

CONNECTION BETWEEN SUBJECTIVE PERSPECTIVE AND WORKING ABILITY OF WORKERS IN ENGINEERING INDUSTRY

(Research note)

Rade Stefanović and Branimir Mekić

*University of Priština, Faculty of Sport and Physical Education,
with temporal base in Leposavić, Kosovo and Metohia, Serbia*

Abstract

Choice of sample items was made completely randomly. Planned sample was 30% of total number of employees, that is 858 examinees. 813 workers were polled in total and that is 28,6 % of total number of employees in Work organization "Atlatnica" and it represents realization of the plan of 95,34%. Polling was done completely by students of Faculty of Philosophy in Niš, department of physical culture. 8 students trained for poll conducting worked in this research. We can make the following conclusions about connection between subjective assessment of a state of physical and working abilities and health with activities in sports recreation and motivation for participation in sports and recreational activities: Subjective assessment of a state of physical and working abilities and health is better with workers who previously played some sport actively.

Keywords: *passive leisure, sports and recreational activities, functional capabilities, Questionnaire, health, χ^2 -test*

INTRODUCTION

Contemporary technology of work as well as monotonous work limit movements and thus physiological movements of a body decrease. Rest after work is mostly passive (reading newspapers, watching TV, social gathering, passive lying). Consequences of all these are various industrial diseases, reduction of functional capacities of organs for moving and early disablement.

Professional work demands and obliges workers to observe certain norms and tasks which influence psychological and physical load of their organisms.

Such style of life and work have permanent consequences on psychosomatic integrity of a worker.

Tumultuous changes in character, way and conditions of life and work, inevitably lead to ripening of various new needs in physical culture, too. Importance of physical culture in contemporary society.

The concept of *physical ability* means ability of human organism to react optimally to various stimuli of the environment. Physical ability represents basis for full development of productivity, for active and complete expression of all abilities of a worker.

Aim of the research

Sports and recreational athletic activities actually

represent various contents and forms of activities which are maximally adapted to needs and interests of a human being, according to a scope or intensity of load as well as according to a place and time where and when they take place and also to the way of conducting them.

With the aim defined in this way, the research had the task to ascertain the following:

- Subjective feeling of health discomfort in everyday life,

Estimation of what can improve health, subjective needs for programmed health preventive holidays:

- Previous active engagement in sports
- Assessment of how a way of life influences health
- Participation in sports and recreational activities,
- Needs and wishes to do some sports and recreational activities in free time

General hypothesis is: There is a connection between subjective perception of physical and working abilities and health from one side and doing sports and recreational activities and motivation for participation in sports and recreational activities on the other side.

METHODS

Sample of examinees

Selection of item of choice, work organization “Alatnica” EI Niš, was made on the basis of agreement with the recreation organizer in that working collective.

Choice of sample items was made completely randomly. Planned sample was 30% of total number of employees, that is 858 examinees.

813 workers were polled in total and that is 28,6 % of total number of employees in Work organization “Alatnica” and it represents realization of the plan of 95,34%.

Polling was done completely by students of Faculty of Philosophy in Niš, department of physical culture. 8 students trained for poll conducting worked in this research.

RESULTS

State of physical and working abilities

In relation to the influence of the way of life on health (Tables 1.A and 1.B)

Data indicate statistically significant differences (on the level of significance 1%) in assessment of the influence the way of life upto now has on health of certain strata of workers, both on the basis of subjective assessment of physical and working abilities as well as on the basis of subjective assessment of a state of health.

According to the workers’ assessment, their present way of life in relation to health is: good (57,67% of all examinees), bad (18,90%), very good (11,04%), cannot decide (9,69%) and very bad (2,70%).

Among workers who think that their way of life is very good for health, the majority of workers have excellent physical and working abilities (44,44%) , slightly smaller number has very good abilities (38,39%) and the smallest percentage is for those with weak abilities (1,1.1%).

In the group of workers who think their way of life is good for their health, the majority of workers have

good physical and working abilities (36,09%), slightly smaller number has very good abilities (23,14%) and the smallest number of workers have weak abilities (4,18%).

Among workers who think their way of life is bad for their health, the majority of workers have good physical and working abilities (29,87%), slightly smaller number has satisfactory abilities (22,73%), very good (21,43%), whereas the smallest percentage is for excellent and weak abilities (12,99% each).

In the group of workers who think their way of life is very bad for their health, the majority of workers have satisfactory and weak physical and working abilities (27,27% for each group of abilities) and the smallest number of workers have very good abilities (0,51%).

Among the workers who cannot decide, the majority of workers have satisfactory physical and working abilities (36,71%), slightly smaller number of workers have good (25,32%) and very good (21,52%) abilities, whereas the smallest number of workers have excellent abilities (5,06%).

State of physical and health abilities

In relation to motivation for participation in sports and recreational activities (Tables 2.A and 2.B)

Since a large number of answers was allowed for this question, HI-square test was not calculated, but the following conclusions can be made on the basis of the table:

The workers would gladly do the following sports and recreational activities: sports games (22, 53% of all answers), walking, running, hiking, trim tracks, health tracks (16,16%), hunting and fishing (15,33%), activities in and on water (10,30%) and activities in nature (10,30%).

Workers are the least interested in: activities on snow (3,93%), exercising on gymnastics apparatus (3,69%), amusement games (3,35%) and classes of sports and recreation (2,93%).

It can be seen from the table that sports and

Table 1.A. State of physical and working abilities in relation to the way of life

I think my present way of life is ... for my health	I think my physical and working abilities are											
	Excellent	%	Very good	%	Good	%	Satisfactory	%	Weak	%	Answer	%
Very good	40	44.44	35	38.39	9	10.00	5	5.56	1	1.11	90	11.14
Good	79	16.77	109	23.14	170	36.8	90	19.11	23	4.88	470	57.67
Bad	20	12.99	33	21.43	46	29.67	35	22.73	20	12.99	154	18.90
Very bad	4	18.28	1	4.55	5	22.73	6	27.27	6	27.27	22	2.70
I cannot decide	4	5.06	17	21.52	20	26.32	29	36.71	9	11.39	9	9.69
	147	18.02	195	23.90	250	30.64	165	20.22	59	7.23	815	

Total number of incorrect answers 3.

X2 = 126 64374, Degree of freedom = 16, P < 0.01, Contingency coefficient = 0.36654

Table 1.B. State of health in relation to the way of life

I think my present way of life is ... for my health	I think my health is											
	Excellent	%	Very good	%	Good	%	Satisfactory	%	Weak	%	Answer	%
Very good	45	50.00	29	32.22	9	10.00	5	5.56	2	2.22	90	11.04
Good	81	17.23	107	22.77	145	30.85	104	22.13	33	7.02	470	57.67
Bad	10	6.49	36	23.38	39	25.32	41	26.62	28	18.18	154	18.90
Very bad	2	9.09	-	-	5	22.73	5	22.73	10	45.45	22	2.70
I cannot decide	6	7.59	13	16.46	15	18.99	29	36.71	16	20.25	79	9,69

144 17.67 185 22.70 213 26.13 184 22.58 89 10.92 815

Total number of incorrect answers 3.

$\chi^2 = 164.49737$ Degree of freedom = 16, $P < 0.01$, Contingency coefficient = 0.40981

Table 2.A State of physical and working abilities in relation to sports and recreational activities which workers would do in their free time

Sports and recreational activities would do in their free time	I think my physical and working abilities are											
	Excellent	%	Very good	%	Good	%	Satisfactory	%	Weak	%	Answers	%
Morning exercises	9	12.16	12	16.22	32	43.24	12	16.22	9	12.16	74	6.20
Walking, running, hiking, trim tracks and health tracks	35	18.13	43	22.28	62	32.12	39	20.21	14	7.25	193	16.16
Hunting and fishing	26	14.21	43	23.50	53	28.96	44	24.04	17	9.29	183	16.33
Activities in water (swimming, sailing, rowing, water skiing)	23	18.70	29	23.58	35	28.45	27	21.95	9	7.32	123	10.30
Classes of sports recreation	6	17.14	10	28.57	9	25.71	8	22.85	2	5.71	35	2.93
Exercising on gymnastics apparatus	10	22.73	8	18.18	17	38.64	5	11.36	4	9.09	44	3.69
Sports games (mini football, volleyball, basketball, handball)	62	87.06	64	21.38	72	26.77	43	15.99	8	2.97	268	22.53
Other games (tennis, table tennis, badminton)	19	29.69	15	23.44	13	20.31	16	25.00	1	1.56	64	5.36
Amusement games (dancing, folklore dancing, darts, dominoes)	13	32.50	10	25.00	11	37.50	4	10.00	2	5.00	40	3.35
Activities on snow (skiing, ice skating, sledging, walking)	13	27.66	14	29.79	12	25.53	7	14.89	1	2.13	47	3.93
Activities in nature (outing, camping)	19	15.45	24	19.51	33	26.83	36	29.27	11	8.94	123	10.30
	235	19.67	292	24.44	349	29.21	241	20.17	78	6.53	1194	

Table 2.B. State of health in relation to sports and recreational activities which workers would do in their free time

Sports and recreational activities workers would do in their free time	I think my physical and working abilities are											
	Excellent	%	Very good	%	Good	%	Satisfactory	%	Weak	%	Answer	%
Morning exercises	9	12.16	14	18.92	27	36.49	14	18.92	10	13.51	74	6.20
Walking, running, hiking, trim tracks and health tracks	33	17.10	43	22.28	51	26.42	45	23.32	21	10.88	193	16.16
Hunting and fishing	29	15.85	36	20.76	38	20.76	51	27.87	27	14.75	183	16.33
Activities in water (swimming, sailing, rowing, water skiing)	21	17.07	28	22.76	32	26.02	31	25.20	11	8.94	123	10.30
Classes of sports recreation	8	22.86	11	31.42	8	22.86	6	17.14	2	5.71	35	2.93
Exercising on gymnastics apparatus	11	25.00	9	20.45	15	34.09	6	13.64	3	8.57	44	3.69
Sports games (mini football, volleyball, basketball, handball)	63	23.61	82	30.60	64	23.22	49	18.28	10	3.73	268	22.53
Other games (tennis, table tennis, badminton)	21	32.81	11	17.19	11	17.19	17	26.56	4	6.25	64	5.36
Amusement games (dancing, folklore dancing, darts, dominoes)	8	20.00	10	25.00	11	27.60	5	12.50	6	15.00	40	3.35
Activities on snow (skiing, ice skating, sledging, walking)	11	23.40	13	27.66	11	23.40	10	21.28	2	4.26	47	3.93
Activities in nature (outing, camping)	14	11.38	24	19.61	37	30.06	35	28.45	13	10.57	123	10.30
	228	19.10	283	23.70	305	25.54	269	22.52	109	9.12	119	

recreational activities which workers would do in their free time and in this order, are mostly present with workers whose physical and working abilities and health are better, that is, workers who assessed them as excellent, very good and good.

Workers whose physical and working abilities are weak are the most interested in hunting and fishing, walking, running, hiking, trim tracks and health tracks and activities in nature (outing, camping, ...)

CONCLUSION

Subjective experience of state of physical and working abilities and health is also significant for perceiving objective (real) state of physical and working

abilities and health.

Activities in sports recreation are aimed at satisfying basic needs and interests of workers in physical culture regardless of the level of their physical and working abilities.

Sports and recreational activities with variety of their contents and forms are adapted to all workers - able and less able, healthy and those whose health is damaged, both according to their range and intensity of load as well as according to place and time and way of their conducting.

These results make basis for acceptance of all general hypotheses except the hypothesis that there is connection between needs for programmed health

preventive holidays with subjective assessment of the state of physical and working abilities and health.

We can make the following conclusions about connection between subjective assessment of a state of physical and working abilities and health with activities in sports recreation and motivation for participation in sports and recreational activities:

1. The workers mostly have favourable opinion of influence of sports and recreational activities on health improvement. The workers who assess their physical and working abilities and health as weaker mostly think that rest and sleeping can improve health, whereas those who assess them as better think that doing sports and recreational activities can improve health.

2. Subjective assessment of a state of physical and working abilities and health is better with workers who previously played some sport actively.

Workers with better physical and working abilities mostly took part in the following activities: sports games, walking, running, hiking, trim tracks and health tracks and activities in nature.

Correspondence:

Rade Stefanović

University in Pristina with temporal base in Leposavić,

Faculty of Sports and Physical Education,

Str. Dositej Obradović bb,

38218, Leposavić, Kosovo-Metohija, Serbia

E-mail: rade.stefanovic@pr.ac.rs

REFERENCES

- Aćimović, D., Joksimović, A., & Špirtovi, O. (2011). Scientific and echnological achievements and their significance in sport. *Activities in Pysical Eucation and Sport*, (2), 247-250.
- Blagajac, M. (1976). *Uticaoj nekih deomografskih i socijalnih obilježaja na potrebe i interese u području sportske rekreacije* [Blagajac m. Influence of some demographic and social features on needs and interests in the area of sports recreation. In Croatian] (Unpublished doctoral dissertation, University of Zagreb). Zagreb: Fakultet fizičku kulturu.
- Leskošek, J. (1971). *Teorija fizičke culture* [Theory of physical culture. In Serbian.] Beograd: NIPU Partizan.
- Наумовски, А. (2001). Основни статистички методи во спортог [Basic statistical methods in sports. In Macedonian.] Скопје: Факултет за физичка култура.
- Pržulj, D., & Cicović, B. (2012). The influence of sports recreational aerobic exercise on the adaptive processes of functional abilities. *Research Kinesiology*, 40(2), 177-183.
- Randeević, N., & Pantelić, S. (2012). The systems of health-recreational physical exercise. *Activities in Pysical Eucation and Sport*, (2), 247-250.
- Stefanovic, R. (2012). *Atletika* [Athletics. In Serbian.] Leposavić: Fakultet za sport I fizičko vaspitanje.