Cognitive interest encouragement model for academic physical education: psychological and educational benefits

UDC 796.011.3



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Abstract

Objective of the study was to test benefits of a new cognitive interest encouragement model for academic physical education system.

Methods and structure of the study. The new cognitive interest encouragement model was developed on the following educational provisions: personality-sensitive approach in the physical education service design and management; axiological design of the physical education service; physical education service customization and individualization requirements; academic progress rating/ scoring system. We sampled for the cognitive interest encouragement model the 3-4-year students (n=80) whose progress was tested by the following pre- versus post-experimental tests: V.S. Yurkevich Cognitive Interest Intensity Questionnaire Survey; and T. Ehlers Personal Success Motivations and Failure Avoidance test. The cognitive interest encouragement model includes the following components: (1) Active and interactive teaching methods including heuristic discussions, problem-solving analyses, situational problems etc. to develop the professional competences; (2) Extracurricular activities geared to spur up cognitive interest in the future professional service.

Result and conclusion. The new cognitive interest encouragement model for academic physical education system was tested beneficial as demonstrated by the sample's progress in the physical education theory and practice including the professional knowledgebase and skills of the future physical education and sport specialists, with special benefits for the senior students' motivations for success in their professional careers.

Keywords: cognitive interest, students, physical education university, psychological and educational aspects.

Background. Presently the national academic physical education and sport system gives a growing priority to the modern specialist training formats that secure good fitness for a wide range of professional missions. This revised education paradigm requires new education approaches designed to encourage cognitive activity among the other personality development factors. These efforts need to spur up the students' cognitive interest that implies a variety of personal qualities and predispositions being mobilized for professional growth agenda. Modern psychological and pedagogical literature tends to consider PI as the selective individual predisposition that prioritizes certain objects and phenomena.

It is important for the students' cognitive interest to be focused on learning in every academic discipline, with different universities traditionally prioritizing different disciplines in the professional progress cycle. It should be mentioned that the national physical education and sports universities take efforts to encourage cognitive interest in the physical education and sport theory and practice and the related fields to motivate students for professional progresses on a harmonized and comprehensive basis.

Modern research with concern to the cognitive interest formation issues takes into account a range of the associating pedagogical problems including the continuity of learning and harmony of the growth and development processes since the academic study period is the time when the age-specific mental and physical development processes are fast and rather sensitive. Therefore, the cognitive interest encour-

Table 1. Pre-experimental cognitive interest test data of the sample, %

Tests	Results			
Ehlers Personal Success Motivations and Failure Avoidance test	Low success mo- tivations	Moderate suc- cess motivations	Fair success motivations	Excessive success motivations
	45	27	10	8
Yurkevich Cognitive Interest Intensity Survey	High cognitive needs	Low cognitive needs		
	35	65		

agement efforts need to be based on the students' resource tests and analyses to effectively and harmonically develop the bodily functions and systems and maximize their healthy productive resource for professional progress with formation of the vocational knowledgebase and skills.

Objective of the study was to test benefits of a new cognitive interest encouragement model for academic physical education system.

Methods and structure of the study. The new cognitive interest encouragement model was developed on the following educational provisions: personality-sensitive approach in the physical education service design and management; axiological design of the physical education service; physical education service customization and individualization requirements; academic progress rating/ scoring system [3]. We sampled for the cognitive interest encouragement model the 3-4-year students (n=80) whose progress was tested by the following pre- versus post-experimental tests: V.S. Yurkevich Cognitive Interest Intensity Questionnaire Survey; and T. Ehlers Personal Success Motivations and Failure Avoidance (PSMFA) test.

The cognitive interest encouragement model includes the following components: (1) Active and interactive teaching methods including heuristic discussions, problem-solving analyses, situational problems etc. to develop the professional competences; (2) Extracurricular activities geared to spur up cognitive interest in the future professional service, with the following elements:

Leisure time activities with multiple entertainments and other events geared to develop the key cultural values and priorities, particularly for professional service in the physical education and sport sector;

- Research and cognitive formats to encourage teamwork of the students and teachers, with special interests in different fields – including, e.g., research groups to explore some topical problems;
- Initiatives to develop responsibility to society and nation on the whole, with a special contribution from patriotic events;
- Special trainings to prevent deviant/ addictive behavior in the student communities;
- Special research groups leaded by the student activists and supervised by designated faculty members:
- Efforts to encourage the student self-governing initiatives to promote physical education and sports / health/ progress values and agendas including the cognitive ones; and
- Academic communication facilitation tools including public information media, posters, newspapers, online social networks, etc.

Result and discussion. The pre-experimental tests rated 45% of the sample with low success motivations (SM), and 65% with low cognitive needs: see Table 1.

The post-experimental tests showed high cognitive interest in the student groups with good progress in academic studies and extracurricular activity: see Table 2.

Table 3 hereunder gives correlations of the learning motivations with cognitive interest.

As demonstrated by Table 3, the 'Thirst for new knowledge' was found to strongly correlate with the very high cognitive interest (R= 0.96) – that may be interpreted as indicative of the personality-sensitive approach success in the physical education service formats; whilst the 'Productive teacher-student co-

Table 2. Post-experimental cognitive interest test data of the sample, %

Tests	Results						
Ehlers Personal Success Motivations and Failure Avoidance test	Low success motiva- tions	Low success motivations	Low success motivations	Low success motivations			
	10	60	17	13			
furkevich Cognitive Interest Inten- High cognitive needs		Low cognitive needs					
sity Survey	78	22					

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Table 3. Correlations of the learning motivations with cognitive interest

Motivations	Rank	Cognitive interest level	Cognitive interest encouragement provisions
Productive teacher-student co- operation	2	High	Physical education service customization and individualization
Learning determination in subjects of interest	4	Low	Academic progress scoring/ rating system
Thirst for new knowledge	1	Very high	Personality-sensitive approach in the physical education and sport service
Better employment opportunities in vocational specialties	3	Medium	Axiological focus of the physical education and sport service

operation' was found to highly correlate with the high cognitive interest (R=0.73) to show the need for the physical education and sport service being well customized and individualized for success.

Conclusion. The new cognitive interest encouragement model for academic physical education system was tested beneficial as demonstrated by the sample's progress in the physical education theory and practice including the professional knowledgebase and skills of the future physical education and sport specialists, with special benefits for the senior students' motivations for success in their professional careers.

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