

The Impact of Teachers' Cultural Capital on Participation of Adolescents' Students in Physical Activity and Sport

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Abstract

Background

Effects of cultural capital related to the physical education teacher, which is an important person for adolescents at school, on physical activity behavior of students is not well understood. Therefore, the purpose of the present study was to investigate the effects of cultural capital related to the physical education teacher on participation of adolescents in physical activity and sport.

Materials and Methods

The present descriptive-correlational study was conducted on 384 students (192 boys and 192 girls) aged 12 to 15 years (mean age of 13.81 ± 0.75 years) in grades first, second, and third from regular middle schools of Saqqez city, Kurdistan province, Iran, in 2019. The dependent variables were included perceived teachers' cultural capital, intention to physical activity, and actual physical activity which were measured by researcher-made questionnaires. Mann-Whitney U test, Spearman test, and structural equation method by using Smart-PLS software were utilized to analyze data.

Results

Results of Mann-Whitney U tests revealed boys reported significantly higher cultural capital scores than girls. Moreover, cultural capital significantly influenced intention to physical activity and actual physical activity behavior of adolescents. In addition, intention to physical activity had significant impacts on actual physical activity behavior. Finally, intention to physical activity played a mediating role in the relationship between cultural capital and physical activity behavior of adolescents (all $T > 1.96$).

Conclusion

These results indicate that social position of physical education teacher can be considered as an important social factor that affects the participation of adolescents in physical activity and sport.

Key Words: Adolescents, Cultural capital, Physical activity.

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1- INTRODUCTION

Regular participation in physical activity and sport is considered as one of the determining factors for optimal growth and development of children and adolescents (1). Furthermore, it has been shown that regular physical activity is an essential health-promoting behavior that is able to prevent or delay a variety of chronic illnesses and premature deaths. Research has demonstrated that regular physical activity increases mental health, reduces symptoms of depression and anxiety, and improves life satisfaction and quality of life (2-3). Longitudinal studies indicated that regular physical activity at school age can affect physical activity during adulthood and impact the public health in general (4). Despite these positive effects, many school-age children and adolescents have a sedentary lifestyle. Therefore, it is highly important to find out which factors might influence participation of children and adolescents in physical activity and sport. Almost all children and adolescents spend extended periods of time in school. Therefore, school can be considered as a potential environment for affecting participation of children and adolescents in physical activity and sport.

Moreover, because of its compulsory nature for school-aged students, physical education classes can be considered as special environments within the school setting that can provide multiple opportunities for children to be physically active inside and outside school (5). As such, physical education teacher plays a vital role within the physical education class. Therefore, the components related to a physical education teacher can be considered as important factors that might influence participation of school-aged children and adolescents in physical activity and sport (6). Perceived cultural capital of physical education teachers at school might be one of these influential factors. However, its role on participation

of school-aged adolescents in physical activity and sport has not well documented. Cultural capital is the accumulation of knowledge, behaviors, and skills that a person can tap into to demonstrate one's cultural competence and social status. Cultural capital can be distinguished into three sub-form (7): 1) embodied cultural capital as an internalized form of capital. This form of capital describes the consistent dispositions of the mind and body of an individual, for instance, values, skills, and knowledge; 2) objectified cultural capital as reified form, which includes the possession of cultural goods such as pictures, books, instruments, or sports equipment; and 3) institutionalized cultural capital which includes formal educational and academic qualifications. In all three sub-form, the cultural capital can be used as a resource to expand the possibilities for social participation and an advantageous lifestyle (7).

Each of these three basic forms of capital could also become effective through the mediation of symbolic capital. "Symbolic capital is nothing other than capital, in whatever form, when perceived by an agent endowed with categories of perception arising from the internalization (embodiment) of the structure of its distribution, i.e. when it is known and recognized as self-evident" (8). Bourdieu (8) pointed out that the effectiveness of symbolic capital is given through society and depends on real practices of communication and interaction. Occupational prestige as the recognition and the power associated with a particular profession, for instance, exists only through the acceptance by members of a society (9). While symbolic capital exists only in the eyes of other members of a society, economic, social, and cultural capital exist in their own modes (8). Some research investigated the role of cultural capital in the school setting. For example,

Caprara (11) examined the effects of students' cultural capital on performance in mathematics and languages. Results showed that there was significant association between levels of student's cultural capital and performance in the mathematics and languages. Wildhagen (11), estimated structural equation models to empirically assess the extent to which teachers' perceptions of students and educational expectations act as mechanisms of the cultural capital effect on grades and standardized test scores. The results show that teachers' perceptions do not mediate the effect of cultural capital on academic performance. However, educational expectations account for portions of the cultural capital effect on grades and test scores.

Tan (12) performed a meta-analysis and summarized the relationships between cultural capital and student achievement. Results showed a small-to-medium overall mean effect size, and larger individual effect sizes for parental education and parental expectations compared to parent-child cultural participation and discussions. Effect sizes were also larger for older students, reading achievement, and studies published earlier. The results affirm the role of cultural capital in explaining student achievement, and indicate that cultural capital is not a unidimensional construct with unequivocal effects on achievement. Other studies investigated the effects of students' cultural capital on the participation in physical activity and sport. For example, Engström (13) examined whether and how differences in sports experiences during childhood and adolescence and differences in cultural capital are reflected in exercise habits in middle age. The results showed that There was also an almost five times greater chance that an individual with a very high cultural capital at the age of 15, as defined by their social background and grades in theoretical subjects, was still an

active exerciser 38 years later in comparison with an individual with a very low culture capital. Everley et al. (14) explored the place of social capital in facilitating physical activity of children aged 5 to 11 years. The study showed that social capital formed an essential basis for participation in physical activity of children. Vollmer et al. (15) investigated a theory-based model of the direct and indirect relationships between socio-cultural factors and adolescents' physical exercise and sport activity. The results of this study showed that the supposed direct association between parental institutionalised cultural capital and adolescents' physical exercise and sport activity is completely mediated. The above-mentioned findings are remarkable and suggest that the use of Bourdieu's Capital Framework offers an additional explanatory power in the context of adolescents' participation in physical activity and sport. However, there are many other variables related to cultural capital that can potentially affect sport participation among adolescents.

One of these variables is cultural capital related to the physical education teacher, which is an important person for adolescents at school. Because the effects of cultural capital related to the physical education teacher in adolescents' participation in physical activity and sport has not been well documented, the purpose of the present study was designed to further explore this issue. Therefore, the aim of the present study was to investigate the effects of cultural capital related to the physical education teacher on participation of adolescents in physical activity and sport.

2- MATERIALS AND METHODS

2-1. Study design and population

This study used a descriptive-correlational approach. The participants were 384 students (192 boys and 192 girls)

aged 12 to 15 years (mean age of 13.81 ± 0.75 years) in grades first, second, and third from regular middle schools of Saqqez city, Kurdistan province, Iran, in 2019 who were selected by using a simple random sampling method. The specified sample size was selected according to G*Power statistical software with an effect size of 80%, a test power of 0.8, and a significant level of 0.05 (16). The questionnaires were distributed among students within the physical education class and they were asked to complete them very accurately. If there were any question regarding the questionnaire, the experimenter answered and made it completely clear for students.

2-2. Measuring tools

Dependent variables were included perceived teachers' cultural capital, intention to physical activity, and actual physical activity.

2-2-1. Cultural Capital: Perceived teachers' cultural capital was measured by a researcher-made questionnaire with 13 questions which was adopted from Avci et al. (17). The questionnaire has used a five-point Likert scale from "strongly agree (5)" to "strongly disagree (1)". We averaged all questions to measure final score of the questionnaire. In this study, the validity of questionnaire was assessed by twelve experts as well as its reliability was assessed where the Cronbach's alpha coefficient was 0.90.

2-2-2. Intention to Physical Activity: Intention to physical activity was measured by using a 3-questions scale, which was adopted from Chatzisarantis et al. (18). First question of this scale has utilized a five-point Likert scale from "strongly agree (5)" to "strongly disagree (1)", and second question has applied an eight-point Likert scale from zero days (0) to seven days (7). We averaged all questions to measure final score of the questionnaire. The designers of the

questionnaire measured reliability of its original form and reported a Cronbach's alpha coefficient of 0.87 (18). In the current study, twelve experts corroborated the validity of this questionnaire and its reliability was assessed where the Cronbach's alpha coefficient was 0.90.

2-2-3. Actual Physical Activity: Leisure-time physical activity was assessed using the Physical Activity Behavior in Leisure-Time Scale (18), including three questions scored based on an eight-point Likert scale from zero days (0) to seven days (7). We averaged all questions to measure final score of the questionnaire. The designers of the questionnaire confirmed its reliability and reported its Cronbach's alpha coefficient to be 0.93 (18). In the current study, twelve experts corroborated the validity of this questionnaire and its reliability was assessed where the Cronbach's alpha coefficient was 0.90.

2-3. Inclusion and exclusion criteria

Inclusion criteria included studying in Saqqez middle schools and consent to participate in the study. Moreover, we only selected the students from national schools.

2-4. Ethical approval

The participants voluntarily participated in the present study and written informed consent was obtained from the subjects and their parents. Ethics Committee of Islamic Azad University of Aliabad Katoul Branch approved this study (IR.IAU.AK.REC.1399.012).

2-5. Data analysis

In the current study, descriptive statistics consisted of means and standard deviations were used to describe the research variables. Kolmogorov-Smirnov test was used to measure normality of data. Mann-Whitney U test was used to compare the research variables between boys and girls. Spearman test was used to assess correlation between research variable.

Structural equation method and path analysis by using Smart-PLS software were utilized to test the proposed model of this study. Significance level was set at $P < 0.05$.

3- RESULTS

3-1. Descriptive data and gender differences: According to **Table.1**, boys' and girls' means and standard deviations of ages were 13.78 ± 0.73 and 13.85 ± 0.77 years, respectively. The results of descriptive statistics showed that boys and girls had almost similar scores in intention to physical activity and leisure-time physical activity, however, boys perceived

higher cultural capital of their physical education teacher in comparison to girls (**Table.1**). Results of Kolmogorov-Smirnov test showed that research variables were not normally distributed (all $P < 0.05$). Therefore, we used Mann-Whitney U test for analyzing gender differences across research variables. Results of Mann-Whitney U tests revealed that boys reported significantly higher cultural capital scores than girls. However, there were not significant differences between boys and girls in intention to physical activity and physical activity behavior (**Table.1**).

Table-1: Means and standard deviations of research variables in boys and girls, $n=384$.

Variables	Age	Cultural Capital	Intention	Physical Activity
Boys (n=192)	13.78(0.73)	3.19(0.80)	3.41(0.73)	3.41(0.73)
Girls (n=192)	13.85(0.77)	2.48(0.81)	3.44(0.74)	3.44(0.74)
Mann-Whitney U	17295.00	9603.50	18121.00	18319.00
P-value	0.261	0.000	0.771	0.916

3-2. Relationship between variables: Because research variables were not normally distributed, we utilized Spearman test to analyze the relationship between research variables (**Table.2**). As observed, there were significant relationships between the cultural capital with intention

to physical activity and actual physical activity behavior in adolescents (all $P < 0.001$). Moreover, intention to physical activity had significant relationship with actual physical activity behavior in adolescents (all $P < 0.001$).

Table-2: Results of Spearman correlation tests between research variables.

Research variables	1	2	3
1. Cultural Capital	-		
2. Intention	$r=0.525^*$ $P < 0.001$	-	
3. Physical Activity	$r=0.525^*$ $P < 0.001$	$r=0.545^*$ $P < 0.001$	-

*Significant at $P < 0.001$

3-3. Structural equation method: **Table.3** and **Figure.1** represent the results of structural equation method. The results of path analysis indicated that the cultural capital significantly influenced intention to physical activity and actual physical activity behavior of adolescents (all

$T > 1.96$). In addition, intention to physical activity had significant impacts on actual physical activity behavior ($T > 1.96$). Finally, intention to physical activity played a mediating role in the relationship between cultural capital and physical activity behavior of adolescents ($P < 0.01$).

Table-3. Results of path analysis between research variables.

Path	β	T-value
1 Cultural Capital - Intention	0.54	10.76*
2 Cultural Capital - Physical Activity	0.42	7.84*
3 Intention - Physical Activity	0.35	6.81*
	Z	P-value
4 Cultural Capital - Intention - Physical Activity	8.58	$P < 0.001^{**}$

* $T > 1.96$, ** $P < 0.001$

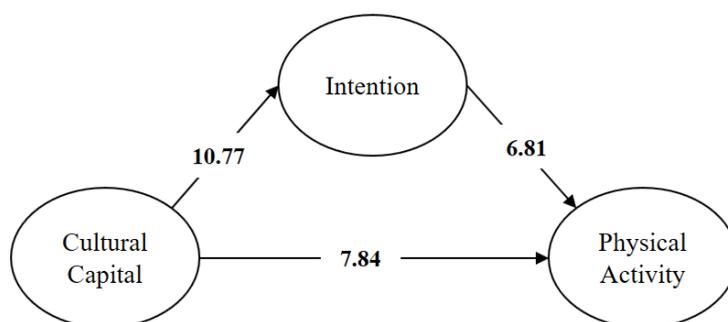


Fig.1: A representation of research model in the form of T-values. The significance level is at $T > 1.96$.

4- DISCUSSION

Previous research suggests that the cultural capital offers an explanatory power in the context of adolescents' participation in physical activity and sport (13-15). However, there are many other variables related to cultural capital that can potentially affect sport participation among adolescents. One of these variables is cultural capital related to the physical education teacher, which is an important person for adolescents at school. Therefore, the purpose of the present study was to investigate the effects of cultural capital related to the physical education teacher on participation of adolescents in physical activity and sport. Based on the

previous research (13-15) and Bourdieu's Capital Framework (7-8), it was hypothesized cultural capital related to the physical education teacher would positively affect participation of adolescents in physical activity and sport. The results of this study showed that the cultural capital significantly influenced intention to physical activity and actual physical activity behavior of adolescents. In addition, intention to physical activity had significant impacts on actual physical activity behavior. Finally, intention to physical activity played a mediating role in the relationship between cultural capital and physical activity behavior of adolescents. These results confirm our hypothesis and indicate that physical

education teachers' cultural capital plays an important role in the participation of adolescents' students in physical activity and sport. Moreover, these results are in consistent with previous results that cultural capital can be considered as an important factor for participating of children and adolescents in physical activity and sport (13-15). To interpret these results, it might be reasonable that the physical education teachers' cultural capital constructs the social position of a teacher during the physical education class and at school and that this position, if is perceived as high, will in turn affect the extent to which the adolescents' students participate in physical activities during the class and outside the school. As such, it might be possible that the greatest perception of children and adolescents from cultural capital of their teachers might strength their participation in physical activity and sport.

It is obvious that children's and adolescent's level of physical activity is very closely associated with the social position of important others such as parent (15). The results of this study has also indicated that cultural capital of physical education teachers is also an important social factor that can influence the participation of adolescent in physical activity. Thus, it can be argued that participation of children and adolescents in physical activity and sport is a social marker and that sport and physical activities are socially and culturally loaded. The most important strength of the present study was that we examined the perceived cultural capital of physical education teacher as a possible social factor that may influence participation of adolescents in physical activity and sport. To the best of our knowledge, the effects of perceived cultural capital of physical education teacher on participation of adolescents in physical activity and sport has not previously investigated. Therefore,

the results of this study adds to the literature and indicate that social position of physical education teacher might positively affect the participation of adolescents in physical activity and sport. Furthermore, among the limitations of this research is its cross-sectional research design, which creates limitations for examining causal effects of attitudes toward fashion on participation of adolescents in sport and physical activity.

5- CONCLUSION

In conclusion, the current study demonstrated that perceived cultural capital of physical education teacher can positively influence participation of adolescents in physical activity and sport. These results indicate that social position of physical education teacher can be considered as an important social factor that affects the participation of adolescents in physical activity and sport. Our findings can have some practical implications for physical education teachers. Based on the results of the present study, it can be recommended that physical education teachers improve their social position within the class and engage more with the students in the sport activities within the physical education class.

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7- CONFLICT OF INTEREST: None.

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