



Variable Models of Physical Education Specialists' Acmeological Competence Formation in the Process of Continuous Professional Education

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acmeolog; acmeological competence; professional training; physical education; modeling; continuous professional training models

Abstract

Objectives; testing the variability of physical education specialists' continuous professional training models aimed at the acmeological competence formation in the experimental way. Methods; the study involved students of the "Physical Education" specialty (n = 194). Selection and modification procedures were applied to the following experiment methods, such as the "Students' learning motivation" revealing method (A. A. Rean, V. A. Yakunin); the "Personality maturity" questionnaire; the "Emotional intelligence" revealing test (N. Hall); the "Evaluation of aspirations level" questionnaire used for the integral motivation activity estimation index; the "organizational capabilities assessing methods"; the "Communication skills revealing" method; the "Personality's creative potential self-esteem" method. Results; The structure of the physical education specialists' acmeological competence was identified. The acmeological competence components including acme-motivational, cognitive-acmeological, acmeological-activity and acme-traits of specialist's personality ones have been characterized. The models of physical education specialists' continuous professional training, such as the professional motivation predominanting; practically-focused; and sports-activity focused ones were distinguished on the acmeology basis. The forming of physical education specialists' acmeological competence components according to the variable continuous training models has been investigated experimentally. The study revealed a high correlations between the acmeological competence formation level and the characterized components. Conclusions; summarizing the study of acmeologically aimed physical education specialists' continuous professional training the following statements were revealed: the model with the professional motivation predominanting is characterized by the high level of acme-motivational component formation; the practically-focused model is characterized by the high level of cognitive acmeological component formation; the sports-activity pattern is characterized by the high level of both acmeological-activity and acme-traits of specialist's personality components.

How to Cite

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INTRODUCTION

The current level of rapid knowledge accumulation and the competency requirements for physical education specialists determine the need to consider the professional training as an integral continuous process that involves not only the completing higher education, but the further self-education and self-improvement, the purposeful movement towards the professional and the personal acme. Nowadays professional training of physical education specialists acquires a special importance as it has got influences on the physical renewal and the society development.

The specialists training problem in the physical education and sport field is highlighted by the modern pedagogical science concerning the professional training. The acmeologically focused professional training of physical education specialists is studied by the foreign scientists. The following aspects are taken into consideration: the professional acmeology practical usage (G. I. Hozyayinov (Hozjainov, 2007), O. L. Zhukova (Zhukova, 2004)); the acmeological and psychological problems of personality's polyprofessionalism (A. V. Posokhova (Posohova, 2014)); the professional and pedagogical culture as the basis of acmeological becoming a sports teacher (L. V. Abdalina (Abdalina, 2008), E. V. Bystritskaya (Bystrickaja, 2014), L. E. Varfolomeeva (Varfolomeeva, 1999), C. G. Sayhanova (Sajganova, 2009)); the nature, structure and content of the acmeological competence of future teachers (D. M. Koshman (Koshman, 2015)); theoretical and applied principles of sports achievements acmeology (Y. F. Kuramshyn (Kuramshin, 2010)); the acmeological analysis of sports personality (I. A. Yurov (Jurov, 2006)).

The problem of human motivation is quite well represented in the scientists' numerous studies, which can be explained by the needs of modern educational practices (Illin, 2013; Arkes, Garske, 1982). According to researchers there is a competitions approach widely used to increase learning motivation (White, 2012). The role of competition for the motivation level increasing is shown up the most clearly in the sports activities (Dereka, 2016; Grabowski, 2004). H. Heckhausen showed that highly motivated people and those, who are motivated for success tend to plan their future for a long period (Heckhausen, Heckhausen, 2010).

The issues of the experimental modeling were pursued by a lot of researchers from the physical education and sport field (Platonov, 2003). E. V. Fedotova defines modeling as a pro-

cess of studying the research facility drawing on its models, which includes the models constructing and designing; its researching; analyzing the results and transferring them to the real object of studying (Fedotova, 2001). In the sports researches field V. N. Platonov defines the term "designing" as a process of creating, specifying and optimization of sports training and participation in the competitions characteristics (Platonov, 2003). Researchers divide the models used in sports into two main groups. The first group consists of: 1) models describing the competitive activity structure; 2) models describing the different aspects of athlete preparation; 3) morphofunctional models that reflect the morphofunctional features of the organism and the possibilities of different functional systems that provide the specified level of sports mastership achievement. The second group of models includes: 1) models that reflect duration and dynamics of sport skills development in the long term cycle, as well as within the macrocycle (or during the year); 2) structural model of the training process large formations (such as long term training stages, macrocycles, periods); 3) models of training stages, meso and microcycles; 4) models of training sessions and their separate parts; 5) models of particular training exercises and their complexes. Also researchers distinguish such models as generalized, group and individual ones.

However, the variation of physical education specialists' continuous professional training on the acmeology basis models and forming their acmeological competence have not been researched yet.

The aim of the study is to analyse the dynamics of physical education specialists' acmeological competence formation following the results of the continuous training models variability experimental test.

The tasks of the study are; to identify features of physical education specialists' acmeological competence forming in the process of continuous training based on the acmeology. To justify the structure of physical education specialists' acmeological competence which includes following components: acme-motivational, cognitive-acmeological, acmeological-activity, acme-traits of specialist's personality. To explore the effectiveness of physical education specialists' acmeology based professional training models in the continuous cycle of training.

METHOD

The study involved students of the "Phy-

sical Education” specialty in the number of 194 people. There were two groups of students formed – control one (98 people) and experimental one (96 people) for the pedagogical experiment. Selection and modification procedures were applied to the following experiment methods, such as the ”Students’ learning motivation” revealing method (A. A. Rean, V. A. Yakunin); the ”Personality maturity” questionnaire; the ”Emotional intelligence” revealing test (N. Hall); the ”Evaluation of aspirations level” questionnaire used for the integral motivation activity estimation index; the ”Organizational capabilities assessing methods”; the ”Communication skills revealing” method; the ”Personality’s creative potential self-esteem” method. The research was conducted at the Borys Grinchenko Kyiv University in 2009-2016. For the special purpose of physical education specialists’ acmeological competence forming the process of continuous training based on the acmeology, the content of professional cycle subjects and practical training was enriched by the acmeologically oriented component. There numbers of aspects were introduced in the content of the professional and practical training subjects cycle on the starting level of higher education such as the acmeology nature and content; the general acmeology thethesis; introduction of the ”microacme” and ”macroacme” concepts; as well as tools and models of the personal acme achieving; the issues of the selfdevelopment and selfimprovement acme-motives. The content of professional and practical training disciplines cycle was enriched by the acmeology concepts of physical education; the means of professional acme achieving; the acmeological design of specialist’s personal and professional development; the professional akmetektonik on the first (bachelor) higher education level. And the content of disciplines from regular vocational pedagogical training cycle was enriched by the applied acmeological knowledge; the usage of acmeologically aimed professional development technologies; and the acmeological approach to professional selfdevelopment on the second (Master’s) level of higher education (Dereka, 2016).

To achieve the goal we used the following methods: theoretical analysis and synthesis of scientific sources data, pedagogical experiment, testing and methods of mathematical statistics ones. While processing the pedagogical experiment results we applied standard methods of mathematical and statistical data analysis (such as method of averages, calculating Student t-test, correlation and factor analysis) using the statistical software «Statistica» (Nachinskaja, 2005)

RESULT AND DISCUSSION

In the study acmeological competent of a specialist is considered as an integrated ability of the individual, which is formed in the continuous acmeological directed training process and reflects the specialist’s ability to build his/her own selfdevelopment with permanent tasks complication and increasing level of learning achievements, self-development and self-improvement throughout life, achievement of personal and professional acme. The study proves the structure of physical education specialists’ acmeological competence which includes following components: acme-motivational, cognitive-acmeological, acmeological-activity, acme-traits of specialist’s personality (Dyba, 2015). Acme motivational component reflects the formation of life-long self-motivation. Cognitive-acmeological component reflects the level of students’ mastering acmeological knowledge, understanding and awareness of the main acmeology provisions. Acmeological-activity component displays structured knowledge about ways of working, experience of their use, personal gain of educational experience in the process and independent scientific research. Acme-traits of specialist’s personality contributes the expression of individual’s activity in the professional development and specialist’s continuous self-improvement and self-development. While investigating the effectiveness of professional training of physical education specialists on the acmeology basis we identified three models of continuous cycle of training, such as the one with professional motivation predominanting; practically-focused; and sports-activity focused (Dereka, 2016).

The model of physical education specialists’ continuous professional training with professional motivation predominanting includes the following steps: after receiving basic secondary education entering college as the primary level of higher education (1-4 courses); the next stage is learning at the Bachelor programme (3-4 courses) and then graduate Masters level of higher education with a person obtaining theoretical knowledge and practical skills (competencies) sufficient to perform successfully their professional duties in the chosen specialty. Practically-focused model of physical education specialists’ continuous professional training comprises the following steps: on the basis of complete secondary education training at Bachelor and Master levels of higher education. Sports-activity model of physical education specialists’ continuous professional training consists of the following steps: on

the basis of complete secondary education and training in youth sports school with gaining some sports mastership levels (such as the candidate to Master in Sports, Master in Sports, International Level Master in Sports); completing the higher education at Bachelor and Master levels of higher education.

There is the analysis of the acmeologic competence formation as well as its components study results obtained for students who are members one of described models of physical education specialists' continuous professional training process on the basis acmeology (with professional motivation predominanting; practically-focused; and sports-activity focused).

The model of physical education specialists' continuous professional training based on acmeology with professional motivation predominanting is characterised by high level of acme-motivational component formation (84.3%), particularly at the primary level of higher education. Cognitive-acmeological (86%) and acmeological-activity (66.5%) components of acmeological competence have formed to the lowest level among the three models. Acme-traits of future physical education specialist's personality in the model with professional motivation predominanting were formed to the end of the study on 72%. The level of acmeological competence formation for physical education specialists in this model is 77% (Figure 1).

Practically-focused model of physical education specialists' continuous professional training based on acmeology is characterized by the lowest comparing to other models level of acme motivation formation (82%). acmeological-activity component (67%) and acme-traits of personality (72%) formed at the same level as the model with professional motivation predominanting. This model differs by the highest formation of acmeological cognitive component (92%).

The level of physical education specialists' acmeological competence formation for those who are at practically aimed model in the process of continuous training on the acmeology based is 78.5% (Figure 2). Sports-activity focused model of physical education specialists' continuous professional training based on acmeology is characterized is characterised by high levels of acme-motivation (87%) and acme-traits of personality (77.5%) components formation. Acmeological-activity (72%) component has the highest level of development in comparison to other two models data.

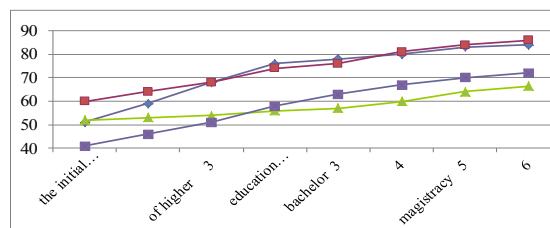


Figure 1. Dynamics of physical education specialists' acmeological competence components formation, the model of acmeology based continuous training with professional motivation predominanting. 1 – acme-motivational component of acmeological competence; 2 – cognitive acmeological of acmeological competence component; 3 – akmeological-activity of acmeological competence component; 4 – acme-traits of personality.

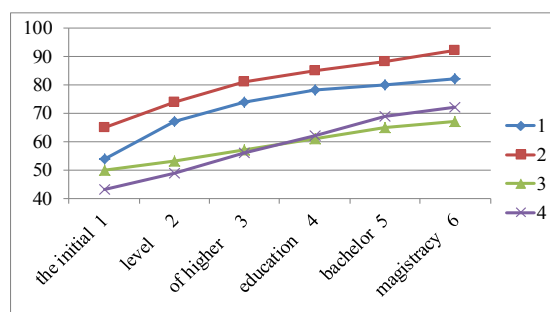


Figure 2. Dynamics of physical education specialists' acmeological competence components formation, the practically-focused model of acmeology based continuous training. 1 – acme-motivational component of acmeological competence; 2 – cognitive acmeological of acmeological competence component; 3 – akmeological-activity of acmeological competence component; 4 – acme-traits of personality.

The level of cognitive-acmeological component formation (85%) is lower than in model with professional motivation predominanting and practically-focused model. The level of physical education specialists' acmeological competence formation for those who are at sports-activity focused model in the process of continuous training on the acmeology based is 80% (Figure 3).

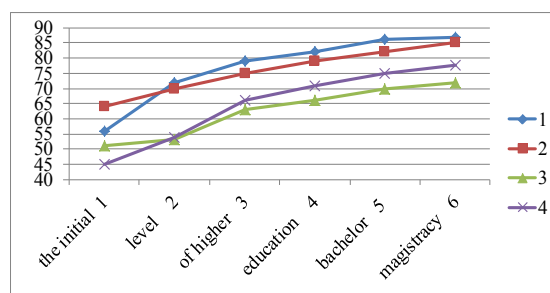


Figure 3. Dynamics of physical education specialists' acmeological competence components formation, the sports-activity focused model of acmeology based continuous training. 1 – acme-motivational component of acmeological competence; 2 – cognitive acmeological of acmeological competence component; 3 – acmeological-activity of acmeological competence component; 4 – acme-traits of personality.

The study revealed a high correlations between the level of acmeological competence formation and acmeological-activity component ($r = 0,81$); acme-motivational component ($r = 0,78$); cognitive acmeological component ($r = 0,71$); and acme-traits of specialist's personality ($r = 0,5$).

Referring to the results of the factor analysis, we note that the overall percentage of variance, indicating the importance of each component in the structure of acmeological competence was: acme-motivational component and personal components cover the total percentage of 43,5% variance; personal and professional – 17,6%, emotional and psychological – 10,3% acmeological and cognitive research – 8,4%.

So, components of acmeological competence (acme-motivational, cognitive-acmeological, acmeological-activity, acme-traits of specialist's personality) are formed, developed, improved, being interconnected and influence each other.

The obtained data allow us to conclude that there was the structure of physical education specialists' acmeological competence (with such components as: acme-motivational, cognitive-acmeological, acmeological-activity, acme-traits of specialist's personality) motivated for the first time. There were variable models of physical education specialists' continuous training based on acmeology developed (professional motivation predominanting; practically-focused; and sports-activity focused). There were intercorrelations between physical education specialists' components of acmeological competence experimentally proven (acme-motivational component and personal components; personal and professional; emotional and psychological; acmeological and cognitive research). And there were experimentally established correlation between the level of acmeological competence formation, its components and their indicators (Dereka, 2016).

Discussion

These survey results confirm the data of N. A. Bakshayeva, A. A. Verbitsky about the impor-

tance of cognitive motives and cognitive abilities of individual development as the basis for successful learning and readiness for self-education during professional training (Bakshaeva, 2006).

There were H. Hekhausen's data completed concerning the motivation to succeed persons involved in sports (Heckhausen, Heckhausen, 2010). There were E. V. Fedotova (Fedotova, 2001) and V. N. Platonov (Platonov, 2003) data supplemented about the process of creating, variable models characteristics specification and optimization of physical education specialists' professional training. The study is supplemented data concerning models used in sports and characterize the structure and terms of physical education specialists' professional training (Dereka, 2016).

The study completed data of L. V. Abdalina (Abdalina, 2008), E. V. Bystritskaya (Bystricka-ja, 2014), L. E. Varfolomyeyev (Varfolomeeva, 1999), C. G. Sayhanova (Sajganova, 2009) about sports teacher acmeological becoming in defining the acmeological principles of physical education specialists' continuous professional training, which includes: concept of acmeologically aimed physical education specialists' continuous professional training; the model of physical education specialists' continuous professional training on the acmeology basis; organizational and methodological principles that reflect acmeological intended forms, content and methods of training specialists in physical education.

In our opinion, a specialist with the acmeological competence formed while the continuous training in higher education will be able to meet the challenges and solve the problems of various levels of complexity, to continue constant self-development and self-improvement in professional activity (Dereka, 2016). The further researches could be aimed to enrich the industry standards of physical education specialists' training with acmeological component

CONCLUSION

The study results allowed to ground a structure of physical education specialists' acmeological competence and to identify the following components: acme-motivational, cognitive acmeological, acmeological-activity, acme-traits of specialist's personality ones.

After the study results the models of continuous professional training cycle were distinguished, such as: the one with professional motivation predominanting; practically-focused; and sports-activity focused ones.

The studing of continuous training cycle variable models rerealed following: the model with the professional motivation predominanting is characterised by the high level of acme motivational component formation; the practically-focused model is characterised by the high level of cognitive acmeological forming component; the sports-activity focused model is characterized by the high level of acmeological-activity component, as well as acme-traits of specialist's personal one.

Prospects for further research are to use the acmeological approach to training physical education specialists on PhD scientific level and to enrich the industry standards of physical education specialists' training with the acmeological component.

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