

ACMEOLOGICAL PRINCIPLES OF FORMATION DYNAMIC OF PHYSICAL EDUCATION SPECIALISTS' ACMEOLOGICAL COMPETENCE ACTIVITIES' COMPONENT

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Abstract. *Purpose:* to determine characteristics of archeological competence's activities component formation in physical education specialists and find correlation of its components. *Material:* in the research students of specialty "Physical education" (n=194) participated. Activities' component of acmeological competence was determined by results of fulfillment of individual scientific research task. The content of such tasks was enriched with acmeological component. *Results:* we analyzed correlation and intra-influence of parts of acmeological competence's activities component ion respect to its formation level. By results of factorial analysis we grouped, classified acmeological competence components and made them compactly visual. The most significant factors of acmeological competence components are marked out. *Conclusions:* we formed activities' component of acmeological competence in process of students' independent and scientific research work.

Key words: acmeology, competence, component, professional, physical education.

Introduction

In documents of European Council ability to study (without mentioning education level) is characterized as human ability to manifest consistency and persistence in studies, as well as ability to organize own studying individually and in groups, controlling information and time effectively [6, pg. 346]. Such competence implies awareness of educational process. It is determined by demands of an individual and his (her) abilities to overcome obstacles. It envisages acquiring, processing and mastering new knowledge and skills as well as search and usage of recommendations [15]. Ability to study implies usage of previously received knowledge and life experience. It is required for application of knowledge and skills in different contexts: at home, at work, in process of study, in vocational training.

In the frames of analytical research Bologna project TUNING they marked out (from 85) the most important components of work by specialty (in order of their significance) [7, pg. 32-33]: 1) ability for analysis and synthesis; 2) ability to study; 3) ability to realize knowledge in practice.

Thus, ability to study is one of key competences. It is a universal tool of modern continuous education system, without which human self-realization is impossible [8, pg. 33]. To master this ability it is necessary to use own positive experience of independent studies.

Multi-levels integral personality-activities' quality permits to set and to effectively solve the tasks and problems of different complexity. It is required for self-actualization, self-perfection, and self-realization in different aspects of personality's life. In first turn it related to professional functioning. Such functioning is characterized by acmeological competence [3, pg. 54]. Such competence characterizes specialist as a subject of professional self-development. It reflects his ability to plan own gradual development in different spheres of life activity with constant complicating of tasks and growth of achievements' level. In this process human psychological and acmeological resources realize to the fullest extent.

The problems of acmeological approach implementation in educational process were regarded the following contexts:

- Perfection of educational process when practicing different forms of physical education in comprehensive schools. The prospects of such approaches' realization were marked out [18];
- Physical culture teachers' readiness for implementation of new technologies. Setting of goals and the tasks, corresponding to them for students, considering "acme" as personal "top" of every student, were studied [19];
- Implementation of active teaching methods, which are connected with development of specialist's personality and formation of his (her) didactic thinking [22];

- Effectiveness of acmeological approach in the process of future physical culture teacher's professional training [12];
- Influence of stimuli for success, self-realization with training means; formation of individual style on quality of students' vocational training. Besides, technology for ensuring future teacher's readiness for professional-pedagogic self-realization are offered [14];
- Determination of ways for creative potential peaks' achievement in conditions of information-educational space. It was noted that in conditions of information intensification in education acmeological technologies facilitate optimization of teachers' professional formation [11];
- Creation of effective educational technologies, pointed at development of higher educational establishment students' professionally-oriented communication competence [10];
- Psycho-pedagogic conditions of education's realization, concentrated on acmeological orientation of graduate's personality [17];
- Understanding of creative-acmeological approach and its content in study of teacher's professional progress. It was noted that creative activity was conditioned by demand in success in professional sphere; achievement of professional competence and self-organization [16].

In our previous works we substantiated the structure and components of physical education specialists' acmeological competence. We offered conception and model of specialists' continuous professional training, based on acmeology. We also studied the principles of content formation, forma and methods of specialists' continuous professional training, based on acmeology [1, 2, and 3].

Thus, the task of professional training is formation of competent specialist, who would be able to constantly, systemically generalize world and domestic experience as well as innovative search of self-realization ways in conditions of modern society. Continuity of knowledge acquiring, professional competence, value attitude to own physical condition and national health in the whole become leading, essential characteristics of professional fitness.

The purpose of the research: to determine characteristics of ability to study formation in process of physical education specialists' continuous professional training based on acmeology.

Material and methods

Participants: in the research students of specialty "Physical education" (n=194) participated. For pedagogic experiment we formed control (n=98) and experimental (n=96) groups of students.

Procedure: the researches were conducted on the base of Kiev University, named after Boris Grinchenko. In period 2010-2015 in educational process of physical education specialists we used acmeologically enriched content of academic disciplines of professional and practical cycles. Activities' component of acmeological competence we determined by results of individual scientific-research works, fulfilled by students. The content of such tasks was enriched with acmeological component. Besides, activities' component included results of students' questioning about every day independent preparation for lectures (hours/day). Physical education specialists' acmeological component includes also integral indicator of activation's motivation. This indicator includes: inner motive, cognition motive, motive for failures avoiding, competition motive, motive for change of activity, self-respect, significance of results, complexity of task, will effort, assessment of achieved results, assessment of own potential, the planned mobilization of forces, expected results, regularity of results, initiative [1, pg. 442].

Statistical analysis: we determined mean values, Student's t-criterion; correlation analysis was fulfilled. In this work we used «Statistica» programs.

Results of the research

The author's conception of physical education specialists' continuous professional training, based on acmeology, shall be realized in educational process of higher educational establishments. Professional training if oriented on formation of acmeological competence on all levels of higher physical culture education. In formation of acmeological competence in specialists' continuous training accents are shifted from initial cycle of higher education to bachelor's and master's cycles.

Thus, in the future specialist with formed acmeological competence will be able to solve the problems of different difficulty. Graduate will constantly self-perfect and self-realize in professional functioning. At master's

level of higher education professional training is accented on formation of specialist's activities' component. The formation process is realized in independent and scientific-research students' work.

Formation of activities' component takes place with the help of acmeologically oriented active means of teaching: lectures (information lectures, problem lectures, binary lectures, topical lectures, reviews, conferences, lecture-visualization and consultations) and seminars (inter-disciplinary seminars, seminars-conferences, discussions, seminar research, role game, "brain storm", and analytical seminar).

Now let us analyze interconnections and inter-influence of activities' component parts in respect to its formation level.

Integral indicator of activity's motivation consists of motivation structure's fifteen components. By the value of correlation coefficient and closeness of connection this indicator influences to the largest extent on level of acmeological competence activities' component formation ($r = 0.82$).

Students independent and scientific research work have significant correlation with level of activities' component formation ($r = 0.61$ and $r = 0.54$, accordingly). Students spend from one to three hours for independent preparation for classes every day. One hour a day for preparation for classes is spent by 18.57% of students. Two hours a day – by 58.57% of students. Three hours – by 22.86%.

Ability to study shall be formed in the process of studying at higher educational establishment. It is necessary to encourage acquiring professional scientific, learning and methodic literature. Questioning results showed that only 58.6% of students buy literature periodically. 41.4% of students do not buy such literature at all.

Thus, it is important to form activities' component, teach students to work regularly and independently. It is also necessary to facilitate formation of internal demand in independent learning. The formed specialists' competence will ensure ability and acme-motivation of personality for constant learning, self-perfection, and self-development during all life. The formation of the component facilitates steady positive attitude to independent study; forms and fixes personality-significant sense of learning actions.

Correlation analysis showed interconnection of activity-motivation indicators and activities' component. High correlation with the level of component's formation had motive of self-respect ($r = 0.85$) and cognitive motive ($r = 0.83$). Self respect motive is expressed in object's strive for more and more difficult goals in one-type activity. Cognitive motive characterizes subject's interest to results of his (her) activity. Cognitive motive is a criterion of society. This motive can conceal rather wide circle of more personal motives, which require satisfaction by studying.

The next group of activity's motivation indicators has significant correlation with the level of the component's formation. Assessment of results in respect to potentials in certain kind of human activity was $r = 0.7$. Assessment of own potential was $r = 0.69$. Motive for avoiding was $r = 0.68$. It should be noted that negative, exciting value of result is intrinsic to motive for avoiding or, to be more exact, fear to show low result and after effects of it.

The next group of activity's motivation indicators has also significant correlation with the level of the component's formation. It characterizes correlation of pre-set level of motivation for efforts, required for achievement of results ($r = 0.64$) and expected level of activity's results ($r = 0.4$). For determination of holistic structure of competence cognitive criterion, subject's understanding of reason factors' educational process is very important. They include subject's understanding of result's dependence on correlation of chance and personal potentials ($r = 0.66$) as well as understanding of to what extent setting of tasks is initiative of directive ($r = 0.54$). Competition motive ($r = 0.54$) is a specific in group of motives, connected with result. The content of this motive is determined by to what extent increase of its level is important for the subject.

Moderate correlation with formation level of the component has internal motive ($r = 0.47$). It is directly connected with the process of activity. This motive is a generalized and demonstrates enthusiasm with fulfillment of task, with educational process.

Assessment of complexity of the fulfilled task ($r = 0.39$) and assessment of will effort in the process of the task solution ($r = 0.38$) have also moderate correlation with component's formation level. It shall be considered, when filling academic disciplines with acmeological component; when planning lectures and practical classes.

Motive for change of activity ($r = - 0.1$) has weak correlation with the component. It opens subject's feelings and tendency to stop the work. Personal significance of activity's results ($r = - 0.3$) also has weak feedback

with the component. That is why in the process of specialists' professional training influence of teacher and educational medium of educational establishment are rather important. They facilitate formation and manifestation of personality's activity in the process of professional formation and constant perfection of specialist.

Thus, level of component's formation in experimental group is 68.54%. In control group this indicator is 55.6%.

Analysis of pedagogic experiment results shows that in experimental group we registered statistically significant distinctions in competence level and in level of its components' formation ($p < 0.05$). In control group we observed certain dynamic but there were no statistically significant distinctions in competence formation level and in the studied components ($p > 0.05$) (see fig.1).

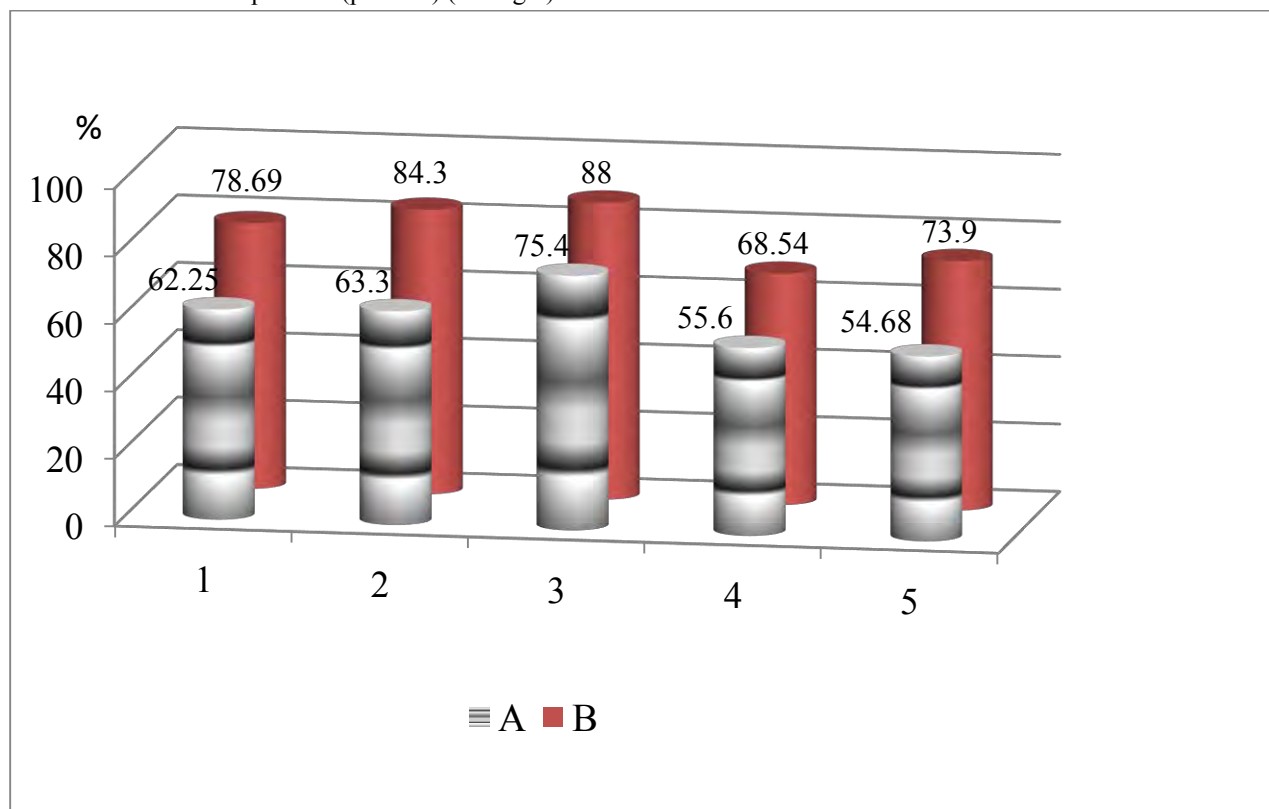


Fig.1. Formation level of acmeological competence and its components in process of continuous professional training of physical education specialists: A – control group of students; B – experimental group of students; 1 – acmeological competence; 2 – acme-motivation; 3 – cognitive component; 4 – activities' component; 5 – personality's component.

Discussion

The conducted study permitted to substantiate demand in students' involvement in fulfillment individual and group scientific-research tasks as well as fulfillment of scientific topic of department, writing scientific-research students' works, participation in scientific-research seminars, conferences and international grants.

The received results witness that students' scientific functioning is oriented on formation of future scientists and on increase of professional duties' fulfillment. For modern physical education specialist it is characteristic to constantly study and generalize new material, questions of allied sciences [13, 21]. In professional functioning of modern physical culture teacher (coach of any kind of sports) there are elements of scientific-research character. That is why experience of scientific work in students' years helps to solve them effectively [1, pg. 388].

The results of this research substantially supplement theoretical ideas about formation of motivation for achievement. By the data of foreign scientific works the main motive of highly productive scientist's activity is "motive for achievement" [5]. Motive for scientific search is cognitive demand, which creates scientist's readiness to manifest intellectual activity in emerging problem situation [4]. There is also other point of view. Formation of

“motive for achievement” to large extent depends on education of child in family, starting from early childhood (day regime, child’s orientation on independence) [5]. Scientists also introduced term “motivation of effectiveness” [20]. A person is active, when he (she) feels demand in effect of his (her) actions. Satisfaction of this demand results in feeling of competence accompanied by gladness and pleasure. It is evident that this kind of motivation is close to motivation of achievement [4]. Researchers note that insistence is also connected with “motive of achievement”.

Our studies supplemented theoretical principles, devoted to realization of independent functioning. Independent work is main mean of students’ mastering learning material [9]. Results of our research point at the fact, that such kind of teaching is necessary for mastering academic disciplines and for general skills of work in professional, scientific and teaching spheres formation. They also facilitate formation of ability to take responsibility and to solve any problem independently as well as to find effective solutions, way out from crisis situations [2].

Thus, independent functioning facilitates formation of adequate self-assessment, active life position. It also expands creative experience of physical education specialist [1, pg. 390]. In the base of students’ independent work there is conception of independence. In our opinion students’ independent activity is possible only is steady motivation is present. The strongest motivating factor is preparation for future professional functioning.

Conclusions

1. In process of future physical education specialists’ training it is necessary to use acmeologically oriented forms and methods. Acmeological enrichment of academic disciplines’ content forms specialists’ acmeological competence.
2. It was found that parts of activities’ component influence on its formation level.

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Conflict of interests

The author declares that there is no conflict of interests.

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