Original Article

Technology for increasing the vital activity of pre-retirement age people based on social partnership between enterprises and sports clubs

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Abstract.

In recent years, in many countries there has been an increase in the retirement age. Among people preparing for retirement according to pre-existing norms, such an unpopular measure provoked an increase in depressive states, a decrease in professional motivation, and a weakening interest in themselves and their own health. As a result, there is a decrease in vital activity. This requires corrective measures to maintain the activity of citizens of pre-retirement age on the part of interested parties, primarily enterprises. **Materials and methods.** An integration approach was used, which combines socio-economic and acmeological approaches. The purpose of the article is a theoretical and practical study of increasing the vital activity of working citizens of pre-retirement age. **Results.** The creation of a social partnership between enterprises and sports clubs is proposed. The whole process is presented in 4 stages: propaedeutic, motivational, active, value-orientational. For each of them, the most effective working methods are proposed. For the experimental work, evaluation criteria were developed by which the ongoing changes were monitored: life position, personality type, level of anxiety and level of aggression, as well as level of life satisfaction. 136 employees of the 50+ category participated in the experiment. **Conclusion.** The necessity of various forms of active leisure and sports that are offered to employees is substantiated. The special role of the propaedeutic and motivational stages is noted, since they are called upon to actualize rational and irrational motives for increasing life activity among employees of pre-retirement age. As a result of focused work, qualitative changes occurred among the employees of the experimental group for each criterion. Thus, the mutual benefit of enterprises and sports clubs from social partnership is proved in terms of increasing the vital activity of pre-retirement age people.

Key words: physical activity, pre-retirement age, social partnership.

Introduction.

The demographic situation of recent decades is characterized by a very significant increase in the number of people of retirement and pre-retirement age in the population structure (Gordon A.G., Litinskaya D.G., 2015). This forced a number of countries, including Russia, to increase the retirement age. This circumstance exacerbates the problem of preserving working ability, professional motivation and life activity of people aged 50-65 years, who have to wait for retirement benefits. Enterprises are interested in solving this problem, since employees must successfully fulfill professional duties, and logically, employees themselves should be also interested, since they need to continue to work for making their living.

However, legislative increase in the retirement age collapsed the plans of the population aged 50+, which provoked the growth of depressive moods, pessimism and even aggressiveness towards the outside world. The negative emotions resulted in general passivity: at work, in life, in leisure ... It should be noted that at present 80% of employees of the pre-retirement age are not ready to solve the problem of maintaining their performance, they are not looking for ways to maintain their health as a result of general dissatisfaction and the presence of subdepressive and depressive states (Loskutova E.A., 2018). In this case, the interested party is the enterprises and organizations in which employees of pre-retirement age work. We believe that the management of enterprises is able to take the initiative in maintaining the health and working ability of their employees, creating new conditions for their recreational activities.

There are no technologies for maintaining people's performance within the new retirement age, however, there are a number of studies on maintaining health and positive mood in people of retirement age (Khorkina N.A., Filippova A.V., 2015; Andrieieva, O., Hakman, A., Kashuba, V., et al. (2019); Potekhina I.P., Chizhov D.V., 2016, etc.). Based on them, it can be argued that the best ways are to increase physical activity; healthy eating and minimize bad habits.

Sports clubs could help increase the physical activity of the population, but their work is mainly aimed at young people. At the same time, competition encourages clubs to look for new areas of their activity, for example, for children and families. However, the involvement of people aged 50+ is practically not carried out, although at present this can be a significant segment of the market.

Thus, there are two interested parties in maintaining the vital activity and health of pre-retirement age people: enterprises and sports clubs, which can create social partnership, and subsequently a third party can join them, which is the employees of enterprises themselves.

Materials and methods.

1. Theoretical methods: analysis of the problem of increasing the vital activity of working citizens of pre-retirement age, generalization, formalization and interpretation of the facts.

2. Empirical methods: psychodiagnostic methods (observation, conversation, discussion, round table, testing) and specially organized influence (master classes, tours, self-monitoring of health). Diagnosis was carried out with the help of: "Life position questionnaire" developed in the azps.ru laboratory; "Personality Orientation" questionnaire by B. Bass; State-Trait Anxiety Inventory (STAI) test by CD Spielberger adapted to the Russian language by Yu.L. Khanin (Spielberger – Khanin test); "Level of aggressiveness" test by A. Buss and A. Durkee; life satisfaction index (LISA), adapted by N.V. Panin.

3. Methods of mathematical statistics: descriptive and comparative analyzes. Processing of the results was carried out using STATISTICA V.6.0.

The following hypothesis was put forward: if a social partnership between enterprises and sports clubs is created, then employees aged 50+ will retain their ability to work, support (or maybe acquire) vitality and motivation for work. The experiment was carried out from September 2018 to July 2019. 136 engineering and technical workers (82 women and 54 men) of a large engineering enterprise in Chelyabinsk took part in the study, of which an experimental and control group were formed.

In accordance with the goals and objectives of the experimental work, 4 evaluation criteria were developed: life position, personality type, level of anxiety and level of aggression.

The study was carried out in four stages. Each of the stages used its own working methods.

Stage 1 - propaedeutic, at which enterprises organize educational events for 50+ employees on the prevention of various diseases, effective recreation, proper nutrition, healing experience, etc. Methods: lecture, conversation, discussion, round table, degustation. In addition, systematic monitoring of health indicators is included in the working day. Means: pulse oximeter, fitness watch (gifts from the company).

Stage 2 - motivational. Sports clubs join the experiment (swimming pool, fitness-centers, sections of joggers, etc.). Master classes, open classes, excursions, free classes are organized.

Stage 3 - active. Enterprises enter into agreements with sports clubs, which offer a special price for their services. Staff attend classes for free. Health status is monitored using cardiointervalometry, blood pressure data, response of cardiac activity to functional load, dynamometry, assessment of anthropometric indicators, Stange breathing test, level of physical development. Classes are held 2 times a week. It is mandatory that employees of the enterprise keep a diary and register their mood and well-being.

Stage 4 - value-orientation. Participants pay 25% of the cost of classes. Employees participate in the propaedeutic stage for newcomers and share their experience. The same diagnostic methods as in stage 3 were used with the assessment of the level of personal anxiety (C.D. Spielberger, Yu.L. Khanin).

Results

The created social partnership of the enterprise and sports clubs turned out to be effective and productive, as evidenced by the data obtained through diagnostic measures. Evaluation was carried out for each criterion.

The first criterion is a life position. "Life position" is understood as the attitude of a person to the world around him/her and to himself/herself manifested in thoughts and behavior. The assessment is based on 4 types of life position identified by E. Berne: "I am not OK - you are not OK" (hopeless position), "I am not OK - you are OK" (one down position), "I am OK - you are OK" (healthy position), "I am OK - you are not OK" (one-up position). Figure 1 shows the changes in life position in the experimental and control group of pre-retirement age people. It is easy to notice that in the experimental group with which the corresponding events were held, there was a decrease in the one down position and a significant increase in the healthy position. In the control group, statistically significant changes were not recorded.

Fig. 1 Changes in the life position of the participants in the experiment

The second criterion is a personality type. This criterion allowed us to track the change in the dominant motives, which were combined into three groups: focus on business (motives of activity, creativity, mastery of knowledge), on society (altruistic, collectivist motives), on oneself (selfish motives of self-assertion, dominance and primacy). For this, "Personality Orientation questionnaire" by B. Bass was used. The positive thing is that in the experimental group, selfish motives decreased significantly and business and social motives increased (Figure 2). In the control group, selfish motives increased and business motives decreased, which cannot but affect the quality of work.

Fig. 2. Change in the personality orientation among participants of the experiment

The level of anxiety and the level of aggression allowed us to assess the change in the emotional status of the employees. The table shows the results obtained.

Table

Changes in the level of anxiety and the level of aggression among respondents

Anxiety level (Spielberger-Khanin test)	Resistive	53.2±3.0	51.6±3.1	41.9±3.7	52.31±3.1
		p>0.05		p<0.05	
	Personal	52.70±3.4	50.35±3.2	44.1±4.1	51.67±3.2
		p>0.05		p<0.05	
Aggression level (Bass-Durkee test)	Aggression Index	21.7±2.0	21.2±1.8	18.3±1.3	21.8±2.0
	Hostility Index	14.4±1.3	13.9±1.3	8.6±1.8	12.5±2.5

The level of anxiety was measured according to the following scale: up to 30 points - low, 31-45 points - moderate, over 46 - high. In the control group, the level of anxiety rose a year later, and in the experimental group, it decreased from a high level of anxiety to moderate (a normal value of the aggression index is 21).

Aggression slightly decreased among the members of the experimental group and significantly increased in the control group. Hostility significantly decreased among respondents from the experimental group and slightly increased among respondents from the control (a normal value of hostility index is 6–7).

The fifth criterion is satisfaction with life. Its assessment was carried out using the "life satisfaction index" (Neugarten A.O.) adapted by N.V. Panina. Based on testdata, we tracked changes on 5 scales: interest in life, consistency in achieving goals, consistency between goals set and goals achieved, positive assessment of oneself and one's own actions, general mood. The most significant changes in the experimental group occurred on the "general mood" and "interest in life" scales. In other parameters, the changes were not statistically significant. In the control group, no changes were recorded. Consequently, the physical activity of 50+ employees improved their mood and interest in life.

In addition, it should be noted that sick leave days were reduced by 27.4% among the employees of the experimental group compared to the previous two years, whereas in the control group there was a slight increase by 3.7%.

The results obtained can be associated with the successful implementation of social partnerships between enterprises and sports clubs.

Discussion

The development of technology for increasing the vital activity of pre-retirement age people in the conditions of social partnership of enterprises and sports clubs was carried out on the basis of an integrative approach, which combined socio-economic and acmeological approaches.

The socio-economic approach allowed us to combine the social and economic interests of enterprises, sports clubs and citizens of pre-retirement age. Social interests are associated with the development of 50+ employees, maintaining their health and increasing labor activity, which will affect the sustainable development of enterprises and the country. Economic interests are determined by the need to minimize sick leave days, to increase labor productivity and reduce the risks of labor passivity.

The acmeological approach allows us to consider human development throughout life, especially at the stage of personality maturity. In this regard, it is based on a number of psychological concepts. For our study, the theory of the life course of C. Buhler and the personal disposition theory by G. Allport play a special role. According to Charlotte Buhler (Buhler, C., & Massarik, F., 1968), people strive for self-fulfillment (self-realization), and this process is limited by 65 (70) - 80 (85) years. Consequently, the extension of labor activity does not contradict psychological laws.

According to the personal disposition theory by Gordon Allport (Allport, G., 1961), a person is a social being and therefore always strives for interaction and mutual enrichment. Human motives are always directed to the future; therefore, past events and their significance can be minimized. Therefore, in order to relieve aggressiveness and depression among pre-retirement age people, it is necessary to develop new group forms and methods of their interaction, which will allow to create motivation for the future, positive emotional background and life energy.

When developing technology for increasing vital activity of pre-retirement age people, we were guided by the existing opinions of scientists on issues of social partnership. The study of the relevant literature allowed us to distinguish three positions in the interpretation of the concept of "social partnership": institutional (Mikheev V.A., 1999), conflict resolution (Borodin I.I., 2002) and technological (Potemkin V.K., Kazakov D.N., 2002). We believe that the existing positions do not contradict each other, but are complementary. In our case, an institutional understanding of partnership allows creating organizational and economic norms for the distribution of financing of sports activities for pre-retirement age people. Conflictological understanding allows considering social partnership as a method of resolving the current difficult situation related to the retirement age. Technological understanding allows developing a technology aimed at protecting the interests of pre-retirement age people. Thus, it can be argued that "social partnership" is a multidimensional concept, but in all cases, it involves a contractual relationship (M. Bondarenko, S. Shevaldina, 2011).

As rightly noted by L. Olsen (Olsen, L., 1996), partners engage each other in the process of seeking new mutually beneficial solutions. There are a lot of such decisions: a) selection of a convenient time for training, master classes or thematic conversations; b) determination of the place for meetings; c) development of a motivation program for employees involved in sports; d) coordination of project financing; e) preparation of a specialized program for 50+ people in accordance with the specifics of work; f) transport logistics, etc.

In the framework of the described social partnership, all the participants are beneficiaries. Enterprises receive more efficient, motivated employees, gain staff loyalty and improve corporate culture. Such paternalism will also provide financial benefits, since the number of sick leave days is reduced, as evidenced by our data and confirmed by the work of Nicholletal. (Nicholl J.P., Coleman P., 1994) and Munro et al. (Munro J., Brazier J., Davey R., Nicholl J., 1997).

Sports clubs receive a more even workload, an increase in the customer base and the promotion of additional services, and most importantly, an increase in the number of regular customers, which will contribute to greater profitability and financial stability of the club. In addition, sports clubs will realize the hidden potential

in educational and propaganda work, increase the qualifications of their employees in working with 50+ clients, and strengthen their presence in the city market.

The final beneficiaries of such a social partnership, of course, are pre-retirement age people as they receive physical development, interesting leisure and recreation, relieve stress, gain additional social guarantees and protection. In foreign studies, it has been shown that physical activity helps to slow down aging (Nicholson L., 2004; WHO, 2010), reduce the risk of cardiovascular and oncological diseases, increase bone density, reduce weight (WHO, 2010; Paterson D., Warburton D. E., 2010), relieve depression, improve life (Sherrington C., Whitney J. C., Lord S. R. et al., 2008) and work satisfaction (Grimaldi Puyana, M., PérezVillalba, M., Bernal García, A. y Sánchez Oliver, AJ (2018), increase general well-being (Nicholson L., 2015).

It should be noted that the results of purposeful work with pre-retirement age employees may be of interest to state and municipal bodies, since their participation in such a social partnership will increase the living standards of the population, the labor efficiency of the region's workforce, and reduce the level of social tension.

Conclusion

The emerging complex of problems associated with legislative changes, physiological, psychological and labor aspects of the professional activity of pre-retirement age people is systemic in nature. Therefore, its effective solution requires a comprehensive approach.

A social partnership between state/municipal authorities, manufacturing enterprises and health centers (sports clubs) is proposed. Each of the participants has strengths, and combining them will give a powerful synergistic effect.

Experimental work was organized to verify the effectiveness of the interaction between enterprises and sports clubs, evaluation criteria were developed, and diagnostic methods were selected. Its results proved that the social partnership between the enterprise and sports clubs increased the physical activity of pre-retirement age workers, which had a positive impact on their life position and personality orientation, reduced anxiety and aggression, improved well-being and physical health. Employees who did not participate in the experiment did not have positive changes. Thus, the considered social partnership is a promising form of work with pre-retirement age people, as their health is maintained, emotional status is balanced, physical stamina and ability to work are increased. Consequently, the goals of all participants of the partnership are achieved.

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