The European Proceedings of
Social & Behavioural Sciences
EpSBS

Future Academy

ISSN: 2357-1330

https://dx.doi.org/10.15405/epsbs.2019.02.16

ICPESK 2018
International Congress of Physical Education, Sports and Kinetotherapy. Education and Sports Science in the 21st Century, Edition dedicated to the 95th anniversary of UNEFS

MOTIVATION TO SELF-IMPROVEMENT AMONG PHYSICAL EDUCATION TEACHERS

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Abstract

The formation of teacher's motivation to self-improvement during their professional activity is investigated. The aim of the research is to analyse motivation to self-improvement of physical education teachers in the process of professional activity. Physical education teachers for experimental (EG, n=124) and control (CG, n=124) groups were picked randomly from a pedagogical staff of Ukrainian universities. The Motivation Sources Inventory was used to define motivation to self-improvement. Teachers of CG participated in the traditional in-service training course, EG was trained according to the authorial program. We assume that motivation leads and organizes teachers' activity, provides personal essence and significance of self-improvement, promotes the transformation of externally-formulated aims into inner needs. Basic trends of an effective influence on the intensification of motivation to self-improvement of teachers were: formation of positive guideline for self-improvement in the process of professional activity with the help of specification of requirements to specialists; formation of solid knowledge and skills; actualisation of the need for improvement and professional growth. Intrinsic motivation is important for self-improvement of teachers of physical education in the process of their professional activity. The results of the research show that intrinsic motives dominate among the teachers of CG, which highlights positive attitude to pedagogical activity, and intensify motivation to self-improvement.

Keywords: Teacher, physical education, motivation, self-improvement.

https://dx.doi.org/10.15405/epsbs.2019.02.16
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Selection and peer-review under responsibility of the Organizing Committee of the conference
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1. Introduction

Under conditions of education modernisation and application of modern information technologies, society sets new requirements to teachers of higher educational establishments (Han & Yin, 2016; Pavlova, Stefankiv, & Vynogradskyi, 2016; Ryan & Stiller, 1991). This is also actual for physical education teachers. No matter how well educational process is built in a higher educational establishment, it cannot completely provide the formation of highly-qualified specialists. During the process of professional activity, a teacher undergoes significant changes. These changes are stipulated by both peculiarities and specifics of the job and social and economic changes. That is why the issue of continuous education is urgent.

Under modern conditions, improvement of the level of professional competence, acquisition of new knowledge, and improvement of teaching are possible due to a systematic self-improvement of teacher in the process of professional activity (Kyriacou & Kunc, 2007; Li, Lee, & Solmon, 2005). However, self-education processes are rather complicated and are stipulated by several factors, motivation being one of them.

2. Problem Statement

Self-improvement is always based on teacher's motivation to professional growth that leads and organizes teacher's activity, gives self-improvement personal value and significance in the process of professional activity, promotes transformation of externally-formulated aims regarding personal self-improvement into individual's inner needs (Ryan & Deci, 2000; Ryan & Stiller, 1991). We assume that motivation leads and organizes teachers' activity, provides personal essence and significance of self-improvement under conditions of professional activity, promotes transformation of externally-formulated aims into inner needs.

3. Research Questions

Study of motivation to self-improvement of teachers of physical education in the process of their professional activity was based on primary sources of motivation as fundamental personal formations mentioned by J. Barbuto and R. Scholl in their works (Barbuto, 2006; Barbuto & Scholl, 1998). Five sources of motivation are pointed out: inner processes; instrumental motivation; external self-concept, internal self-concept; aim internalisation. Motivational structure of each teacher of physical education can have all sources of motivation; however, expressiveness of each of them in a motivational profile interested us the most.

4. Purpose of the Study

The aim of the research is to analyse motivation to self-improvement of physical education teachers in the process of professional activity.

5. Research Methods

Physical education teachers for experimental (EG, n=124) and control (CG, n=124) groups were picked randomly from a pedagogical staff of Ukrainian universities. Khmelnytskyi National University,

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Ternopil Volodymyr Hnatyuk National Pedagogical University, Zaporizhzhya National University, Drohobych State Pedagogical University of Ivan Franko, Kyiv National University of Technologies and Design were chosen as research and experimental basis of the research. The Motivation Sources Inventory by J. Barbuto and R. Scholl was used to define motivation to self-improvement of teachers of physical education (Barbuto, 2006; Barbuto & Scholl, 1998; Soltyk et al., 2017).

The questionnaire to determine sources of motivation consists of 30 questions (6 in each category). Each question can be answered using 7 options: “totally NO”, “NO”, “rather NO”, “I don’t know”, “rather YES”, “YES”, “totally YES”. Each answer is evaluated with a certain amount of points (from -3 to 3), as determined in the scale. Final grade is calculated in each category as a sum of points for six statements.

To analyse the level of formation of motivation to self-improvement of physical education teachers in the process of professional activity, the following levels have been determined: low level is characterised by prevalence of other motives over internal self-concept and absence of the need for self-improvement in the process of professional activity; average level is characterised by sufficiently-formed internal self-concept, however, understanding of the importance and necessity of a systematic self-improvement in the process of professional activity is insufficient; high level features express durability of intrinsic motivation to self-improvement and complete understanding of the importance of continuous and systematic improvement of the level of professional skills.

Teachers of CG participated in the traditional in-service training course, EG was trained according to the authorial program. According to the authorial program, to increase motivation of teachers to self-improvement, teachers were engaged in sharing their experience, teachers’ scientific activity intensified under conditions of competitiveness, favourable conditions were created for career growth. Round tables and scientific seminars pointed out the most important professional qualities, defined components of professional activity needed for a quality educational process. Reports were given by teachers having huge work experience, scientific degrees, teachers who are ranked high in university ratings, are respected by students, young teachers and scientists who fruitfully work with research in the field of professional education. Training sessions were held. They have shown that, in the process of professional activity, external motivational factors transform into internally-valuable motives and beliefs of teachers of physical education. Teachers also attended one another’s classes, which is also a requirement for a teacher in a higher educational establishment. During the classes, teachers focused on pedagogical communication of the one who gave a class, namely on verbal and non-verbal communication, on physical preparedness, the accuracy of demonstration of certain exercises, the teacher’s ability to control physical condition and load, ability to correlate physical load and rest and to control the emotional state of students. When discussing demonstration lessons, attention was paid to positive aspects and application of innovational methods of teaching. Drawbacks and ways of their elimination were also discussed. When analysing classes given by other educators, teachers improve skills in self-evaluation of personal qualities and skills. Scientific and practical conferences of the department helped improve teachers’ scientific knowledge in methodology. All teachers engaged in self-improvement made reports at breakout sessions. They informed about the results of their personal theoretical and practical research and had an opportunity to acquire additional knowledge due to other reports.

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6. Findings

6.1. Results

The results of the research of IP (inner processes) for teachers from EG with average level constituted 72.58% prior to the experiment and 71.77% after it (Figure 01A, Table 01). The average score of IP for EG group was 2.39 before the experiment and 3.31 after it, showing an increase of 0.92. The number of teachers from EG who had high level of IP was 21.77% before the experiment with average score of -8.8, while after the experiment, their number constituted 28.22% with average score of 8.83. The index of IP in motivation to self-improvement of EG group increased by 6.45%.

The number of teachers from CG with low level of IP decreased to 3.23% after the experiment. The number of teachers who had average level of IP increased from 75% to 75.8%. The average score of IP for teachers who had low and high levels did not change. It was observed a slight increase of 0.8 in the average score for teachers having average level of IP.

The number of teachers of physical education who had average level of instrumental motivation (IM) decreased from 75% to 73.39% (Figure 01B). At the same time, the number of teachers who had high level increased from 25% to 26.61%. The average score of teachers having average level of IM slightly changed from 1.72 to 2.72; the average score of teachers having high level of IM changed from 9.5 to 9.83 (Table 01).

Within CG, the number of teachers having low level of IM constituted 8.87% before the experiment and decreased to 8.06% after it.

After having analysed the dynamics of indices of external self-concept (ESC), we found that the number of teachers from EG having low level of ESC constituted 4.03% before the experiment, while after the experiment, no teacher from EG had low level of ESC (Figure 02A).

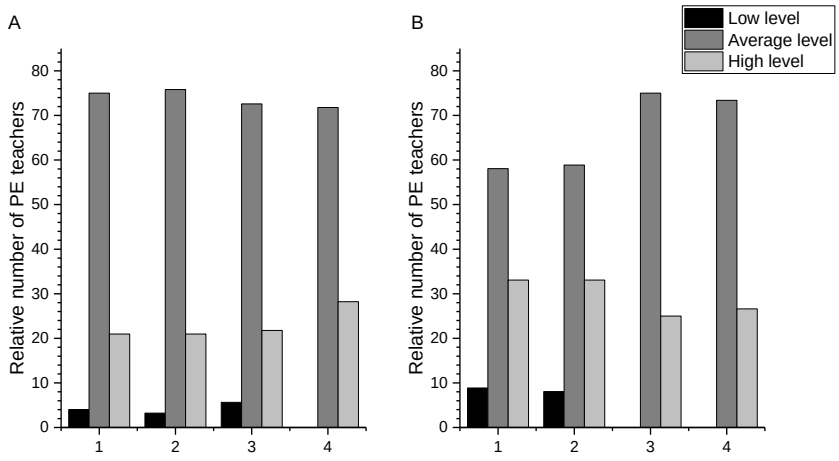

Figure 01. Dynamics of indices of motivation (A – inner processes, B – instrumental motivation) of physical education teachers to self-improvement: 1 – CG before experiment, 2 – CG after experiment, 3 – EG before experiment, 4 – EG after experiment

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Table 01. Results of study of the motivational component of physical education teachers in the process of professional activity

Levels	Control group		Experimental group	
	Before experiment	**After experiment**	**Before experiment**	**After experiment**
Inner processes				
Low	-8.00	-8.00	-2.00	-
Average	2.06	2.17	2.39	3.31
High	7.80	7.80	8.80	8.83
Instrumental motivation				
Low	-8.00	-8.00	–	–
Average	2.36	2.50	1.72	2.72
High	8.50	8.63	9.50	9.83
External self-concept				
Low	-7.00	-6.00	-6.00	–
Average	1.35	1.59	1.90	2.18
High	9.83	9.83	7.00	7.50
Internal self-concept				
Low	–	–	–	–
Average	3.00	2.63	4.40	5.67
High	9.67	9.63	9.43	9.67
Aim internalisation				
Low	–	–	–	–
Average	1.17	1.25	2.5	4.21
High	8.83	8.83	9.16	9.2

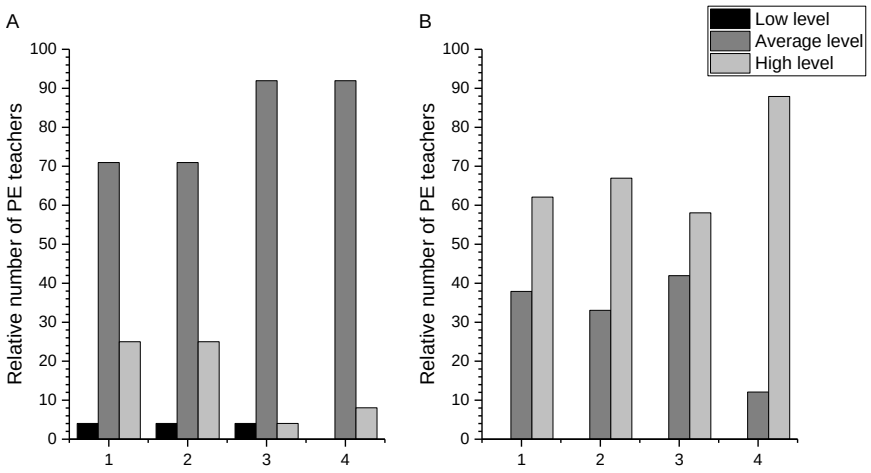

Figure 02. Dynamics of indices of motivation (A – external self-concept, B – internal self-concept) of physical education teachers to self-improvement: 1 – CG before experiment, 2 – CG after experiment, 3 – EG before experiment, 4 – EG after experiment

The number of teachers from EG having average level of ESC did not change and constituted 91.94% before and after the experiment, while the average score increased from 1.90 to 2.18 (Table 01). Before the experiment, the number of teachers of physical education having high level of ESC constituted 4.03% with average score of 7, while after the experiment, their number constituted 8.06% with average score of 7.5.

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The results of ESC remained unchanged with teachers from CG. The number of teachers having low level of ESC constituted 4.03% with average score of 7. Also, there were no changes in quantitative indices with teachers from CG having average level of ESC. Their number constituted 70.97% before and after the experiment. The average score slightly increased from 1.35 to 1.53. The number of teachers from CG having high level of ESC constituted 25% with average score of 9.83.

Figure 02B shows positive dynamics of indices of internal self-concept (ISC) with teachers of physical education from CG and EG before and after the experiment. Within EG, no teacher with low level of ISC was found. We observed a decrease in the number of teachers from EG who had average level of ISC (from 41.94% to 12.10%). However, the average score of ISC increased from 4.4 to 5.67. The number of teachers from EG having high level of ISC constituted 58.06% with average score of 9.43 before the experiment.

Within CG, no teacher having low level of ISC was found before and after the experiment. The average level of ISC within CG decreased from 37.9% to 33.06%. At the same time, the average score decreased by 0.37 (from 3 before the experiment to 2.63 after it). The results of the research of ISC within CG showed that 62.1% of teachers had high level with the average score of 9.67, while after the experiment, their number constituted 66.94% with average score of 9.63. Their number increased by 4.84%.

The number of teachers from EG having low average level of aim internalisation (AI) constituted 66.94% with the score of 2.5 before the experiment and 58.06% with average score of 4.21 after it (Figure 03, Table 01). The number of teachers from EG having high level of AI constituted 33.06% with average score of 9.20 before the experiment. After the experiment, their number increased to 41.94% with average score of 9.20. In this case, it increased by 8.88%, while the average score, by 0.13.

The number of teachers from CG having average level of AI remained unchanged before and after the experiment and constituted 49.19%. Within CG, the number of teachers having high level of AI remained the same before and after the experiment and constituted 48.39%. The average score did not change and was 8.33.

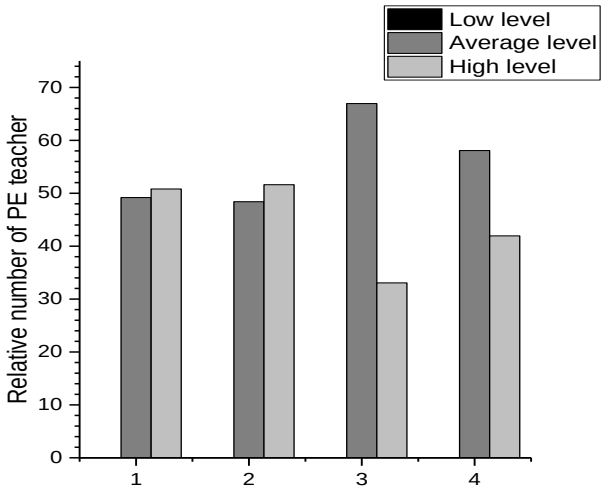

Figure 03. Dynamics of indices of motivation aim internalisation of physical education teachers to self-improvement: 1 – CG before experiment, 2 – CG after experiment, 3 – EG before experiment, 4 – EG after experiment

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6.2. Discussion

As a result, a map of motivation expressiveness of each individual physical education teacher or the entire group or team can be obtained. A source of motivation can be the work process and external tangible results, awards (wages, promotion, rewards etc.); belonging to a group, support of its members, gaining of a desired status; self-improvement, desire to reach higher level of competence; desire for self-expression, better achievements, realization of personal important group aims, tackling the challenges, self-actualisation. Motivational structure of each teacher of physical education can have all sources of motivation; however, expressiveness of each of them in a motivational profile interests us the most.

Intensification of motivation in the envisaged process of professional activity increased the interest of physical education teachers in self-improvement, their desire to succeed and realize the importance of self-improvement under conditions of professional activity, as well as their need, in continuous education, for professional growth, realizing the necessity of improving their professional skills and knowledge. We think that motivation leads and organizes teachers' activity, give personal essence and significance to self-improvement under conditions of professional activity, promotes transformation of externally-formulated aims into inner needs. Basic trends of an effective influence on intensification of motivation to self-improvement of teachers were as follows: formation of positive guideline for self-improvement in the process of professional activity with the help of specification of requirements to specialists; formation of solid knowledge and skills, which is a significant factor for the development of motivation to professional self-improvement and personal development; actualisation of the need for professional growth. Primary actions regarding intensification of motivation of teachers of physical education to self-improvement in the process of professional activity included administering scientific and methodological seminars and training sessions related to professional growth (Moreno, González-Cutre, Martín-Albo, & Cervelló, 2010; Soltyk et al., 2017).

The analysis of the results of research on motivation to self-improvement of teachers of physical education in the process of professional activity, namely IP, showed that no teacher with low level of IP was revealed in the experimental group (EG) after the experiment, while prior to the experiment, this number constituted 5.65% with average score of -2. After having analysed the indices of motivation within control group (CG), namely the index of IP, we revealed insignificant changes. When analysing the results of the research of teachers' motivation, namely instrumental motivation (IM) and its dynamics, we revealed changes in quantitative indices of the average and high levels within EG. Quantitative indices with teachers from CG who had high level of IM remained unchanged. Namely, slight increase in the average score with teachers having average and high level of IM was observed. The results of the research on the motivation of physical education teachers to self-improvement show positive changes regarding external self-concept (ESC) of teachers of physical education from EG. Within EG, internal self-concept (ISC) has the best index of motivation to self-improvement of teachers of physical education in the process of professional activity.

After the experiment, the number of teachers from EG having high level of ISC constituted 87.9% with average score of 9.67. This shows that the number of teachers having high level of ISC within EG has increased by 29.84%, however, the average score has increased only by 0.24. A slight increase in the average score of ISC is explained by the fact that a number of teachers have moved from average to high level, however, still have not reached high indices.

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In our work, we support the idea that only a person with high level of motivation to professional self-improvement can achieve better results in personal *acme*. The authors see such motivation in the desire to achieve goals, in an expressed need for self-improvement, in the artistic attitude towards the activity. No additional actions are needed for personal development if the person has high level of motivation. In this case, the person has fun from the very process of professional self-improvement, which is an integral component of his/her activity (Soltyk et al., 2017).

We base our research on works by Ryan and Deci (2000), Ryan and Stiller (1991), related to the theory of self-determination and cognitive self-evaluation. These authors state that interpersonal events and structures that form the sense of competence during an action can intensify intrinsic motivation for this action since they allow satisfying the basic psychological need in competence.

We have also proved scientific conclusions showing that formation of positive guideline for professional self-improvement can be done with the help of specification of the system of requirements for the specialists; formation of solid knowledge and skills, which are a solid factor for the development of motivation to professional self-improvement and personal development; actualisation of needs in professional growth (Vallerand, 2007; Van den Berghe, Vansteenkiste, Cardon, Kirk, & Haerens, 2014).

After having analysed the influence of motivation on the efficiency of professional and pedagogical activity of teachers in higher educational establishments specialising in physical education and sport, researchers have found that prevailing intrinsic motives of professional activity are more prone to adequate self-evaluation in terms of the level of formation of pedagogical skills and professional improvement and do not think they have reached the top of mastery (Vallerand, 2007; Van den Berghe et al., 2014). Teachers with prevailing external motivation are characterised by heightened self-evaluation in terms of formation of pedagogical skills, which does not promote their orientation towards the improvement of professional activity and its efficiency (Watt et al., 2012; Weiss, 1999). We agree that motivation to self-improvement of an educator depends on teacher's creative personality that has inner content of value orientations, realization of personal obligations, positive attitude to self and others and an external plane of this expression, ability to construct personal perception of the world and professional self-image (Han & Yin, 2016; Li, Lee, & Solmon, 2005).

We have also supplemented the researchers who think that self-improvement of a teacher of physical education and sports is defined by such parameters as: clearly stated subject's position, durability of dominating needs and motives for professional self-improvement, ability to manage educational activity, ability to express creative activity, intellectual independence and initiative (Ryan & Stiller, 1991; Watt et al., 2012).

7. Conclusion

Intrinsic motivation is very important for self-improvement of teachers of physical education in the process of their professional activity. If intrinsic motives dominate, this assures motivation for teachers of physical education to self-improvement. If external motives dominate, this shows absence of motivation to self-improvement in the process of professional activity. The results of research show that intrinsic motives dominate with most teachers from EG, which proves positive attitude to pedagogical activity and high-level motivation to self-improvement in the process of professional activity.

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