



INTRINSIC MOTIVATION OF TEENAGER SCHOLARS TOWARD PHYSICAL ACTIVITIES

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Abstract:

Physical education is a learning process which uses physical activities to improve skills, fitness and attitude of an individual to achieve an optimum level. The objective of this study was to examine the level of motivation among 16 years old scholars towards physical activities in a physical education class and further explore any gender difference. Four classes of 16 years old schoolboys and schoolgirls were selected for the study. There were 130 students (62 boys; 68 girls). The instrument of Situation Intrinsic Motivation Scale by Blanchard et al (2007) was administered in this research. Descriptive data indicated that the overall measure for the Intrinsic Motivation was $M=3.63$, $SD=0.72$; Identified Regulation was $M=3.25$, $SD=0.60$; External Regulation was $M=2.69$, $SD=0.76$; and Amotivation was $M=2.80$, $SD=0.73$. The independent t-test revealed that Intrinsic Motivation and External Regulation was significant based on gender, $p < .05$. The results indicate that steps should be undertaken by school physical education teachers to improve the teaching of physical education to improve the student's situation intrinsic motivation level.

Keywords: intrinsic motivation, gender motivation, physical education interest

Introduction

Intrinsic motivation is defined as an internal factor orders and integrates the attitude of an individual (Weinberg & Gould, 1999). This is important to make sure students are actively involved in the learning process in Physical Education lessons (Solmon, 2006). Physical education is a learning process which uses physical activities to improve skills,

fitness and attitude of an individual to achieve an optimum level (Wuest & Bucher, 2009). Activities in Physical Education (PE) need to be planned to make it attractive and varied so that students can have fun. Having fun while undergoing PE will contribute to continuous involvement from the students (Bailey, 2006; Viira & Koka, 2012). Students who are highly motivated intrinsically in PE lessons will involve voluntarily in the physical activities in the class (Blanchfield & Jennifer Lisa, 2002; Tsigilis, 2005).

Voluntary and sincere involvement can lead to active teaching process and give an impact on the student's level of health (Blanchfield & Jennifer Lisa, 2002; Guzman & Kingston, 2012; Tsigilis, 2005). Therefore, the level of physical fitness of students should be parallel with the level of intrinsic motivation. Data shows that the level of physical fitness and health of students are not favorable (Dan, Mohd Nasir, & Zalilah, 2011; Derri, Nikos, & Petraki, 2004; Kasmini, Idris, Fatimah, Hanafiah, Iran, & Asmah, 1997; Rengasamy, 2008, 2012; Singh, 2005; Sinnapan, 2006; Tomkinson, Olds, & Gublin, 2003; [USDHHS], 2008). Research also shows that the level of motivation and students interest among school students towards PE lessons after the age of 14 has declined especially among female students (Newton, 1994).

This situation will persist until adulthood if students are not motivated to do physical activities and continuous exercises in their lives. Efforts are being put in by researches to observe intrinsic motivation in individual involvement in sport and recreation activities (Blanchard, Maska, Vallerand, Sablonnie, & Provencher, 2007; Chin, Khoo, & Low, 2012; Cremades, Flournoy, & Gomez, 2012; Goose & Winter, 2012; Guzman & Kingston, 2012; Heng, 2001; Martin-Albo, Nunez, Dominguez, Leon, & Tomas, 2012; Moen & Verburg, 2012; Park, Jeon, & Kim, 2012; Tsitskari & Kouli, 2010). However, research on the intrinsic motivation of students involvement in PE lessons is still limited (Balakrishnan, 2011; Haywood, 1991; Kouli, Rokka, Mavridis, & Derri, 2009; Moreno, Gonzalez, Martin, & Cervello, 2010; Spittle & Byrne, 2009; Viira & Koka, 2012) especially for 16 years old students.

Previous research found out that there are significant differences in intrinsic motivation from the gender aspect (Cremades et al., 2012; Tsitskari & Kouli, 2010; Weinberg, Tenenbaum, Mckenzie, Jackson, Anshel, Grove, & Forgaty, 2000). Research showed that female students are more intrinsically motivated than male students (Etnier, Sidman, & Hancoc, 2004; Petheric & Weigand, 2002; Weinberg et al., 2000). However, there are also research that shows that male students have more intrinsic motivation compare to female students in PE lessons and sports (I-Wei, 1998; McKiddie & Maynard, 1997; Newton, 1994; Tsitskari & Kouli, 2010; Xiang, McBride, & Guan, 2004; Zahariadis, Tsorbatzoudis, & Grouios, 2005). Inconsistency of these findings requires further research. This research is important to provide information

regarding the aspects of intrinsic motivation of students to the stakeholders in the school curriculum and PE teachers so that the aims and objectives of PE can be achieved and the decline of intrinsic motivation among students in PE lessons can be reversed (Mathes, McGivern, & Schneider, 1992; Passar, 1982). Hence, this research was carried out to observe the level of situation intrinsic motivation among 16 years old students in PE lessons in one of the schools. This research is essential as it could provide information to teachers regarding the level of situation intrinsic motivation among 16 years old students in PE lessons. The reason for choosing 16 years old students to be the subject of this research is because these students are matured to give accurate responses (White, 1999). This research aims to observe the level of situation motivation among 16 years old students in PE lessons. Furthermore, this research also aims to observe the differences in situation intrinsic motivation subscales from the gender aspect.

Methodology

A quantitative research via survey was used in this research as the questionnaire could be administered to as many respondents (Robert, Spink, & Pemberton, 1999). This survey was carried out to gather information on the level of situation intrinsic motivation of 16 years old students in PE lessons in a school. One school of the 23 schools in the district was selected to be the respondent in this research. 130 students of 16 years old from the four classes in the school were chosen to be the respondents and these respondents are of 16 to 17 years of age (Mean=16.05, SD=0.22). Instrument The Situational Intrinsic Motivational Scale (SIMS) instrument by Blanchard et al (2007) used in this research which consists of 16 items. Each item is measured in likert scale from 1 to 5.

The Situation Intrinsic Motivation Inventory measures four subscales, namely intrinsic motivation domain (4 items), identified regulation domain (4 items), external regulation domain (4 items) and amotivation domain (4 items) (Moreno et al., 2010). Validity and the reliability of this SIMS are between .82 to .88 (Blanchard et al., 2007; Moreno et al., 2010).

Pilot test was carried out on 35 respondents who fulfilled the same criteria has shown Cronbach Alpha value of .90 and could be accepted (Nunally, 1978).

Procedure

Respondent's participation in this research is voluntary and a letter of consent from parents was collected as these respondents were under the legal age. The questionnaire

of the SIMS was given to the respondents and respondents were given 25-30 minutes to complete the questionnaire. The researcher has cooperation from the school administrators to gather all the respondents in the school canteen to make sure the respondents answered all the items in the questionnaire individually without any interaction. This was to avoid any bias in the responses from the respondents. The researchers also explained to the respondents that all their responses must be based on the teaching and learning process of PE lessons. All the answers must reflect respondents true feeling related to the teaching and learning process they underwent in PE lessons.

Results

Descriptive statistical analysis shows that all the respondents of one of the school involved are of the age of 16 to 17 years (Mean=16.05, SD=0.22).

Variable		Situation Intrinsic Motivation Subscale			
Gender		Intrinsic Motivation	Identified Regulation	External Regulation	Amotivation
Male	Mean	3.44	3.20	2.90	2.90
	SD	0.68	0.65	0.71	0.65
	N	62	62	62	62
Female	Mean	3.81	3.29	2.51	2.70
	SD	0.71	0.55	0.77	0.78
	N	68	68	68	68
Total	Mean	3.63	3.25	2.69	2.80
	SD	0.72	0.60	0.76	0.73
	N	130	130	130	130

Table 1: Situation Intrinsic Motivation among 16 Years old Students in A School

Table 1 shows the situation intrinsic motivation among 16years old students in PE lessons in a school. Result showed the mean score for male students is (M=3.44, SD=0.68) for the intrinsic motivation subscale, (M=3.20, SD=0.65) for the identified regulation subscale, (M=2.90, SD=0.71) for the external regulation subscale, and (M=2.90, SD=0.65) for the amotivation subscale. Meanwhile, the female students has a mean score of (M=3.81, SD=0.71) in the intrinsic motivation subscale, (M=3.29, SD=0.55) in the identified regulation subscale, (M=2.51, SD=0.77) in the external regulation subscale,

and (M=2.70, SD=0.78) in the amotivation subscale. Overall, the mean score of 16 years old students in a school shows the level of situation motivation in intrinsic motivation subscale (M=3.63, SD= 0.72), identified regulation subscale(M=3.25, SD=0.60),external regulation subscale(M=2.69, SD=0.76) and amotivation subscale (M=2.80, SD=0.73).

Situation Motivation Subscale	Intrinsic	Gender		Mean Different	df	t value
		Male (n=93)	Female (n=81)			
Intrinsic Motivation						
Mean		3.44	3.81	0.37	128	-3.02*
SD		0.68	0.71			
Identified Regulation						
Mean		3.20	3.29	0.09	128	-0.88
SD		0.65	0.55			
External Regulation						
Mean		2.90	2.51	0.39	128	2.99*
SD		0.71	0.77			
Amotivation						
Mean		2.90	2.70	0.20	128	1.62
SD		0.65	0.78			
* Significant at $p < .05$						

Table 2: Independent t test Situation Motivation Based On Gender

Table 2 shows independent t-test was carried out and showed a significant difference in the gender aspect in the intrinsic motivation subscale $t(1, 128)=-3.02, p < .05$ and external regulation $t(1, 128)=2.99, p < .05$ among 16 years old students in a school. The result also showed that the mean score for female respondents is higher (Mean=3.81, SD=0.71) compare to male respondents (Mean=3.44, SD=0.68) with a mean difference of 0.37 in intrinsic motivation domain. But, for external regulation subscale, result showed that the mean score for male respondents is higher (Mean=2.90, SD=0.71) compare to female respondents (Mean=2.51, SD=0.77) with a mean difference of 0.39.

Discussion

Overall, the situation intrinsic motivation is still at a moderate level. This research is also aligned with the previous research (Alderman et al., 2006; Bailey, 2006; Blanchard et al., 2007; Moreno et al., 2010). This anomaly could be caused by several factors such as the PE curriculum and teacher's teaching experience. In this study, the perception of the students is based on PE lessons. On the other hand, a similar research done by Viira and Koka (2012) was not carried out in PE lessons. The finding of this research shows that

the enjoyment in games should be given priority so that intrinsic motivation among students who follow PE classes could be increased. This is important to maintain students' active involvement in PE classes. The outcome of this result indicates that teachers should plan their daily lesson plans more effectively (Deci & Ryan, 1985). This is important to increase the level of intrinsic motivation among 16 years old students to be more active in PE lessons. If this situation is not taken seriously, there is a possibility that the intrinsic motivation among the students will gradually reduce and students will not be active and reluctant to get involved in the PE lessons. As a result, students will try to skip or give excuses to avoid being involved in the PE lessons. This will affect the discipline of students and indirectly their level of fitness will be reduced and be exposed to sedentary illnesses.

Independent t-test shows that there is a significant differences in gender in the intrinsic motivation and external regulation subscale, $p < 0.05$ in PE lessons. The result of the finding is not consistent with the previous findings (I-Wei, 1998; Newton, 1994; Tsitskari & Kouli, 2010; Zahariadis, Tsorbatzoudis, & Grouios, 2005). If seen in the 16 years old students' curriculum perspective, the games taught are hockey, sepak takraw and tennis. There is a possibility that these games are quite challenging for female students and the challenges because the girls to feel enjoyment compared to male students. Apart from that, teacher's role and characteristics could also affect this study whereby female teachers are more active and more knowledgeable in the tennis game and hockey compared to male teachers. This factor could contribute to students' enjoyment while following PE lessons. Although the finding of the research points to significantly higher intrinsic motivation in female students compared to male students in the subscale of intrinsic motivation, the categorization score range still shows that both male and female students have moderate level of intrinsic motivation in PE lessons.

Conclusion

This research found that the level of situation intrinsic motivation of 16 years old students in PE lessons is still at a moderate level. The finding shows that there is a significant difference in gender aspect in the intrinsic motivation subscale and external regulation subscale. The research gives the latest information about the level of situation intrinsic motivation of 16 years old students in PE lessons in a school. This study can provide information to PE teachers, Curriculum Development Centre and Ministry of Education that a new transformation is needed to increase students' level of situation intrinsic motivation. This is important because situation intrinsic motivation is the key

for students to continue to get involved actively in PE lessons. To improve the level of situation intrinsic motivation among students in PE lesson, PE instructors or teacher should engage in new pedagogical skills that are more effective and comprehensive.

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