Motivational Correlates for Physical Education Class Participation of College Students

Jonar Tumali Martin

Physical Education Department, College of Education Angeles University Foundation. Mc Arthur Hi-way, Angeles City, Philippines martin.jonar@auf.edu.ph

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Abstract: The study investigated the association between goal orientation and self-determination in the physical education class of college students from three major private universities in Angeles City, Philippines. This cross-sectional study comprised a random sample of 114 college students, male (n=47) and female (n=67), with a mean age of 16.89 (SD=2.01). Participants answered the Perception of Success Questionnaire (POSQ; Roberts et al., 1998) and the Sports Motivation Scale (SMS; Pelletier et al. 1995). Descriptive and correlation statistical analyses were conducted. Findings reveal that students' ego orientation was found moderate while the task orientation of the students was found to be high. The self-determination motivation of the students was found to be moderately high, with intrinsic motivation scoring higher which indicates more self-determined motivation. Both ego and task-orientation are associated with extrinsic and intrinsic motivation. A stronger relationship existed between ego and extrinsic motivation while a stronger relationship existed between task-orientation and intrinsic motivation. This study may provide baseline data that authorities in Physical Education (PE) may use in identifying relevant curricular programs and teaching approaches that could assist efforts in fostering motivation to participate in lifelong physical activities.

1 INTRODUCTION

Research supports the many health benefits acquired through physically active lifestyle (Warburton et al., 2006; WHO, 2011), yet, a large percentage of the population does not have a substantial amount of physical activity necessary for good health (Haskell et al., 2007). According to Weiss (2000), physical activity habits should be started early to increase the likelihood of maintaining an active lifestyle all through life. One venue that is viewed to promote early physical activity habits is school physical education (Sallis and Mackenzie, 1991). Allied with the promotion of a physically active lifestyle is to motivate individuals to become, and remain, physically active. It is important that the physical activity environment provides a motivating and satisfying experience so that it could result in an increase in self-determined participation. Two of the most prominent theories that have been applied to physical education when it comes to motivation are the Achievement Goal Theory (Ames, 1992; Nicholls, 1984) and Self-Determination Theory (Ryan and Deci, 2000).

A popular concept established by the Achievement Goal Theory is goal orientation which Ames (1992) and Nicholls (1984) refers to the conception of ability adopted by an individual and acts as goal of action. An individual who is taskoriented is focused on developing skills and demonstrating mastery at the task while an individual who is ego-oriented is more focused on demonstrating ability by being successful by outperforming others (Nicholls, 1984; Treasure and Roberts, 2002). While Self Determination Theory, as explained by Ryan and Deci (2000) is the existence of different levels of motivation ranging from the most self-determined level of motivation which refers to intrinsic motivation to the less selfdetermined level of motivation which is amotivation. According to Vallerand (2001), intrinsic motivation is considered the highest form of motivation, which reflects situations, in which individuals do an activity to have fun, learn new things or develop their skills.

Studies on goal orientation report that students have higher task orientation than ego-orientation (Martin et al., 2016; Wang et al., 2002). According

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to Nicholls (1989), students that are task-oriented enjoy more in the practice of the activity compared to those that are ego-oriented. In terms of the link between goal orientation self-determination, studies have found that task-oriented students are more selfdetermined with high intrinsic motivation (Granero-Gallegos et al., 2012; Moreno et al., 2008; Wang et al., 2002).

In a study by Grasten et al. (2012) with adolescents, it was found out that those that were in a task-oriented climate had higher intrinsic motivation, whilst those that belong in an egooriented climate had higher extrinsic motivation. Ntounamis (2005) pointed out that students participate more actively in PE classes and in their leisure time when they are enjoying the activity. Moreover, Standage and Treasure (2002) concurred that those who have self-determined motivation have high intention to do physical activity.

Teachers would benefit greatly if they have a better understanding when it comes to the relationship of the students' goal orientation and self-determined motivation. It could help identify effective strategies that can be incorporated into the PE class to increase the likelihood of students to be engaged in lifelong physical activity. Therefore, the purpose of this study is to investigate the relationship of goal orientations to the intrinsic and extrinsic motivation of college students in the physical education class.

SCIENCE AND TECI

2 METHODS

2.1 Study Design and Participants

This cross-sectional study was designed to investigate the relationship between the goal orientation and self-determined motivation in the physical education class of the college students in a private university. This study adopted previously validated questionnaires including Perception of Success Questionnaire (POSQ; Roberts et al., 1998) and the Sports Motivation Scale (SMS; Pelletier et al. 1995) adapted to PE. The participants of the study were 114 students taking up PE class, male (n=47) and female (n=67), with a mean age of 16.89 (SD=2.01) from three major private universities in Angeles City, Philippines.

Permission to conduct the study was sought from school authorities Authority. Students were asked to sign a written consent to participate. Before the signing of the consent, students were informed about the purpose of the study and their rights as participants. The questionnaire was answered in their PE class under the supervision of the students' PE teacher on an agreed date and time. There was no time limit for the completion of the questionnaire. Participants were assured anonymity on their responses to the instruments.

The researcher floated the questionnaire in their respective PE classes on an agreed date and time under the supervision of the PE teacher. The participants were told to ask for help if confused concerning either the instructions or the clarity of a particular item. To minimize students' tendency to give socially desirable responses, students were encouraged to answer honestly and were assured that their responses were confidential. Each participant took 20-30 minutes to complete the questionnaires. Prior to the onset of the study and its data collection, approval was sought from Angeles University Foundation-.Angeles University Foundation Medical Center Institutional Ethics Review Committee (AUF-AUFMC IERC).

2.2 Instruments Used

2.2.1 Perception of Success Questionnaire

The Perception of Success Questionnaire (POSQ; Roberts et al., 1998) was utilized to measure how participants perceive their success in the PE class. It is consisted of 12 items measuring students' achievement goal in PE classes in terms of *task*orientation (e.g. "I reach personal goal") and egoorientation (e.g. "I outperform my opponents"). The instrument is a Likert-type scale indicating the degree of agreement or disagreement ranging from 1 (strongly disagree) to 5 (strongly agree). Previous studies showed the reliability of the instruments in the field of PE (Granero-Gallegos et al., 2012; Martin, et al., 2016). For the current study, the internal consistency of the subscales was satisfactory for both ego- (0.87) and task-(0.93) orientation.

2.2.2 Sport Motivation Scale (SMS)

The Sport Motivation Scale by Pelletier et al. (1995) adapted to PE was utilized to measure motivation. The scale consists of 28 items measuring the different levels of motivation established by the Self-Determination Theory (Deci and Ryan, 1985): twelve (12) items for extrinsic motivation (EM) (e.g. "Because it allows me to be well regarded by people I know"), and twelve items (12) for intrinsic motivation (IM) (e.g. "For the pleasure it gives me to know more about the sport skills that I practice").

Only dimensions of intrinsic motivation and extrinsic motivation were used in the study. Answers were collected on a Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The internal consistency of the instrument in the field of PE was demonstrated in a recent study on Filipino college students (Martin, 2015). Likewise, for the current study, the internal reliability coefficients for both intrinsic (0.91) and extrinsic (0.88) motivation were satisfactory.

2.3 Data Analysis

Descriptive and correlation analyses were conducted in examining the data. For the descriptive statistics, mean and standard deviation were computed. Pearson correlation was done to examine relationship between variables. SPSS version 17.0 was used to complete the analyses.

3 RESULTS AND DISCUSSION

3.1 Descriptive Values of the Study Variables

Table 1 shows the descriptive values of each of the research variables. Generally, the ego-orientation of the participants was found to be moderate (M=2.86, SD=0.93) while the task-orientation of the students was found to be high (M=4.05, SD=0.81). For self-determination, both intrinsic (M=3.53, SD=0.70) and extrinsic (M=3.42, SD=0.69) motivation of the students was found to be moderately high.

	М	SD	
Ego orientation	2.86	0.93	0.87
Task orientation	4.05	0.81	0.93
Intrinsic motivation	3.53	0.70	0.91
Extrinsic motivation	3.42	0.69	0.88

Table 1: Descriptive statistics.

The scales used in the study underwent reliability of measures, particularly Cronbach's alpha. As reported in Table 1, the results show that the scales possess adequate reliability, as the values of Cronbach's alpha were all over 0.70, which exceeded the recommended level proposed by Nunnally (1978).

3.2 Correlation between Achievement Goal and Self-determination in the Physical Education

Table 2 shows the intercorrelations among all variables. As shown in the table, there is no association between ego and task orientation (r=0.15, p < 0.05). Ego-orientation was positively associated with extrinsic (r=0.44, p > 0.01) and intrinsic motivation (r=0.33, p > 0.01). Also, task orientation was positively correlated with extrinsic (r=0.29, p > 0.01) and intrinsic motivation (r=0.42, p > 0.01). Moreover, intrinsic and extrinsic motivation were positively correlated (r=0.79, p > 0.01).

Table 2: Intercorrelation of the variables.

		1	2	3	4	
	Ego					
1	orientation	-				
	Task	0.15				
	orientation		-			
	Intrinsic	0.33*	0.42*			
	motivation			-		
	Extrinsic	0.44*	0.29^{*}	0.79^{*}	—	
	motivation			0.79		
*p>.01						

*p>.01

3.3 Discussion

In any educational endeavor, motivation is an essential ingredient in imparting knowledge and skills to students moreover retention of learning and formation of lifelong positive habits. By being abreast with the motivational orientation and levels of the students, teachers could shape up the learning environment to assist in efforts in fostering positive habits leading to lifelong adherence to physical activity.

This study described the goal orientation and self-determined motivation profiles of the Filipino college students in their PE class and the correlations between variables were examined. The findings revealed that the students have moderately high levels of ego-orientation, extrinsic motivation, and intrinsic motivation while they have high levels of task orientation.

Results of this current study concur with the findings of earlier studies that students have moderate levels of ego-orientation while having high levels of task orientation. Similarly, it was found out that students have higher level of task orientation score than ego-orientation (Grannero-Gallegos et al., 2012, Wang et al., 2002). In a study by Grannero-Gallegos et al. (2012), students who are task oriented are more self-determined and practice physical activity more outside of school PE while those who are ego-oriented exhibit otherwise. This habit may be attributed to the teaching practices in the Philippines. Similarly, in other countries, the mastery of a task is given emphasis rather than comparing performance with others. More so, most of the time, students are graded individually based on competency rather than the manner of competing with others.

Congruent to other studies, students have high levels of intrinsic and extrinsic motivation with the earlier scoring higher than the later (Grannero-Gallegos et al., 2012, Grasten et al., 2012). This result indicates that Filipino students prefer to enjoy and have fun in their PE class more than to reap the rewards from the activity. This finding suggests that teachers should structure the PE class in such a way that enjoyment is an integral component while targeting necessary competency.

In the correlation analyses of variables, it was revealed that both ego and task orientation were associated with intrinsic and extrinsic motivation. Similarly, in the study of Granerro-Gallegos et al. (2012), a stronger link existed between ego and extrinsic motivation while a stronger positive relationship existed between task orientation and intrinsic motivation. According to Vallerand (2001), those who have high scores in intrinsic motivation associated positively with a number of desirable psychological consequences which include enjoyment, satisfaction, interest, effort. and adherence to exercise, and negatively with anxiety and boredom. However, according to Wang et al. (2002) those who have high levels of extrinsic motivation are partly motivated by avoidance of guilt or might be feeling pressured to be participating in school PE and leisure activities.

In the studies of Granerro-Gallegos et al. (2012) and Wang et al. (2002), they found out that students who have high task-orientation and intrinsic motivation participate more in physical activity outside of the PE class. This result suggests that PE teachers should modify the lessons so that that the climate is more on the achievement of the task rather than performing in comparison with others to develop and maintain more self-determined students in the PE class and leisure activities.

4 CONCLUSIONS

The Filipino college students scored higher in taskorientation than ego-orientation. The ego-orientation of the students was found to be moderate while their task-orientation was found to be high. In terms of self-determination, the intrinsic and extrinsic motivation of the students were found to be moderately high, with intrinsic motivation scoring higher, indicating more self-determined motivation. Both ego-orientation and task-orientation are associated with extrinsic and intrinsic motivation, but a stronger relationship existed between egoorientation and extrinsic motivation while a stronger relationship existed between task-orientation and intrinsic motivation. This study may provide baseline data that authorities in PE may use in identifying relevant curricular programs and teaching approaches to assist efforts in fostering motivation to participate in lifelong physical activity.

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