.1 Research background

TPSR teaching mode was developed by Haier Sen, a famous American physical education expert. According to the situation of American school physical education and American youth moral education, and the requirements of promoting youth's correct sense of responsibility education design and development in our country, this mode effectively develops students' responsible behavior based on responsibility plan, and TPSR teaching mode can enhance students' personality development and prosocial behavior. It is suggested that it can be extended to preschool education and university in the future to understand the implementation of TPSR in different stages. Integrating qualitative and quantitative research methods can make a more comprehensive study, which is beneficial to the implementation of physical education curriculum and teaching in China. At the same time, the practice verifies the effect of this model on students' learning, which has academic and empirical significance for TPSR, and is also an important cornerstone for further promoting the development of TPSR model in the future, and has far-reaching significance for the reform and development of physical education curriculum and teaching in Chinese schools. In order to meet the needs of the times, the contents of physical education and physical education class curriculum development are gradually simplified. However, the development of physical education needs to improve itself due to the changes of the times and the variation of the environment, but the core of this improvement is not to abandon its original core value-educating people.

1.2 Research motivation

TPSR mode can make students feel respect, unity, discipline and trust, and how to resolve contradictions and conflicts in a reasonable way. However, under different cultural backgrounds, whether the functions and effects of TPSR model are equally applicable to Chinese teenagers needs further research, which is one of the research motives. The TPSR curriculum model starts from the perspective of cultivating students' personal and social responsibilities, which is also the core value of the TPSR curriculum model. Therefore, it is the second motivation to confirm whether the TPSR curriculum model can really play its core value, thus significantly improving

students' sense of personal and social responsibility and showing responsible behavior in their lives. At present, there are few relevant research results on sports social behavior and sports efficiency in China. Most of the researches on students' sports social behavior and sports efficiency are defined from the legal perspective, and the research contents are mostly the determination of school injury accident responsibility and the investigation of school tort liability, but less research on students' social behavior and sports efficiency from the perspective of moral education. At the same time, a considerable number of Chinese scholars discuss the moral education function of physical education curriculum from a qualitative point of view, while the quantitative and concrete research on moral education penetration is even rarer, and the research on students' sports social behavior and sports efficiency needs to be further deepened, which is the third motivation of the research. Under the background of attaching importance to the development of moral education, physical education class's educational function on students' moral level has been largely focused.

People can't stand without virtue, and the root of educating people lies in virtue. Man's all-round development is the coordination and unity of morality, intelligence, physique and beauty. Herbart once pointed out that teaching without moral education is just a means without purpose, and moral education without teaching is just a purpose without means. Piaget pointed out that rule training is the beginning of moral behavior, and the essence of morality is to abide by rules. The inherent sense of rules and the requirements of rules in the process of physical education teaching and sports activities are also the requirements for students' moral development. It plays an irreplaceable role in judging students' moral value, judging their code of conduct and cultivating their moral practice ability.

(1) Strong theoretical support

Goal theory studies by Bandura and Schunk show that specific, close and challenging goals can promote self-efficacy and improve efficiency. Appropriate goal setting can promote students' progress in learning; Theory of self-worth. Covington defines self-worth motivation as the inclination to establish and maintain a positive self-image or sense of self-worth, that is, students need to believe that they are capable academically, so that they can think that they are valuable in school. In order to maintain self-worth, students will try their best to protect their learning ability at least. The goal of TPSR mode emphasizes that students should have team spirit and learn to work together. Failure should not be attributed to lack of ability, but should be achieved through hard work. This is consistent with the goal of protecting students' learning ability and maintaining students' sense of self-worth. Self-determination theory. According to the theory of self-determination, students' learning motivation depends on three basic psychological needs, namely, competence needs, belonging needs and autonomy needs.

(2) Mature models and scales

TPSR model is a hot topic in the field of education in recent years. Physical education curriculum designed based on TPSR model can promote students' responsible behavior and improve students' moral level. The research on TPSR model has been carried out on different occasions, such as sports clubs, sports summer camps, youth development plans, beyond ball plans, etc., and the research in school physical education courses is also being carried out one after another. In addition, the measuring tools of students' responsibility behavior are constantly improving, which can be widely used in the empirical study of TPSR curriculum model.

From the perspective of education (all-round development of people), some scholars believe that campus sports culture is conducive to the cultivation of healthy psychology and sound personality; Conducive to the implementation of moral norms; Conducive to the implementation of spiritual style; It is conducive to the cultivation of aesthetic value.

1.3 Research questions

TPSR is a teaching model oriented to cultivate personal and social responsibility, which plays an important role in studying the influence of students' personal and social responsibility (TPSR) course on personal and social responsibility and the mutual influence between social responsibility and interpersonal relationship. The research questions are as follows:

First: TPSR benefits include personal responsibility and social responsibility, What are the impacts on college students?

Second: How about the TPSR of college students and their interpersonal relationship?

Third: What is the impact of TPSR on college students' interpersonal relationship?

2. Methods

In this study, experimental teaching and purposive sampling were used to select freshmen and juniors of Chengzhi University, an elective public physical education class in Nanchang University, Jiangxi Province, as participants, with a total of 167 college students. In this study, experimental teaching was adopted. The experimental

A Study on the Responsibility Benefit and Interpersonal Relationship of Personal and Social Responsibility Teaching(TPSR) Course for College Students: A Case Study of Public Physical Education Students in Nanchang University, Jiangxi Province

group was TPSR teaching, and the control group was general teaching. The teaching was a senior female physical education teacher with 12 years. This experimental teaching is a one-semester public physical education course, once a week, with 80 points each for a total of 16 weeks. After the course, the TPSR and the Scale

	Experimental group (N=82)		Control group (N=85)	
	N	%	N	%

Interpersonal Relationship Scale were filled out and provided to researchers for follow-up analysis.

2.1 Basic personal data

The subjects of this study are public physical education courses in Nanchang University, Jiangxi Province (Table 1), with 82 students in the experimental group (49.1%) and 85 students in the control group (50.9%). In grade, there are 30 freshmen (36.3%) and 52 juniors (36.4%) in the experimental group. In the control group, there were 85 freshmen (100%), and no juniors participated. In the professional part, the subjects of arts, science, engineering and art in the experimental group are 38(46.3%), 6(7.3%), 38(46.3%) and 0 (0%) respectively; The subjects of arts, science, engineering and art in the control group were 35(41.2%), 21(24.7%), 11(12.9%) and 18(21.2%) respectively

2.2 research framework and assumptions

Table 1 Summary table of background types of experimental group and control group.

gender	male	30	36.6	0	0.0
	woman	fifty-two	63.4	eighty-five	100.0
grade	freshman	30	36.6	eighty-five	100.0
	junior	fifty-two	63.4	0	0.0
Speciali- zed subject	liberal arts	38	46.3	35	41.2
	science	six	7.3	21	24.7
	field of	38	46.3	11	12.9
	engineerig				
	art	0	0.0	18	21.2
	subtotal	82	49.1	eighty-five	50.9

According to the research purpose, this study tests the TPSR responsibility benefit and interpersonal relationship between the experimental group and the control group, in which the TPSR benefit includes personal responsibility and social responsibility, and the interpersonal relationship includes the relationship between peers, friends, family members and teachers, The research framework is as follows (Figure 1).

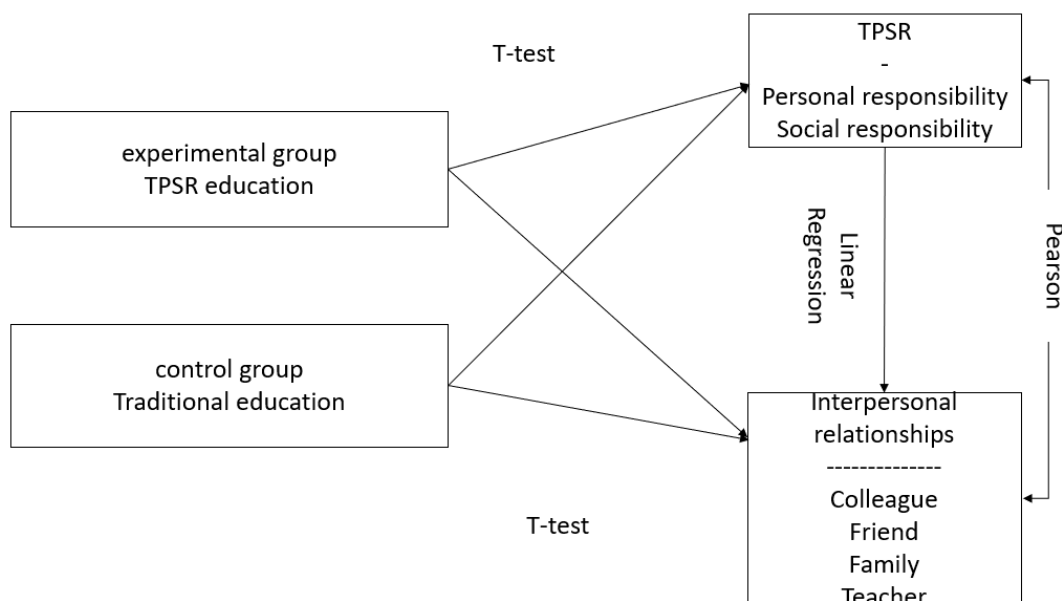


Fig1:Study on false composition

According to the research framework diagram, this study makes the following research assumptions:

H1: There are significant differences between experimental group and control group in TPSR responsibility benefit and interpersonal relationship.

H2: There is a significant correlation between TPSR responsibility benefit and interpersonal relationship between experimental group and control group.

H3: TPSR responsibility benefits of experimental group and control group have significant influence on interpersonal relationship.

2.3 Scale tools

(1)TPSR scale:

In this study, yang minghan (2012) revised the personal and social responsibility questionnaire (PSRQ) developed by Li et al,(2008). Through factor analysis, the validity of the original scale shows that the factor load is greater than 0.5, the eigenvalue is greater than 1, and the total explanatory variation number is 59.31%, which shows that the scale has good validity. This scale is divided into two dimensions,Cronbach α of "personal responsibility" and "social responsibility" in each dimension is .94 and .91 respectively, and the reliability of the total scale is .94, which shows that the internal consistency of this scale is good and it has good reliability.

(2) Interpersonal Relationship Scale

This scale refers to Lai Jianzhi (2020) and selects Li Yisheng and others' "Interpersonal Relationship Questionnaire",Through factor analysis, the validity of the original scale shows that the factor load is greater than 0.5, the eigenvalue is greater than 1, and the total explanatory variation number is 60.93%, which shows that this scale has good validity. This scale is divided into four dimensions,Cronbach α of peer relationship, friend relationship, family relationship and teacher relationship are .86, .98, .88 and .90, respectively, and the reliability of the total scale is .87, which shows that the scale has good internal consistency and good reliability.

The above-mentioned two-component scale is calculated by Likert type scale, and the degree of consent from high to low is "always so", "often so", "sometimes so", "rarely so" and "never so", with scores ranging from 5 points to 1 point in sequence,The higher the questionnaire score, the higher the students' personal and social responsibility and interpersonal relationship, and the lower the opposite.

2.4 Data analysis and processing

After data collection, it was analyzed by SPSS for Windows18.0 statistical software, and the significant level of statistical test was set as $\alpha = .05$. The pain meter analysis method is as follows:

(1) independent sample t-test was used to analyze the differences of TPSR and interpersonal relationship between experimental group and control group.

(2) Pearson correlation analysis of TPSR and interpersonal relationship between experimental group and control group.

(3) Linear regression analysis of the influence of TPSR on interpersonal relationship between experimental group and control group.

3.Results and Discussion

According to the research purpose and hypothesis, this study analyzes the following research results:

3.1 Differences in TPSR and Interpersonal Relationship between College Students in Experimental Group and Control Group

According to the analysis results of independent sample t-test (as shown in table 1), it was found that there were significant differences in tpsr [$t(150.01) = 2.61, p = .10 < .05$] and interpersonal relationship [$t(165) = -3.24, p = .001 < .05$] between the experimental group and the control group. Therefore, in terms of TPSR, the experimental group ($M=4.77, SD=.34$) is higher than the control group ($M=4.60, SD=2.55$), which shows that the experimental group has higher personal and social responsibility than the control group. The experimental group ($M=2.28, SD=.57$) is lower than the control group ($M=2.55, SD=6.83$) in interpersonal relationship, showing that the experimental group is lower than the control group, and the TPSR group has lower interpersonal relationship.

Table 3 T test of TPSR and interpersonal relationship between experimental group and control group.

	M (SD)		df	T value	p
	Experimental group (N=82)	control group (N=85)			
TPSR	4.77(.34)	4.60(.50)	150.01	2.61*	.010
interpersonal relation	2.28 (.57)	2.55 (.50)	165	-3.24*	.001

* $p < .05$ ** $p < .01$ *** $p < .001$

The results show that there is a significant positive correlation between college students' interpersonal relationship and social responsibility, and empathy plays a partial intermediary role between them.

3.2 To explore the TPSR and interpersonal relationship between the experimental group and the control group

(1) the correlation between TPSR and interpersonal relationship of college students in experimental group and control group

In this study, Pearson correlation was used to analyze the results (Table 4). In the experimental group, it was found that personal responsibility [$R(80) = -0.193, P > .05$] had no significant correlation with interpersonal relationship, while social responsibility [$R(80) = -.379, P < .01$] had significant correlation with interpersonal relationship and was moderately negative, indicating that

Part of the control group found that personal responsibility [$r(83) = -0.395, p > .01$] and social responsibility [$r(83) = -.422, p < .01$] were significantly correlated with interpersonal relationship, and were moderately negatively correlated, indicating that the higher the degree of personal and social responsibility in the control group, the worse the interpersonal relationship, and vice versa.

Table 4 correlation matrix between TPSR and interpersonal relationship of college students in experimental group and control group

group	Structured surface	one	2
Experimental group	1 personal responsibility	-	
	2 Social responsibility	.745**	-

A Study on the Responsibility Benefit and Interpersonal Relationship of Personal and Social Responsibility Teaching(TPSR) Course for College Students: A Case Study of Public Physical Education Students in Nanchang University, Jiangxi Province

N=82	3 interpersonal relationship	-0.193	-.379**
	1 personal responsibility	-	
control group	2 Social responsibility	.618**	-
N=85	3 interpersonal relationship	-.395**	-.422**

*p<.05 **p<.01 ***p<.001

(2) The influence of TPSR on interpersonal relationship between experimental group and control group

Regression analysis is used to test the influence of TPSR's personal responsibility and social responsibility on interpersonal relationship (as shown in Table 5). The results show that some personal responsibilities ($\beta = .199$, $P > .05$) in the experimental group have no significant effect on interpersonal relationship, but social responsibilities ($\beta = .286$, $P > .05$) have significant relationship with interpersonal relationship and have a negative moderate correlation, indicating that the higher the social responsibility, the worse the interpersonal relationship in the experimental group.

In the control group, personal responsibility [$\beta = -.217$, $p > .05$] has no significant effect on interpersonal relationship, but social responsibility [$\beta = .289$, $p < .05$] has a significant relationship with interpersonal relationship, and has a negative moderate correlation, indicating that the higher the social responsibility in the control group, the worse the interpersonal relationship.

Table5 TPSR 与人际关系之线性回归

		interpersonal relation		
		B	SE B	β
Exp	personal liability	.385	.299	.199
eri	Social responsibility	-.655**	.192	-.527**
men	R2	.161		
tal	Adj R2	.140		
gro	F	7.581**		
up	df	(2,79)		
cont	personal liability	-.232	.134	-.217
rol	Social responsibility	-.224*	.097	-.289*

gro	R2	.207
up	Adj R2	.188
	F	10.72**
	df	(2, 82)

Note: N = 106 *p < .05 ** p < .01 *** p < .001

Conclusions

1.the difference of TPSR responsibility benefit and interpersonal relationship between experimental group and control group: in TPSR degree, experimental group is higher than control group, therefore, experimental group has higher personal and social responsibility than control group. In the interpersonal relationship degree, the experimental group is lower than the control group, which shows that the interpersonal relationship degree of TPSR group is lower than that of the control group.

2.Significant correlation between TPSR responsibility benefit and interpersonal relationship between the experimental group and the control group: In this study, it was found that there was no significant correlation between personal responsibility and interpersonal relationship in the experimental group, but there was a significant correlation between social responsibility and interpersonal relationship, which showed that the higher the degree of social responsibility, the worse the interpersonal relationship in the experimental group, and vice versa.

3.The influence of TPSR responsibility benefit on interpersonal relationship between experimental group and control group: The influence of TPSR personal responsibility and social responsibility on interpersonal relationship was tested by regression analysis (as shown in Table 5). The results show that some personal responsibilities in the experimental group have no significant influence on interpersonal relationships, but social responsibilities have significant relationship with interpersonal relationships, and have a negative moderate correlation, which indicates that the higher the social responsibilities in the experimental group, the worse the interpersonal relationships.

In the control group, personal responsibility has no significant effect on interpersonal relationship, but social responsibility has a significant relationship with interpersonal relationship, and it has a negative moderate correlation, indicating that the higher the social responsibility of the control group, the worse the interpersonal relationship.

The results show that interpersonal relationship belongs to the highest level transfer of TPSR teaching mode, and the low level of interpersonal relationship indicates that the level effect of transfer is not achieved and the effect is not good. The main reason is that cognition and sequence have a great influence on the transfer effect, the teaching strategies in classroom design are not comprehensive enough, and the teaching evaluation system is not perfect enough, which can prolong the teaching time of TPSR in future experimental teaching and strengthen the rigorous teaching process of TPSR. To improve the goal of migration.

An empirical study on students' responsibility behavior in physical education classroom is not only the inevitable requirement of the development of physical education and the construction of service-oriented society, but also the bounden responsibility of every physical education worker. At present, the research on this model is still in the promotion stage, focusing on the intervention process and effectiveness of the curriculum model, and further research is needed in the diversity of research tools and objects, the evaluation of the effect of responsible learning, and teachers' classroom teaching strategies.

References

1. He Chuanbao. Analysis of the Influence of College Sports Management on College Students' Sports Activities [J]. *Modern Vocational Education*,2020(44):218-219.
2. Li Lingshu, Ji Liu. The Enlightenment of TPSR Responsibility Model to Physical Education Based on the Thought of "Cultivating People with Moral Ability" [J]. *Journal of Capital Institute of Physical Education*,2017,29(03):217-220+288.
3. Xiang Zhenwei. Research on School TPSR Physical Education Teaching Model from the Perspective of Moral Education [J]. *Physical Education in Chinese Schools (Higher Education)*,2016,3(02):41-44.
4. Wang Jian, Xu Yan and Liu Fang. Research on the Integration of Sports and Arts in Public Physical

A Study on the Responsibility Benefit and Interpersonal Relationship of Personal and Social Responsibility Teaching(TPSR) Course for College Students: A Case Study of Public Physical Education Students in Nanchang University, Jiangxi Province

- Education Courses in Colleges and Universities of Shandong Province [J]. Sports Science and Technology, 2018,39(06):109-111 .
5. Roy .(2020),Research on the Integration and Development of Physical Education and Information Technology in Colleges and Universities —— Comment on "Integration of Information Technology and Physical Education Curriculum".
 6. Yang Feng & Liao Yongsheng. (2020),On the reform of public physical education in colleges and universities under the background of innovation and entrepreneurship.
 7. Ke Xin. Research on College Physical Education Reform Based on Sunshine Sports Environment [J]. Sports Fashion, 2018,(12):166 .
 8. Akemi Umegaki, Satoshi Otomo. Study of the Transfer and Maintenance of the EŞects of the TPSR Model in Junior High School Physical Education Classes[J] .International Journal of Sport and Health Science,2017,15(2):23-25 .
 9. David Walsh. Helping Youth in Underserved Communities Envision Possible Futures: An Extension of the Teaching Personal and Social Responsibility Model [J].Research Quarterly for Exercise and Sport, 2006, 79(2):209-221 .
 10. Pickering M Teaching personal and social responsibility in physical education [M]. Champaign, IL: Human Kinetics, 2019:19-21 .
 11. Hellison, D. Teaching responsibility through physical activity [M].Champaign, IL: USA; Human Kinetics,2018 .