Physical Education in Universities
Researches – Best Practices – Situation

Miroslav Bobrík
Branislav Antala
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Editors

Bratislava 2020
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Introduction

You are holding a book “Physical Education in Universities: Researches - Best Practices - Situation” prepared by FIEP, Slovak Technical University and Comenius University in Bratislava. The book is part of the 4th Physical Education World Wide Survey, which is carried out by UNESCO in cooperation with FIEP and its partners. The publication is part of one of its lines, focusing on mapping the basic characteristics of physical education and physical activities of children and youth in the world at individual levels of schools, from pre-school education to universities.

In 2017 the book "Physical Education in Primary School: Researches - Best Practices - Situation", edited by D. Collela, B. Antala and S. Epifani, was published by Pensa Multimedia in Italy and has 502 pages. 102 authors from 27 countries and 5 continents participated. In 2018, it was followed by a publication "Physical Education in Secondary School: Researches - Best Practices - Situation," published by the University of Montenegro in cooperation with the Montenegrin Sport Academy. The editors were S.Popovič, B.Antala, D.Bjelica and J.Gardašević. It had 343 pages and was prepared by 84 authors from 24 countries and 5 continents. The publication "Physical Education in Early Childhood Education and Care: Researches - Best Practices - Situation" was published in Slovakia by the Slovak Scientific Society for Physical Education and Sport in 2019. Its editors were B. Antala, G. Demirhan, A. Carraro, C. Oktar, H. Oz and A. Kaplánová. It had 464 pages. 120 authors from 32 countries from 5 continents participated. A series of these 4th Physical Education World Wide Survey publications will continue in 2021 with the publication of "Physical Education and Sport for Children and Youth with Special Needs: Researches - Best Practices - Situation".

This book is divided into four parts. In the first part of the publication called "Researches", we bring the latest research findings aimed at exploring the physical activity in universities, faculties and institutes. The second part, the “Best Practices” brings examples of good practice from different countries of the world and the third part “Situation” is focused on presenting knowledge related to the characteristics of the state of the issue in various countries in the world. Last, fourth part of the book is focused on French language write articles. Due the agreement between FIEP and CONFEJES, the book was open for articles write in French language also. Seven articles, especially from African countries, are situated in this last part of the book.

136 authors from 28 countries and five continents participated in the book, of which 13 were European countries/regions (France, Italy, Ireland, Kosovo, Nord Macedonia, Portugal, Russia, Serbia, Slovakia, Spain, Sweden, Ukraine, United Kingdom), 2 countries from America (Mexico, USA), 4 countries from Asia (Lebanon, Malaysia, Saudi Arabia, Singapore), 6 countries from Africa (Algeria, Benin, Burkina Faso, RSA, Senegal, Tunisia) and 3 countries from Oceania (Australia, New Zealand, Samoa). Therefore, the publication brings a broad international perspective on the issue of university physical education and physical activities.

A book “Physical Education in Universities: Researches - Best Practices -Situation” is prepared also for celebration of 60th anniversary of Faculty of Physical Education and Sports Comenius University in Bratislava in Slovakia where FIEP have already many years its European seat. Book celebrate also 80th anniversary of Faculty of Chemical and Food Technology from Slovak University of Technology in Bratislava. Its Department of Physical Education and Sport is a partner for preparation of this book. More complex information about these two important Slovak institutions are presented in the beginning of book in the part Introduction.
A thank you goes also to the reviewers who, through their comments and advice, helped the authors improve the quality of their contributions. We thank also the Foundation for Development of Faculty of Chemical and Food Technology of Slovak University of Technology in Bratislava and the faculty management for financial and moral support in publishing this publication.

Miroslav Bobrík
Branislav Antala
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Editors
Expectancy Beliefs, Task Values, Achievement Motivation and Motivation Climate in Physical Education among Malaysian Trainee Teachers

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Abstract

The purpose of this study was to examine the perceived motivational climate, goal orientations, expectancy beliefs and task values among Physical Education trainee teachers. The participants comprised of 300 trainee teachers aged between 18 and 25 years old (Mean age = 21.94 ± 1.64 years) completed the Motivational Climate in PE Questionnaire, Task and Ego Orientation in Sports Questionnaire, Expectancy Beliefs and Task Values Questionnaire. The results showed no significant differences in task-and ego-involving climate, task and ego orientation, expectancy beliefs and task values according to gender and age groups. These findings suggested that strategies which adapt and promote a mastery-oriented climate emphasising task values (attainment, utility and intrinsic) of PE would increase the level of competency and satisfaction in PE participation among the Malaysian trainee teachers.

Key words: Expectancy beliefs, Task values, Achievement motivation, Motivation climate
Introduction

The obesity epidemic in Malaysia has always been a concern as Malaysia has been rated as one of the most obese countries in South East Asia. The 2015 National Health and Morbidity (NHMS) survey revealed that 30% of adults above the age of 18 were overweight, 17.7% were obese which revealed a dramatic rise from only 4.4% classified as obese in 1996. This has resulted in a rise of non-communicable diseases whereby 50% above the age of 18 had high cholesterol, and 17.5% had diabetes in 2015 (Chan et al., 2017).

The decline in physical activity among college students could be due to various factors as they transit from high school to college which could provide them with greater autonomy relative to their daily lives (Fedewa & Anh, 2011). These sedentary behaviours have been a catalyst to increased physical inactivity among college students which has increased the risk of obesity, chronic disease and early death (Lynch & Owne, 2015). The participation of sports and physical activity in schools, colleges, institutes and universities need to be rejuvenated and addressed during their youth in order to reduce the idleness during the adulthood and consequently reducing health epidemic.

Creating an environment that can motivate youth in engaging diligently during their transition period from adolescence to youth would enable physical education (PE) educators and sports practitioners to understand their motivation behaviours related to physical activity and sports. This would provide them with an optimal conducive environment associated with health and physical benefits and psychosocial development for the betterment of health in their adulthood later.

According to Soini et al. (2014), PE played an important role in the development of a healthy and physically active lifestyle through the acquisition of healthy habits in students and youth. The socio-cognitive theories that can lead to greater positive experiences, participation and motivation in PE, sports and physical activities were the Eccles’ expectancy-value model of achievement choice (Eccles et al., 1983) and achievement goal theory (Duda & Nicholls, 1992).

The expectancy-value model of achievement choice theory (EVM) looks into the individual’s beliefs on how successful he or she would be in upcoming tasks. The beliefs reflect the expectancies for success and belief about ability on how well they can engage and complete their tasks and how they deal with their evaluation of self-ability and competence (Wigfield & Cambria, 2010). These beliefs are in relation to the four components of task values. The task values are the perceived values by an individual on their success in a domain or task which comprised of attainment, intrinsic, utility and cost (Chin, Khoo, & Low, 2009; Chin, Wee, Kuan & Lim, 2019). Studies have shown that expectancies beliefs and their values could predict achievement-related choices and performance in PE and sports.

The achievement goal theory (AGM) (Duda & Nicholls, 1992) looks into the two-goal orientations, i.e. task and ego which are also dependable on the conception of ability (Carr & Weigand, 2001). Task orientation is when one’s focuses in developing competence utilising undifferentiated conception of ability which will lead to a higher positive, adaptive environment and motivational pattern (Chin, Khoo & Low, 2009). Conversely, ego orientation is based on one’s own comparison of ability and performance with that of others (Chin, Khoo & Low, 2012; Braithwaite, Spray & Warburton, 2011). In addition, the AGM also differentiates between dispositional orientation motivational climate. Therefore, task-oriented individual in performance or mastery-oriented motivational climate would develop individual’s competence in a task given.
On the other hand, the ego-oriented individual in an ego-oriented motivational climate will show his or her competence in relation to others and relates failure to his or her lack of ability (Moreno, Zomeño, Marín, Ruiz & Cervelló, 2013). The nature of achievement goals is influenced by the individual’s environment in the adoption of certain achievement goals relating to their experiences and beliefs (Olsan, 2018).

Motivational climate, which is based on task-involving climate and an ego-involving climate can influence both goals orientation in AGT. In addition, the motivational climate in PE affects individual’s self-experience, motivation and attitudes towards physical activity (Markus, Jarmo, Anthony, Sami & Jaakkola, 2014). Task or mastery climate stresses on personal improvement on effort, competence and skills which are associated with task orientation, intrinsic motivation, internal factors and values such as interest, enjoyment, effort and perceived ability (Bakirtzoglour & Ioannou, 2011; Bryan & Solmon, 2012; Moreno, Sicilia, Cervello & Elisa, 2011). Whereas, an ego climate emphasises on performance comparison with others and outcomes which are related more towards ego orientation, extrinsic motivation, external factors and values such as praises, grades, rewards and constraints (Bakirtzoglour & Ioannou, 2011; Spittle & Byrne, 2009). Presently, no studies had been done showing the integration between Eccles’ EVM, AGM and motivational climate. As task or mastery climate is associated with the intrinsic values, it is assumed that it would have some form of relation with interest (intrinsic) value and attainment (importance) value in Eccles’ EVM (Yli-Piipari, 2011). Whereas, ego climate would be related to the utility value as it represents the more extrinsic reasons for engaging in a task (Deci & Ryan, 2000).

Although the national philosophy of education of Malaysia is to produce individually who are intellectually, spiritually, emotionally and physically balanced, it doesn’t seem to factor in the health of the trainee teachers. This is due to the hectic and tiring lifestyle training schedule of trainee teachers which has taken a toll on their health. Due to the demand placed upon them in campuses, the demand may influence and change the trainee teachers’ levels of physical activity. In addition, the lack of motivating and educating on the values of physical activity had prevented the practice of activity being included in their daily word schedule in schools and when they reached adulthood (Rosales-Ricardo et al., 2016). Presently, there are no reviews on expectancy beliefs, task values, goal orientation and motivational climate on the Malaysian teacher education campus context as most studies were from the western perspectives. This study would provide a need from a multicultural county to understand and identify the beliefs, values, goal orientation and motivational climates among trainee teachers utilising the expectancy-value model of achievement choice and achievement goal theory towards PE in the education campus-settings. The aim of this study was to examine the expectancy-beliefs, subjective task values and motivation climate of the Malaysian university’s trainee teachers towards PE in terms of gender and age groups.

Method

Participants

A total of 300 trainee teachers (60 males, 240 females) in the Institute of Teacher Education Tun Abdul Razak Campus in Malaysia participated in this study. They were aged between 18 to 25 years old (Mean age =21.94 ± 1.64 years) and met all the inclusion criteria and consented to taking part in this study. Permission was obtained from the appropriate authorities prior to the study. This study was approved by the Ethics Committee of the Institute of Teacher Education Tun Abdul Razak Campus. The participants were briefed on the questionnaires. Their participation in this
study were voluntary and anonymous. They were also assured of their confidentiality. The participants who had given their consent were allowed to participate in the study and may withdraw at any point if they choose not to continue.

**Measures**

The Motivational Climate in PE Questionnaire (MCPEQ) (Jaakkola, Wang, Soini & Liukkonen, 2015; Soini et al., 2014; Wang, Koh, Biddle, Liu, & Chye, 2011; Wang, Woon, Chatzisarantis & Lim, 2010) was adapted and utilised to measure individuals’ perception of the task-and-ego involving climate in physical education. The scale comprised of 13 items, 6 items measure the perception of ego-involving climate (e.g., “In my PE class, my PE teacher pays special attention to whether my skills are improving”) while the remaining 7 items measure the perception of a task-involving climate (e.g., “In my PE class, my PE teacher praises the students only when they are better than their schoolmates.”). The items were rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

The Task and Ego Orientation in Sport Questionnaire (TEOSQ; Duda & Nicholls, 1992) was adapted and used to measure trainees’ dispositional task and ego orientations in physical education. The TEOSQ consists of seven-items measuring task (e.g., “I learn a new skill by trying hard”) and six-items measuring ego (e.g., “I can do better than my friends”). The 13-items were rated on 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

The Expectancy Beliefs and Task Values questionnaire (EBTV) was assessed using a 13-item measure (Chin, Teo, Kuan & Ting, 2019; Xiang et al., 2004) which measured the expectancy beliefs and subjective task values. There were 5 items measuring expectancy for success and beliefs and 6 items measuring subjective task values of attainment, utility and intrinsic. Both subscales were rated on a 7-point Likert scale anchored at both ends.

**Results**

Table 1 shows the socio-demographic characteristics of the participants. The participants were 300 trainee teachers (male = 60, female = 240). In terms of age groups, 13.3% was in the 18 – 19 age group, 19.6% was in the 20 – 21 age group, 62.5% was in the 22 – 23 age group and 4.3% was in the 24 – 25 age group. Overall, 2.4% of the participants was obese, 8.2% was overweight, 70.2% was normal, and 19.2% was underweight. The TESL major was the largest group of participants (22.3%) and remedy major has the least number of participants (3.7%).

Table 2 showed that the three questionnaires demonstrated good internal reliabilities for the overall scales and subscale. The EBTV questionnaire demonstrated the highest overall internal consistency of 0.94 and the TEO SQ also demonstrated a high level of internal consistency of 0.86. Whereas, the MCPEQ showed an acceptable level of internal consistency of 0.77. The results revealed no significant difference between gender for mastery climate ($t$ = -.113, $p$ = .370), ego climate ($t$ = -.193, $p$ = .996), task orientation ($t$ = 1.722, $p$ = .343), ego orientation ($t$ = -.224, $p$=.673), expectancy beliefs ($t$ = 1.191, $p$ = .407), task values ($t$ = 1.069, $p$ = .629).

These showed that male and female were having similar expectancy beliefs, task values, goal orientations and motivational climate. The findings did not support previous studies which showed gender difference in their beliefs and values in physical education and physical activity.
Table 1 Socio-demographic characteristics of the participants

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</tr>
<tr>
<td>Female</td>
<td>240</td>
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<td>Age Groups</td>
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<td>18 – 19</td>
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<tr>
<td>20 – 21</td>
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<td>24 - 25</td>
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<td>4.3</td>
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<tr>
<td>Normal</td>
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<td>70.2</td>
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<tr>
<td>Overweight</td>
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<td>8.2</td>
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<td>PE</td>
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<td>Remedy</td>
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<td>Others</td>
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Table 2 Independent samples t-test of mastery climate, ego climate, task orientation, ego orientation, expectancy beliefs and task values

<table>
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<tr>
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<tr>
<td>Mastery Climate</td>
<td>.87</td>
<td>5.35</td>
<td>.94</td>
<td>5.36</td>
<td>.90</td>
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<td>Ego Climate</td>
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<td>4.39</td>
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<td>TEOSQ</td>
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<td>Task Orientation</td>
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Table 3 One-way ANOVA of mastery climate, ego climate, task orientation, ego orientation, expectancy beliefs and task values

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<th>18-19 SD</th>
<th>20-21 M</th>
<th>20-21 SD</th>
<th>22-23 M</th>
<th>22-23 SD</th>
<th>23-25 M</th>
<th>23-25 SD</th>
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<th>p</th>
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<td>3.92</td>
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<td>3.99</td>
<td>.54</td>
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The one-way ANOVA also revealed no significant difference between age groups for the task climate \((F = 1.643, p = .180)\), ego climate \((F = 1.694, p = .168)\), task orientation \((F = .365, p = .778)\), ego orientation \((F = 1.125, p = .339)\), expectancy beliefs \((F = 1.005, p = .391)\) and task values \((F = 1.086, p = .355)\).

Discussion

This study examined the motivational climates, expectancy beliefs, task values and goal orientations of trainee teachers towards PE in terms of gender and age groups. The results showed that male and female trainee teachers were aware of the levels of attributes which were related to ego orientation and this would likely increase their level of competency or success in PE. They are trained to use appropriate task-oriented interventions or approaches and selecting appropriate resources and communication within the lecturers and peer as well as within their experiences. These are relevant to them that can increase their confidence and helps them to be comfortable with the physical activities during physical education lessons. Besides, the participants were able to meet the expectation in PE, being aware of peer support and pressure to perform within their expectations and limitation, enabling them to learn and acquire the learning efficiently.

In terms of expectancy beliefs and task values, the participants have demonstrated to have the self-belief to perform physical activities according to their ability and competence. In addition, the augmentation of the intrinsic value, utility and important values of physical education had led to the participants’ appreciation of physical education regardless of gender or age groups which could be due to the environment in the Institute of Teacher Education. The environment which is more inclined towards mastery and support within the educational system that deemphasise on competition, social comparison, performance goal orientation and self-assessment of ability are more likely for the trainee teachers to perceive their physical education related experiences as positive leading them towards being physically active in terms of their participation. The Institute of Education have placed priority on motivating trainee teachers to engage and participate in physical activities through physical education and providing equal opportunities for both gender and age groups to feel competent. The values of physical education in terms of knowledge and physical activities can help the trainee teachers to be aware of the importance of a healthy lifestyle.
that can improve their quality of life and inculcate good values and life skills of the next generations in schools.

The mastery-oriented PE climates that have been inculcated in the institute teacher education campuses had resulted in trainee teachers participating in various learning experiences and peer interactions, focus on improvement, learning and self-development at achievement tasks have facilitated a sense of enjoyment (Wadsworth, Robinson, Rudisill & Gell, 2013). A mastery approach has shown to be highly related to intrinsic motivation and the positive effect that can drives individuals to engage and sustain physical activity (Ames, 1992). Therefore, the adoption of mastery motivational climate through a variety of challenging and diverse tasks, autonomy to select and perform the task within one’s comfort level and abilities with constructive task-specific feedback in physical education will encourage intrinsic interest towards physical education.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

References


