

LIFESTYLE OF PEOPLE CURRENTLY IN THEIR FORTIES IN TERMS OF THEIR RELATIONSHIP TO PHYSICAL ACTIVITIES

Pavel TILINGER

Abstract

The aim of our study was to analyse physical activities, wellness activities and other activities of people in their forties, i.e. people aged 40-49, who carry out in their daily lives. We also found out the physical fitness of this age group. To achieve our intention, we used a modified "Questionnaire to find out the physical activities and wellness activities of people in their forties", compiled especially for this occasion. The survey involved 75 women and the same number of men aged 40-49 years. The survey was conducted in 2020, just before the onset of the coronavirus epidemic. We used the statistical program Excel to process the results of the survey. The average age of the respondents was 45.2 years, BMI of men 26.4, women 23.7. Half of the respondents live in a city with more than 50,000 inhabitants, 47 % of women and 41 % of men have a university degree. 73 % of the interviewed men and 85 % of the interviewed women actively take care of their own condition. The most frequently mentioned physical activities realized in the last 12 months were walks (walking, trips, Nordic walking, hiking), followed by sports activities (most often sports games, cycling, swimming, skiing), activities in the fitness centre, group exercises (aerobics, yoga, Pilates etc.), own exercise, sauna and meditation. In the 12-minute running test men reached 1867 m and women 1613 m.

Keywords

fitness of forties; quality of life; healthy lifestyle; wellness

1 INTRODUCTION

A person's lifestyle represents a certain system of activities, relationships and habits that are characteristic of a particular individual. We can speak of a number of components that make a lifestyle. These include work style, personal, family and partner life, living conditions and way of living, nutrition, regeneration of physical and mental forces, leisure activities (Žaloudíková, 2009). In our work, we focused on the study of physical activities of forty-year-olds, i.e. citizens aged 40-49, on activities that represent just one of the components of lifestyle, intertwined into the other components. In the literature one can find a number of recommendations for the values of physical activities of this age category, e.g. WHO recommends for adults 30 minutes of moderate intensity 5 times a week, or 20 minutes of vigorous intensity 3 times a week, or a combination of moderate and vigorous intensity at least 2 times a week (in Bartůňková, 2013). The importance of physical activity for all ages has been substantiated and various

recommendations have been published by a number of experts (Daněk and Teplý, 1974; Dostál, 1978; Cooper, 1980, 1986; more recently, e.g. Hendl and Dobrý, 2011; Stackeová, 2014; Švamberk Šauerová et al., 2018; Bunc et al., 2013, Kučera et al., 2013 and others).

Movement is vital, a tool of life and one of the basic conditions of quality of life. Adequate movement is a prerequisite for physical fitness, which is determinant for health and the possibility of life satisfaction of a person (Krejčí, Hošek et al., 2016). It depends on one's discretion, emotional, social connections and habits whether and what kind of physical activity chooses, whether overcomes the comfort and incorporates it into one's own life.

The gradually increasing rate of decreasing physical activity in all age categories of the population strongly supports the fulfilment of the catastrophic forecasts published by the WHO for developed countries about the emerging obesity pandemic. This danger represents a great

warning for our society and forces physical education professionals to be proactive.

2 AIM OF THE STUDY

The aim of the present study was to analyse the lifestyle of contemporary 40-year-olds in terms of their relationship to physical activity. We were interested in the type and frequency of physical activities performed in the past and currently with the intention of taking care of fitness and leisure time during the day, week, month or year.

Sub-tasks

- What was the participation in sport and physical activity of the subjects when they were 20 years old?
- What is the current status of participation in physical activities among those in their 40s?
- How do forties take care of their fitness condition?
- What is the fitness level of those born in the 70s, last century?

3 METHODOLOGY

To accomplish our purpose, we used a modified "Questionnaire to Identify Physical Activity and Wellness Activities of People in their Forties" designed specifically for this occasion.

In addition to the identification questions, the questionnaire included a special section dedicated to questions aimed at fulfilling the above sub-tasks.

75 women and an equal number of men aged 40-49 participated in the survey. The survey was conducted in 2020, just before the onset of the coronavirus epidemic. The statistical program Excel was used to process the results of the survey.

The total numbers of respondents are based on the accuracy and the possibility of estimating the relative frequencies of the population. Even aggregate values above the level of two percent can be considered as estimates. All estimates based on the total number of probands are within a 95% confidence interval of no more than 4.9% either way.

For percentages divided by sex only, values above the 4 per cent level can then be taken as estimates of relative frequencies. All estimates divided by sex only have a 95 per cent probability of being within a maximum of 6.9 per cent either way.

The respondents in their forties mostly live in Prague and the Central Bohemia region, all of them belong to parents or friends of parents of students of VŠTVS Palestra, Ltd., who, after detailed instructions, carried out the survey practically in the form of structured questioning and testing, or interviews, and thus obtained fully completed materials.

Characteristics of the respondent population

Both genders were equally represented in the survey sample, 75 men and 75 women. The average age of men was 45.3; the average age of women was 45.1.

Somatic parameters are shown in Table 1. The mean values reported indicate that the population is composed of forty-year-olds (men) who are slightly overweight. In fact, we found a fairly wide range of representation of both very "thin" and very overweight individuals. On the basis of the calculations performed, it can be concluded that with a 95% probability, the average BMI of men aged 40-50 years is in the interval 24.1 to 28.7 and that of women in the interval 21.4 to 26.0.

Table 1 Somatic characteristics of forty-year-olds interviewed

Age category	Body height men (cm)	Body height women (cm)	Body weight men (kg)	Body weight women (kg)	BMI men	BMI women
40-49	178	169	88,5	67,7	26,4	23,7

Other characteristics related to partnership status were also of interest. Table 2 shows that

the majority of forties (74%) is married. The number of single men (16%) is interesting.

Table 2 Form of partnership status of people in their forties

	Total (n)	Total %	Men (n)	Men %	Women (n)	Women %
Married	111	74	53	71	58	77
Single	17	11	12	16	5	7
Divorced	22	15	10	13	12	16

Table 3 Size of the city where forty-year-olds live

	Total (n)	Total %	Men (n)	Men %	Women (n)	Women %
Up to 1000 inhabitants	17	11	9	12	8	11
Up to 10 000 inhabitants	29	19	14	19	15	20
Up to 50 000 inhabitants	35	23	15	20	20	27
Above 50 000 inhabitants	69	46	37	49	32	43

Almost half of the respondents (46%) live in a city with a population over 50,000 (Table 3), i.e. Prague. Municipalities under 50,000 and under 10,000 account for around 20%. Small municipalities under 1,000 are represented by only 11-12 percent.

The education of respondents also corresponds closely with living in a city (Table 4). The numbers of college- and secondary school-educated men and women far exceed the national average.

Table 4 Highest educational attainment of people in their forties

	Total (n)	Total %	Men (n)	Men %	Women (n)	Women %
Elementary	2	1	1	1	1	1
Vocational	13	9	10	13	3	4
Secondary with A levels exam	69	46	33	44	36	48
Higher education	66	44	31	41	35	47

4 RESULTS OF THE STUDY

4.1 Sports activities around the age of 20

Table 5 Numbers of men and women who report doing sports in their 20s

Age category	Men (n=75)	Men %	Women (n=75)	Women %
40-49	66	88	53	71

We found that 88% of male and 71% of female respondents reported playing sports in their 20s (Table 5). The majority (26 men and 26 women) played sport recreationally, with 19 men and 15 women competing at regional level, 9 men and 7 women achieving second-level performances

and 12 men and 5 women competing at first league level (Table 6). Out of any sport, 12% of men (9 individuals) and 29% of women (22 individuals) remained in their early 20s.

Table 6 Level at which forty-year-olds did sport in their 20s

Level of sportsmanship	Men (n=66)	Men %	Women (n=53)	Women %
Recreational	26	39	26	49
Regional	19	29	15	28
2. league	9	14	7	13
1. league	12	18	5	9

Table 7 shows which sports were most popular among the respondents in their forties at the age of 20. In the statements, 30 sports and sports activities were named. In the table, we have listed both activities common to men and

women and sports typical for men and sports typical for women. All activities encountered in more than one response were listed (at least 2 men or women had to name this sport).

Table 7 Most frequently reported sporting activities of the surveyed forties in their 20s (number of men and women doing sports, 119 persons in total, 66 men and 53 women)

Sports	Qty. of men	Qty. of women	%	Categories
Athletics	6	9	13	Men + women
Volleyball	4	6	8	Men + women
Handball	3	4	6	Men + women
Basketball	3	3	5	Men + women
Cycling	3	3	5	Men + women
Combat sports	5	1	5	Men + women
Tennis	2	3	4	Men + women
Gym, fitness	2	2	3	Men + women
Swimming	2	1	3	Men + women
Football	17		14	Men
Hockey	8		7	Men
Rowing	2		2	Men
Gymnastics		4	3	Women
Dance		2	2	Women
Aerobics		4	3	Women

4. 2 Current status of participation in physical activities

Participation in competitive sport

The interviewees' statements show that only one man is currently competing at the top

level in bodybuilding, one man and one woman are playing volleyball at the second league level and one is competing in cycling at a similar level. There are 5 other men (football, futsal, volleyball, tennis, paragliding) and two women tennis players playing at the

regional level. The frequency of training is indicated at 2-3 per week. The top bodybuilder trains practically every day. The number of competitive starts per year also corresponds

to the performance level and nature of the sport, ranging from a few starts in individual sports (3-10), to 10-30 matches in team sports (Table 8).

Table 8 Participation of 40-year-olds in competitive sport by level of performance (2-regional championship, 3-second league, 4-first league)

Sports	male representation by level of performance	female representation by level of performance
Tennis	2	2, 2
Volleyball	3, 2	3
Bodybuilding	4	
Paragliding	2	
Football, futsal	2, 2	
Cycling	3	

Participation in recreational sport

As Tables 9 and 10 show, 60% of 40-year-olds are involved in recreational sports. The most commonly reported sports are athletic running, cycling, skiing, swimming and tennis. The following sports represent a wide range

of interests of the respondents, but are not mentioned by more than one or two respondents (basketball, squash, fitness, dance, hockey, yoga, golf, etc.). Usually one to three training sessions per week are devoted to the sports mentioned. Only rarely do respondents report participation in competitions.

Table 9 Participation of 40-year-olds in recreational sport

	Yes (n)	Yes (%)	No (n)	No (%)
Men	45	60	30	40
Women	45	60	30	40

Table 10 Most frequently reported recreational sports

Sports	Qty. of men	Qty. of women	% (total)
Athletic run	3	13	11
Cycling	10	4	9
Skiing	6	7	9
Swimming	7	7	9
Tennis	3	6	4

Table 11 Participation of 40-year-olds in organised physical activities

	Yes (n)	Yes (%)	No (n)	No (%)
Men	20	27	55	73
Women	34	45	41	55

Organised physical activities

Relatively few forties admit to participating in organized physical activities (Table 11). If they do participate, it is in physical activities such as exercising in Sokol, kung Fu, dancing, spinning, bowling, aerobics, Pilates, kick yoga, with a frequency of 1-2 participations per week. These activities are reported no more than 1-2 times in the whole population, with the exception of participation in yoga, which is reported by a total of 12 women and one man.

Participation in unorganised physical activities

A very pleasant surprise came from the answers about the participation of the respondents in

unorganized physical activities, i.e. activities that the respondents prepare and implement themselves. 85% of men and 96% of women reported active participation in unorganised physical activities (Table 12). When asked to name specific physical activities, walking was the most frequently mentioned, followed by exercising at home, cycling (in summer), skiing (in winter) and swimming. Occasionally, respondents mentioned fitness running, dancing, exercising in the fitness centre, massages, etc. 48% of men and 41% of women go to the sauna at least once a month. These unorganised physical activities are practiced 2-4 times a week by forties, for a total of 10-11 hours per month (Table 13).

Table 12 Participation of 40-year-olds in unorganised physical activities

	Yes (n)	Yes (%)	No (n)	No (%)
Men	64	85	11	15
Women	72	96	3	4

Table 13 Most frequently reported unorganised physical activities (respondents had the option to indicate more than one activity)

Physical activity	Men qty./ %	Women qty./ %	% (total)	Hours per month
Walking	42 / 56	45 / 60	58	13
Own exercise	19 / 25	28 / 37	31	14
Sauna	36 / 48	31 / 41	45	3
Cycling (seasonal)	23 / 31	17 / 23	27	12
Skiing (seasonal)	13 / 17	9 / 12	15	18
Swimming	8 / 11	19 / 25	18	9

4.3 Care of own fitness

The questionnaire included a specific question about how forty-year old ones take care of their own fitness. The results show that 27%

of men do not take care of their own fitness. For women, the percentage is lower, with 15% of women not taking care of their fitness (Table 14).

Table 14 Forty-year-olds' care for their own fitness

	Yes (n)	Yes (%)	No (n)	No (%)
Men	55	73	20	27
Women	64	85	11	15

Among the reported activities used for taking care of one's own fitness, walking and home exercises are predominant among women, while men most often mention various sports (volleyball, basketball, hockey, tennis, squash, bowling, etc.) and activities in fitness centres, especially in gyms (Table 15). Both men and women consistently report spending about

17-18 hours per month on fitness development. It is a question or a matter for discussion to list a rational diet as the most important means of fitness maintenance. When we think of fitness, we usually think of some kind of physical activity; a rational diet is then an important part of not only fitness but also of the overall health of the individual, wellbeing.

Table 15 Most commonly reported physical activities used by forties in care of their fitness condition

Physical activity	Men qty.	Men %	Women qty.	Women %
Sports	17	31	-	-
Own, home exercise	7	13	11	17
Fitness centre	10	18	4	6
Walking	4	7	14	22
Conditioning run	5	9	7	11
Yoga			7	11
Group exercise			6	9
Cycling	7	13	3	5
Sauna	3	5	3	5
Rational diet	1	2	7	11
Gardening	1	2	2	3
Total	55	100	64	100

4. 4 Testing the endurance and balance of forty-year-olds

We used a 12-minute run to assess the endurance of the 40-year-olds. The results and comparison of the values found with the norms reported by Cooper (1986) and Chytráčková

et al. (2002) are presented in Table 16. It is clear that the values achieved by our probands are (slightly) below average according to Unifittest, compared to the norms of Cooper (1986) the men's performance is "weak" and the women's performance is "acceptable".

Table 16 Evaluation of the endurance abilities of forty-year-olds using a 12-minute run

Rating according to Unifittest 6-60	Norms Men	Norms Women	Our performance men	Our performance women
Significantly below average	-1750	-1340		
Below average	1751-2130	1341-1690	1867	1613
Average	2131-2510	1691-2040		
Above average	2511-2890	2041-2390		
Significantly above average	2891+	2391+		

Rating by Cooper (1986)	Norms Men	Norms Women	Our performance men	Our performance women
Very weak	-1830	-1420		
Weak	1830-2000	1420-1580	1867	
Acceptable	2010-2240	1590-1790		1613
Good	2250-2460	1800-2000		
Very good	2480-2650	2010-2160		
Excellent	2680+	2170+		

To assess balance abilities, we applied a one-legged balance test consisting of standing on the right leg, then on the left leg, with and without visual control, i.e. four timed trials. If the subject lasted 40 seconds, the subtest ended. A summary of the average performances in the balance tests is given in Table 17. The performances in this test cannot be compared

with the general standard; in the past, we have tested seniors in this way (Tilinger et al., 2019) and the approximated values for 65-year-olds were at 103 s, the performances of 70-year-olds were 88s, and the performances of seniors aged 75 were at 73 s. From this point of view, the performances of 45-year-olds may appear to be an acceptable average.

Table 17 Assessment of balance abilities of forty-year-olds. Average values of the tested are given in seconds. In the last column is the total performance, the sum of all four times achieved

Standing on one leg	Right closed eyes	Right closed eyes	Left closed eyes	Left closed eyes	Performance in total (s)
Men	29,7	37,2	26,9	33,3	127,1
Women	29,0	38,7	25,0	34,1	126,5

5 CONCLUSIONS

The study is a small probe into the lifestyle studies of today's people in their forties, fellow citizens who were born in the 1970s. A look at their early adulthood (around their 20s) and an analysis of their current attitudes towards physical activity as an important part of taking care of one's own health and fitness shows that most of the respondents meet today's experts' ideas about the use of physical activity to promote a healthy lifestyle.

The results of the questionnaire analysis show that there is a part of the population that is obese (in our sample 5 women and 8 men with a BMI over 31). Men have an average BMI of 26.4, which shows a slight overweight of this population.

12% of men and 29% of women in their 20s did not do sport, even recreationally. Currently, 60% of people in their forties are involved in recreational sport.

There is very little participation by men (only 27%) in organised physical activities. For women, the proportion is higher, reaching 45%.

The participation of 40-year-olds in unorganised physical activities is significant, reaching 85% for men and 96% for women. This also scores strongly in the answers to the question on taking care of one's own fitness, which is consciously and purposefully taken care of by 73% of men and 85% of women.

The assessment of endurance skills shows some reserves and deficiencies in this component of fitness.

The overwhelmingly encouraging results of the study should be a further motivation for the uninvolved, inactive in the fight against the ageing process and the decline in performance, both physical and mental, as this population group, now very fit, faces another 20 years of working life in which physical activity as a health

promoter, compensation for work stress and an appropriate form of active rest will play a significant role.

6 REFERENCES

- Bartůňková, S. (2013). *Fyziologie pohybové zátěže: učební texty pro studenty tělovýchovných oborů*. Praha: Karolinum.
- Bunc, V., Hráský, P. & Skalská, M. (2013). Pohybové aktivity seniorů – benefity a problémy. In Štěpánková, H. (ed.). *Stárnutí 2012: sborník příspěvků = Ageing 2012: conference proceedings..* Praha: Psychiatrické centrum Praha.
- Cooper, K. H. (1980). *Aerobní cvičení*. Praha: Olympia.
- Cooper, K. H. (1986). *Aerobický program pre aktivne zdravie: pohyb, výživa, duševná rovnováha*. Bratislava: Šport, Slovenské telovýchovné vydavateľstvo.
- Daněk, K. & Teplý, Z. (1974). *Neodpočívejte v pokoji aneb umění rekreace*. Praha: Olympia.
- Dostál, E. (1978). *Běh pro zdraví*. Praha: Olympia.
- Hendl, J. & Dobrý, L. (2011). *Zdravotní benefity pohybových aktivit: monitorování, intervence, evaluace*. Praha: Karolinum.
- Chytráčková, J. & Měkota, K. (Eds.). (2002). *Unifittest (6-60): příručka pro manuální a počítačové hodnocení základní motorické výkonnosti a vybraných charakteristik tělesné stavby mládeže a dospělých v České republice*. Praha: Univerzita Karlova, Fakulta tělesné výchovy a sportu.
- Krejčí, M., Hošek, V. a kol. (2016). *Wellness*. Praha: Grada Publishing.
- Kučera, P., Hráský, P. & Bunc, V. (2013). *Současná úroveň pohybové aktivity a zdatnosti u pracující populace v hlavním městě Praha*. [online]. 2013 [cit. 2021-11-01]. ISSN
- Stackeová, D. (2014). *Fitness programy z pohledu kinantropologie*. Praha: Galén.
- Švamberk Šauerová, M. (Ed.). (2018). *Analýza postojů populace v různých věkových skupinách k vybraným složkám zdravého životního stylu*. Praha: VŠTVS Palestra.
- Tilinger, P., Švamberk Šauerová, M., Jirásko, R., Kozárek, L., Nechlebová, E. & Synek, O. (2019). *Analysis of Physical Activities of Seniors (65+) as Health Prevention. Life in motion – healthy old age*. Berlin: Lambert Academic Publishing.
- Žaloudíková, I. (2009). *Podpora zdraví a zdravého životního stylu s důrazem na onkologickou prevenci ve škole*. (Disertační práce). Masarykova univerzita Brno.

7 CONTACT

(Correspondent author address)

Pavel TILINGER

College of Physical Education and Sport
PALESTRA, Ltd., Prague, Czech Republic

E-mail: tilinger@palestra.cz