

## RECREATIONAL TOURISM IN THE FUNCTION OF THE PSYCHOPHYSICAL STATE OF PEOPLE

UDC 796.015.132-053.9

Ninoslav Golubović<sup>1</sup>, Marija Dimić<sup>1</sup>, Stevan Stamenković<sup>2</sup>

<sup>1</sup>Faculty of Sciences and Mathematics, University of Niš, Niš, Serbia

<sup>2</sup>Faculty of Sports and Physical Education, University of Niš, Niš, Serbia

**Abstract.** *Natural means of movement have an important role in the psychophysical state of people. The complete state of the human body is taken into consideration, which is improved during the stay in natural surroundings and participation in recreational activities, both in the sense of the health and working ability of a person. The aim of this research is the need to implement programmed walking into recreational tourism. There will be a basic overview of positive factors that affect the psychophysical condition of people. This topic is very attractive and demanding, even though it has been elaborated and considered many times before, and the authors will try to give their contribution to the research done so far.*

**Key words:** *tourism, walking, health, recreation.*

### INTRODUCTION

Tourism is a contemporary phenomenon, an important segment of human life in the 21st century. In the recent years the demand for recreational-health tourism, which represents recreation outside the dwelling place in the areas out of reach of air pollution, noise and constant exposure to stress, areas rich in oxygen and greenery, has been increasing. Such places allow a person to resist urban life of the streets and enables him to develop an increasing need for physical activities.

Recreation is closely connected with a person's health, and from the aspect of health it has all the positive sides that sport offers, as well as some wider possibilities of application related to the age and fitness level of a person. Modern means of tourist movements of

---

Received September 18, 2017/ Accepted December 11, 2017

**Corresponding author:** Ninoslav Golubović

Faculty of Sciences and Mathematics, University of Niš, St. Višegradska 33, 18000 Niš, Serbia

Phone: +381 18 223 430 • E-mail: [ngolub13@yahoo.co.uk](mailto:ngolub13@yahoo.co.uk)

people can be implemented in the form of recreational activities: playgrounds (football, handball, tennis, volleyball...), different games (table tennis, shooting, bike riding, horse back riding, chess, pools...), mountain activities (walking, skiing, parachuting...), as well as different water activities, such as water skiing, diving, fishing... (Bratić, 2015). The need for combining recreational and health tourism is increasing not only in Serbia, but also worldwide. People combine spa and mountain centres more and more often. The reason of doing so is a combination of healing waters and mud with the clean air, which positively influences the psycho-physical condition of people and the improvement of both their health and working ability.

A huge problem of modern age with highly developed technology is a lack of movement or hypokinesia, which has a negative influence on the psycho-physical condition of an individual, and is also one of the main causes of rapid growth of obesity in all the age groups, and increasing appearance of a wide range of health issues and illnesses (Planinsec & Matejek, 2004; Grujić, 2002). The World Health Organization (WHO) considers obesity the biggest contemporary problem that should be influenced by a healthy life style – physical activity, a healthy diet, healthy surroundings, social surroundings, and other elements that contribute to health, which WHO defines as: "a condition of complete physical, mental, and social wellbeing, and not only the absence of illness or weakness" (Milićević, 2013).

Considering the fact that only movement can prevent hypokinesia, it can be concluded that the implementation of physical activity, in its base, has different elements of movement, is of crucial importance for both the mental and physical health of people (Caspersen, Powell, & Christenson, 1985).

The aim of this research was to point out the effects of walking of moderate or sub-maximal intensity to psycho-physical health of middle-aged men and women, as well as the importance of implementation of the mentioned activity in the recreational tourism programme.

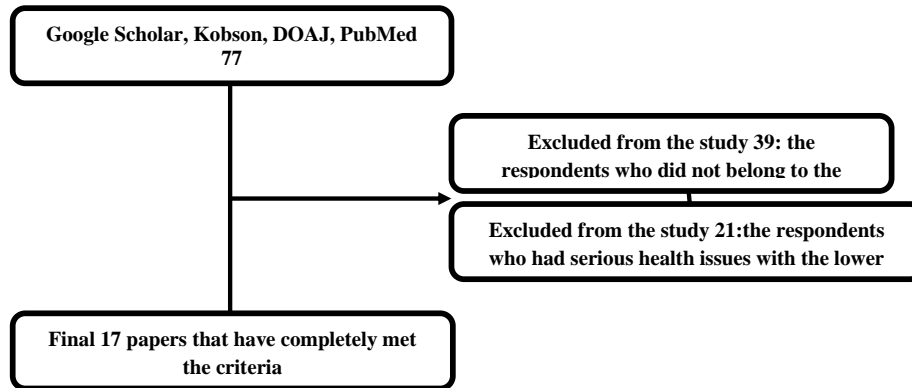
## METHODS

In accordance with the issue chosen, namely the very topic and the aim of the research, secondary data gained through the search and processing of different scientific databases that deal with health issues in sports and tourism, are used in this paper. Information from the available relevant literature has been used, scientific and research papers, and an internet search has been done by means of the following bases: Google Scholar, Kobson, DOAJ, PubMed. For a more detailed search of research papers, the authors used key words: tourism, walking, health, recreation and sports, which at the same time was the subject matter of the research. The study was limited to research papers published between 1994 and 2013. With this type of theoretical insight into the topic of research, as special methods we have used the analytical-synthetic, inductively deductive, abstraction method, generalization method, and description method.

### **Theoretical approach**

For gathering, classification and analyses of the selected research, the descriptive method, and theoretical analyses have been used. The study includes 17 closely related studies shown in figure 1. The initial search included 77 studies (figure 1.) that met some of the criteria. In total 60 studies have been excluded. In 39 studies, the respondents did

not belong to the predicted age group, and 21 studies have been excluded due to serious health issues of the respondents that led to insufficiencies of the lower extremities.



**Fig. 1** Closely related research

## RESULTS AND DISCUSSION

Connecting more different means of tourist movement in a certain destination is especially interesting for tourists. The most interested are middle-aged individuals who through tourism mostly perform natural means of movement such as walking, running, animation and bike riding. All the mentioned activities are used with the aim of maintaining fitness, and health of the body, as well as improvement of power, flexibility and stamina. That enables them to have a better quality of life and the more efficient performance of everyday activities (Hudson, 2003).

In the analyzed studies, a sample of the respondents aged 30-60 was included. The aim was to test the effect and influence of walking on the health status of middle-aged men and women. In a large number of studies the respondents were not diagnosed with any illnesses, but some persons have been classified as obese. Only in several studies were the effects of walking tested with persons diagnosed with diabetes type 2 (Walker, Piers, Putt, Jones, & Dea, 1999; Swartz et al., 2003; Karstoft et al., 2013). One hour of constant, moderate intensity walks 5 times a week leads to the reduction of blood sugar levels in persons with diabetes type 2. Swartz et al. (2003) have concluded that taking 10000 steps a day also has a positive effect on sugar regulation, but does not lead to body weight reduction and the percentage of fatty tissue in over-weight and obese persons. This conclusion has been to a large degree supported by other researchers (Karstoft et al., 2013) who claim that the program of interval walking shows better results and significantly influences the reduction of total cholesterol and bad cholesterol, as well as BMI, and has a positive correlation with VO2 max.

In certain studies the experimental program included sports walking and low calorie diets (Gappmaier, Lake, Nelson, & Fisher, 2006; Fogelholm, Kukkonen, Nenonen, & Pasanen, 2000; Layman et al., 2005; Okura, Nakata, & Tanaka, 2003; Garnier, Gaubert, Joffroy, Auneau, & Mauriège, 2013). It lasted on for an average of 4-6 months, 4-5 times a week, 45 minute-walking of light to moderate intensity. In the mentioned research, the

respondents have shown, after the finished program, a significant reduction in body weight, LDL cholesterol, skin wrinkles, and percentage of fatty tissue, triglycerides, and improvement of VO<sub>2</sub> max and strength of extensors of the lower extremities. The level of stress with persons who used the mentioned program (walking + diet) has been reduced to a large extent.

Mostly there was one experimental and one control group, and in that case, the experimental group used the walking program, whereas the control group was not subjected to any kind of physical exercise program. The results of a larger number of studies prove that the implementation of programmed walking produces positive effects on the psycho-physical health of middle-aged people related to the population of the same age that has not been at all, or has not been enough physically active (Aldred, Hardman, & Taylor, 1995; Murphy, Murtagh, Boreham, Hare, & Nevill, 2006; Stensel, Wavell, Hardman, Jones, & Norgan, 1994; Layman et al., 2005; Vancampfort et al., 2013; Andersen et al., 2013; Lee, Seo, & Chung, 2013; Garnier et al., 2013).

Some of the analyzed papers had in the sample only male or only female respondents. The results of these studies have shown that the program of walking 5 times a week of moderate to sub-maximal intensity has shown a significant improvement in the anthropometric characteristics of the respondents of both genders. In the studies that considered only the male population (Mivatake et al., 2002; Karstoft et al., 2013; Stensel et al., 1994), the best result is visible in the work of Mivatake et al. (2002), and the answer can be looked for in the duration of the program (1 year), which resulted in a significant reduction of body composition and improvement of HDL cholesterol. Compared to the respondents, the results of a research where the sample consisted of middle-aged women, a significant reduction of certain morphological and psychological characteristics was noted. In the study carried out by Andersen et al. (2013) an 8-week speed walking program influenced the reduction of anthropometric characteristics and a significant improvement of self perception. It has been proved that only 30 minutes a day, walking of somewhat stronger intensity (70-80%) 5 times a week, reduces the size of the waist, body weight and skin wrinkles (Murphy & Hardman, 1998).

## CONCLUSION

The average walking took 30-60 minutes, 3-5 times a week, of moderate to sub-maximal intensity. These programs have shown the best results. Compared with the control groups where the respondents were persons inactive or not active enough, based on the results of the above-mentioned studies, a significant improvement of psychophysical abilities and characteristics could be seen, in favor of the experimental group, which followed a walking program. In some studies the dosage of the program was expressed in the means of the number of steps made, and in the results, a significant reduction of skin wrinkles of the lower extremities can be noticed, the reduction of BMI and the size of the waist. The important information is that the mentioned program leads to an increased self-perception, and has a positive correlation with the level of psychophysical characteristics.

The data gained from the analyzed studies point out the beneficial effects of walking on the psychophysical condition of middle-aged people. A combination of the mentioned physical activity and a change of the surroundings where one exercises can additionally influence the improvement of the results implies the need of organizing, as well as joint

action of tourism and kinesiology. The programs of sports recreation within tourism find an additional market for their products and services, and the experts of kinesiology and sports are the very base of recreation tourism development.

Tourism, in all its aspects, offers significant possibilities for its own development, as well as for the development of sport. These two means of movement (sports and tourism) have a synergetic effect, and in that way, one supports the development of the other. An adequate offer of arrangements with targeted programs can be a crucial element for the selection of a certain destination over some other. This is equally important as the choice of natural, anthropogenic and gastronomic values. The importance of sports recreational programs in tourism will increase due to the growth of the tourist demand and the enrichment of the tourist offer. Considering the tourists who expect a higher quality of time, the task of sport recreational programs represents satisfying the needs of the body with a maximal dedication to each tourist. That leads to a constant optimizing and completing sports recreational programs.

#### REFERENCES

- Andersen, L.L., Sundstrup, E., Boysen, M., Jakobsen, M.D., Mortensen, O.S., & Persson, R. (2013). Cardiovascular health effects of internet-based encouragements to do daily workplace stair-walks: randomized controlled trial. *Journal of Medical Internet Research*, 15(6), e127
- Aldred, H.E., Hardman, A.E., & Taylor, S. (1995). Influence of 12 weeks of training by brisk walking on postprandial lipemia and insulinemia in sedentary middle-aged women. *Metabolism*, 44(3), 390-397.
- Bratić, M. (2015). The role of mountain tourism centers within the total tourism of Serbia, PhD thesis, University of Niš, Faculty of Science and Mathematics, Department of Geography.
- Caspersen, C.J., Powell, E.C., & Christenson, G.M. (1985). Physical activity, exercise, and physical fitness: definitions and distinctions for health-related research. *Public Health*, 100(2), 126-131.
- Fogelholm, M., Kukkonen, K., Nenonen, A., & Pasanen, M. (2000). Effects of walking training on weight maintenance after a very-low-energy diet in premenopausal obese women. *Formerly Archives of Internal Medicine*, 160(14), 2177-2184.
- Garnier, S., Gaubert, I., Joffroy, S., Auneau, G., & Mauriège, P. (2013). Impact of brisk walking on perceived health evaluated by a novel short questionnaire in sedentary and moderately obese postmenopausal women. *Menopause*, 20(8), 804-812.
- Gappmaier, E., Lake, W., Nelson, A.G., & Fisher, A.G. (2006). Aerobic exercise in water versus walking on land: effects on indices of fat reduction and weight loss of obese women. *The Journal of Sports Medicine and Physical Fitness* 46(4), 564-569.
- Grujić, V. (2002). Health status, health needs and utilization of health care of population in Serbia. *Glasnik Instituta za zastitu zdravlja Srbije*, 76(1), 26-147.
- Hudson, S. (2003). *Sport and adventure tourism*. New York: Publication Data,
- Karstoft, K., Winding, K., Knudsen, S.H., Nielsen, J.S., Thomsen, C., & Pedersen, B.K. (2013). The effects of free-living interval-walking training on glycemic control, body composition, and physical fitness in type 2 diabetic patients. *Diabetes Care*, 36(2), 228-236.
- Layman, K.D., Evans, E., Baum, J.I., Seyler, J., Erickson, J.D., & Boileau, A.R. (2005). Dietary protein and exercise have additive effects on body composition during weight loss in adult women. *The American Society for Nutritional Sciences*, 135(8), 1903-1910.
- Lee, S.H., Seo, B.D., & Chung, S.M. (2013). The effect of walking exercise on physical fitness and serum lipids in obese middle-aged women: Pilot study. *Journal of Physical Therapy Science*, 25(12), 1533-1536.
- Milićević, S. (2013). Health tourism - megatrend on the tourism market. *Megatrend revija*, 10(4), 163-176.
- Mivatake, N., Nishikawa, H., Morishita, A., Kunitomi, M., Wada, J., Suzuki, H., Takahashi, K., Makino, H., Kira, S., & Fujii, M. (2002). Daily walking reduces visceral adipose tissue areas and improves insulin resistance in Japanese obese subjects. *Diabetes Research and Clinical Practice*, 58(2), 101-107.
- Murphy, M.H., Murtagh, E.M., Boreham, C.A.G., Hare, L.G., & Nevill, A.M. (2006). The effect of a worksite based walking programme on cardiovascular risk in previously sedentary civil servants [NCT00284479]. *BMC Public Health*, 6:136.

- Murphy, M.H., & Hardman, A.E. (1998). Training effects of short and long bouts of brisk walking in sedentary women. *Medicine and Science in Sports and Exercise*, 30(1), 152-157
- Okura, T., Nakata, Y., & Tanaka, K. (2003). Effects of exercise intensity on physical fitness and risk factors for coronary heart disease. *North American Association for the Study of Obesity*. 11(9), 1131-1139.
- Planinsec, J., & Matejek, C. (2004). Differences in physical activity between non-overweight, overweight and obese children. *Collegium Antropologicum*, 28 (2), 747-754.
- Stensel, D.J., Wavell, K.B., Hardman, A.E., Jones, P.R.M., & Norgan, N.G. (1994). The influence of a 1-year programme of brisk walking on endurance fitness and body composition in previously sedentary men aged 42-59 years. *European Journal of Applied Physiology and Occupational Physiology*, 68(6), 531-537.
- Swartz, A.M., Strath, S.J., Bassett, D.R., Moore, J.B., Redwine, B.A., Groer, M., & Thompson, D.L. (2003). Increasing daily walking improves glucose tolerance in overweight women. *Preventive Medicine*, 37(4), 356-362.
- Vancampfort, D., Probst, M., De Herdt, A., Corredeira, R.M., Carraro, A., De Wachter, D., & De Hert, M. (2013). An impaired health related muscular fitness contributes to a reduced walking capacity in patients with schizophrenia: a cross-sectional study. *BMC Psychiatry*. 13(1), 5.
- Walker, K.Z., Piers, L.S., Putt, R.S., Jones, J.A., & Dea, K.O. (1999). Effects of regular walking on cardiovascular risk factors and body composition in normoglycemic women and women with type 2 diabetes. *Diabetes Care*. 22(4), 555-561.

## REKREATIVNI TURIZAM U FUNKCIJI PSIHOFIZIČKOG STANJA LJUDI

*Prirodni oblici kretanja imaju značajnu ulogu u psiho-fizičkom stanju kod ljudi. Misli se na rast i razvoj celog ljudskog organizma, koji tokom boravka i rekreacije u prirodi povećava kako zdravstvenu, tako i radnu sposobnost. Cilj ovog istraživanja ukazuje na potrebe što većeg broja stručnih ljudi iz sfere rekreacije i kineziologije, kao i njihovog angažovanja u oblasti turizma. Dat je osnovni prikaz povoljnih i nepovoljnih činioca koji utiču na psiho-fizičko stanje kod ljudi. Ova tema, vrlo primamljiva i zahtevna, i ako je više puta obrađivana i sagledavana, autori su pokušali da daju doprinos u dosadašnjem istraživanju.*

Ključne reči: turizam, hodanje, zdravlje, rekreacija