PHYSICAL ACTIVITY IN THE LEISURE TIME STRUCTURE OF WOMEN PARTICIPATING IN CLUB FITNESS CLASSES

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Key words: physical activity, leisure time, women, fitness classes

SUMMARY

The purpose of the work. The purpose of the study was to determine the importance of physical activity in the leisure time structure of women who participated in club fitness classes.

Material and methods. Study participants comprised 489 women who regularly practiced in 14 fitness clubs in selected cities in the eastern Poland: Białystok, Siedlce, Biała Podlaska, Lublin, Rzeszow and Tarnobrzeg. The research was based on a diagnostic survey conducted in the form of a questionnaire.

Results and conclusions. The results of this study allow us to draw a variety of conclusions. In the leisure time structure of women who regularly participate in fitness classes, physical activity is of high importance. The amount of time respondents spend on physical activity depends on their age and BMI, but does not statistically depend on respondents’ education, marital status or number of children they have. The most popular sports skills possessed by the respondents are cycling, volleyball, swimming and ice skating.

Introduction

Physical activity is commonly considered to be one of the most important elements of a healthy lifestyle, an evaluation criterion of health in all its aspects and a means of improving quality of life. Numerous scientific research papers [1–4] and other studies have confirmed this statement.

In the majority of countries in the world, including Poland, the physical activity of citizens has ceased to be a person’s individual concern. It has become an important issue and an objective of state policy that requires constant monitoring and diagnosis [5–7]. The prevailing model of engaging in recreation mostly for pleasure, entertainment and fun is currently changing into the belief that undertaking such activities is necessary throughout populations [5, 8]. Research on physical activity of different demographic and socio-professional groups is relevant from the point of view of public health. Polish studies concerning the participation of citizens in physical recreation are usually conducted independently from each other and by researchers from various scientific disciplines. This leads to differences in terminology and methodology. Moreover, this makes it more difficult to compare results and following trends [5].

The analysis of results of studies completed in the last decade shows that the percentage of Polish citizens characterized by low physical activity is decreasing. The process is slow and its course is different in various social groups [5].

The Bridging study conducted in 2001 indicates that as many as 70% of Polish citizens do not perform physical exercise regularly [9]. According to the results of the WOBASZ project [10], the Eurobarometer survey conducted in 2004 [11] and the data obtained by the Central Statistical Office [12], the number of Polish people not regularly undertaking physical activity equals, respectively, 50%, 46% and 28%.
The results of scientific research [5, 9, 10, 13–17] indicate that despite these positive changes regular physical activity is very slowly becoming established in leisure time structure of Polish citizens, especially with women and elderly people.

Physical activity of women has been researched in numerous scientific studies. A review of the literature on this subject shows that the issues most frequently investigated in the studies were health aspects of physical activity, women's interests and recreational skills, the importance of physical recreation in the leisure time structure of women, reasons for participation and social determinants of physical activity of women, etc.

According to these studies, the level of physical activity of Polish women is still not satisfactory despite certain positive changes. Women show less interest in physical recreation than men at all stages of life. Physical recreation is almost the least important in the leisure time structure of women [9, 18, 19].

For women living in the 21st century, physical recreation is a necessity as it allows them to increase physical fitness and capacity and improve their overall health condition. As a result, it creates opportunities for better self-fulfillment in many areas of life, improving physical and mental states and raising self-esteem.

A contemporary woman, who often performs many professional, family and social roles, should have a high level of psychophysical fitness. This can be achieved through regular physical activity.

Modern civilization causes changes in attitudes displayed by women. Moreover, it gives rise to new needs, including in the area of leisure time. Social and cultural transformations, technological progress as well as the fashion for a healthy lifestyle have a large influence on the attitude of women towards their own bodies, health and forms of spending leisure time. A woman who takes care of her looks and is rested, fit and full of energy leads successful and enjoyable professional and family life.

Research conducted at the end of the 20th century and beginning of the 21st century showed an increase in the percentage of women convinced that professional status and the chance of finding employment were not only influenced by acquired skills but also by a fashion-imposed image. According to the research conducted by Guszkowska [20], Kuźmińska [21], Rogacz-Mańka [22], etc., this belief motivated them to achieve the ideal of a modern woman.

Fitness classes have become a fashionable form of recreation, one that is preferred by women. As a result, the demand for this kind of activity is increasing. Fitness clubs, which are nowadays developing dynamically, strive to satisfy the needs and tastes of contemporary women. The clubs offer a wide range of classes that match the interests of participants and are adjusted to their abilities. The clubs take modern tendencies in physical recreation into account. They promote a healthy lifestyle and not only focus on improving the body and increasing its aesthetic values, but also on building health and maintaining psychophysical fitness at the highest possible levels [23].

Despite numerous studies, knowledge about the physical activity of women is still incomplete. The literature noticeably lacks in-depth analyses of women's attitudes towards new trends and forms of physical recreation and their preferences concerning these forms, as well as detailed analyses of physical activity undertaken in leisure time by women who regularly participate in classes organized by fitness clubs.

The aim of this study was to determine the importance of physical activity in the leisure time structure of women who participated in fitness classes.

Prior to conducting the research, we made the assumption that women who regularly participate in fitness classes engage in physical activities during their leisure time and that in the structure of this time, these activities are of high importance.

The aim of the study was achieved and the adopted hypothesis was verified by obtaining answers to the following research questions:

1. What forms of recreation do respondents undertake apart from participating in classes conducted by fitness clubs?
2. What is the relative importance of physical activity among other forms of spending leisure time in which the respondents engage?
3. How much time per a week do the respondents spend engaged in physical activity?
4. What sports and recreational skills do the respondents have and which do they use during leisure time?

**Material and methods**

The study participants comprised 489 women who regularly exercised in 14 fitness clubs in selected cities of eastern Poland: Białystok, Siedlce, Biała Podlaska, Lublin, Rzeszów and Tarnobrzeg. An e-mail asking for permission to conduct the research was sent to all 44...
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clubs operating in these cities. The study was only conducted in clubs that granted permission.

The selection of study participants was purposive. The research group included all women who had been regularly exercising for at least a year and who attended fitness classes on the day of the study. The interviewees were chosen at random. From the overall list of women attending each of the fitness clubs, one in five were selected for the interview.

The research was based on a diagnostic survey conducted in the form of a questionnaire prepared by the authors. The survey included detailed study questions. Additional information was obtained through interviews. The interviews were based on the prepared questionnaire and their purpose was to conduct a more in-depth analysis of the research subject as well as verify the respondents' answers to the questions in the survey.

The research results were subjected to statistical analysis. Empirical distribution of analyzed features is presented in Tables and Figures. Due to the quantitative character of the researched features, the analysis of leisure time structure was based on stratum weight. The chi-square test of independence was applied to determine statistically significant relationships between the features measured with a nominal scale, assuming that \( P < 0.05 \).

The women who had been taking part in fitness classes for one to two years constituted the highest percentage (51.96%) of respondents. A much lower number of women had been attending fitness classes for four to six years (12.99%), and greater than six years (4.54%). The participants of the classes in the researched clubs were usually young women aged between 25 and 34 (44.6%), and under 25 (35.8%). A very small group of respondents comprised of women over the age of 45 (4.9%). The number of respondents who held a Master's degree equaled 43%, 24% of the respondents attending the fitness clubs had a Bachelor's degree. The women with high-school education constituted the majority of the study participants (30.5%). More than half of the women exercising in fitness clubs were unmarried (57.5%). Moreover, 37.8% of the attending women were married, 3.7% were divorced and 1.0% were widowed. The majority of the respondents did not have any children (60.2%). The women who had one, two, or three or more children constituted 19%, 14%, and 5.5%, respectively.

Results

The conducted research shows that the respondents most often spend their leisure time meeting with friends (66.2%) and engaging in physical activity (62.5%) (Figure 1).

The popularity of listening to music (50.4%) and reading (40.4%) is also noteworthy.

Analysis of information obtained through the interviews indicates that the respondents prefer physical activities such as gymnastics (fitness), cycling, dancing walks, swimming as well as team games.

Respondents' physical activity was analyzed according to assumed independent variables: age, marital status, education, number of children and BMI index.

On the basis of the analysis of research results (Table 1), we established that 46% of the surveyed women spend from three to four hours per week on

Figure 1. Forms of spending leisure time by female respondents
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The analysis of the research results (Figure 2) showed that the relationship between the age of the respondents and the time devoted to physical activity during a week (χ² = 21.69; df = 6; P < 0.05) is statistically significant. The revealed relationship is weak (Cramér's V equals 0.15). The women aged 25–34 and under 25 years spend the highest number of hours per week on physical activity, that is, more than four hours per week (39.0% and 32.6%, respectively). Women aged 45 and older dedicate the least amount of time per week to physical activity (between one and two hours).

On the basis of the analysis of the research results (Figure 3), we determined that the amount of time that the respondents spend on physical activity per week is related to their BMI value. The BMI index (i.e. the

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χ² = 21.69; df = 6; p < 0.05

physical activity; 20.6% from one to two hours and 33.3% five and or more hours.

Table 1. Number of hours per week spent by female respondents on physical activity

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χ² = 21.69; df = 6; p < 0.05

Figure 2. Number of hours per week spent by female respondents on physical activity depending on age

Figure 3. Number of hours per week spent by female respondents on physical activity depending on BMI
Quetelet index) is calculated by dividing body mass expressed in kilograms by the square of body height expressed in meters.

According to A. Szczeklik [24], the BMI values in adults indicate:
- Very severely underweight, BMI under 15;
- Severely underweight (usually caused by serious illness or anorexia), BMI 15.1–17.4;
- Underweight, BMI 17.5–18.5;
- Normal weight, BMI 18.5–24.9;
- Overweight, BMI 25.0–29.9;
- Obesity Class I, BMI 30.0–34.9;
- Obesity Class II, BMI 35.0–39.9;
- Obesity Class III, very severe obesity, BMI over 40.0.

According to the research, overweight and obese women dedicate less time to physical activity than other respondents. In the group of researched women, 38.33% spend 1–2 hours per week on exercise. The women with BMI indicating normal weight and those who are underweight spend much more time engaging in physical activity.

According to the results of the conducted research, the number of hours that respondents spend on physical activity does not statistically depend on their education, marital status or the number of children they have. The following data are presented in Figures 4, 5 and 6.

To achieve the research aim, it was important to obtain information about the respondents’ sports skills.
Analysis of the study results showed that cycling (declared by 95.1% of women) is the most common sports and recreational skill of the respondents. A large number of respondents declared that they had the following skills: dancing (71.4%), swimming (64.8%) and playing volleyball (68.6%). Of the surveyed women, 58.6% can ice skate, 45.6% can ski and 35.6% can canoe. The smallest number of women declared that they can windsurf (16.6%), snowboard (14.7%), ride horses (19.4%) or sail (20.7%).

According to the study, a large percentage of the respondents do not use their sports skills during leisure time. This primarily concerns water sports (windsurfing, canoeing and sailing), winter sports (skiing and ice skating), as well as table tennis and team games. The respondents most frequently use the following sports skills in their leisure time: cycling (73.3%), dancing (54.3%), swimming (49.2%), playing volleyball (35.3%), ice skating (22.1%) and skiing (21.3%). Other sports skills that the respondents mentioned as possessing and using are in-line skating, rock climbing and scuba diving. Detailed data are presented in Figure 7.

The conducted interviews allow us to conclude that the respondents use their sports and recreational skills only to a small degree mainly due to financial reasons and because of poorly developed sports infrastructure in their cities, i.e. lack of swimming pools, tennis courts, and publicly available halls, fields or other facilities. Despite the fact that the market for recreational services in Poland is expanding, the state of sports infrastructure and the quality of recreational services found in the cities of eastern Poland (where the research was conducted) is not satisfactory.

To achieve the aim of the study, it was important to obtain information concerning the respondents’ opinions about the role of physical activity. Collecting this data was possible due to the conducted interviews, according to which the majority of interviewed women recognize the importance of physical activity in increasing physical fitness (59.7%), improving health (54.3%) and keeping a proportional figure (52.7%). Many women emphasized the opportunity to participate in social meetings (42.7%), satisfying the need for physical exercise (32.1%) and improving mental and physical state (29.7%).

**Discussion**

According to Biernat, it is difficult to compare the physical activity of Polish people with the physical activity of the citizens of other European countries. The reason for this is the lack of compatible international research. Studies carried out in the European Union are difficult
to compare, as confirmed by the authors of COMPASS, who upon verifying reports from other countries for their own project, concluded that not even two of the studies were methodologically identical [5]. Despite these difficulties, a comparison of physical activity between Poles and people living in other countries was carried out in several projects: Bridging the East-West Health Gap [9] and the Eurobarometer [11].

A comparison of the physical activity of Polish citizens with the results of the Eurobarometer survey [26] was also carried out by M. Piątkowska [27]. The analysis of the survey indicates that the participation of Polish people in physical recreation is poor in comparison to the people living in other EU countries. In the survey referenced above concerning the participation in “sport for all” of the citizens of the 25 EU countries, the data report that 38% of respondents regularly engaged in physical recreation (no less than once a week). Physical activity is the highest in Scandinavian countries (75% of Finns; 72% of Swedes). Interviews conducted with almost 27,000 people (1,000 from each country) show that Poles relatively rarely undertake physical activity. In total, 49% of the respondents (39% in the EU, on average) stated “never” in response to the question about how often they exercise.

According to the latest Eurobarometer survey, 9% of EU-27 citizens (6% of Polish citizens) regularly engage in sport for all (at least 5 times per week); 31% of people living in EU countries (19% of Polish people) perform exercise 1–2 or 3–4 times per week; 21% of EU citizens (24% of Polish citizens) exercise rarely (1–3 times a month or less) [26].

Studies conducted by many authors indicate that the level of physical activity depends on education, i.e. the higher the level of education, the higher the physical activity [16, 28–30, et al.].
According to the research by Kostka, 33% of women with higher education, 20% with high-school education, 10% with vocational education and only 4% of women with primary education regularly participate in physical recreation [30]. The authors referenced earlier in this paper have obtained similar results. Our study yielded results that are different from the results of the aforementioned studies and those obtained by Lipowski [16], Parnicka [25] and Kozdroń [17].

Similar to the countries of Western Europe, the physical activity of women in Poland is determined by their age [5], i.e. its level decreases with age. Young women (aged 15–24) are the group that participates in recreational activities most frequently (61%), followed by the age group 25–39 (up to 44%), the age group 40–54 (up to 40%), the age group 55–69 (up to 33%), and the age group of 70 years or more (up to 22%). Our study has also confirmed these findings.

The research results allowed us to verify the adopted hypothesis, which was confirmed. Regular (at least once per week) participation in fitness classes motivates the respondents to undertake more physical activity in their leisure time. They prefer physical recreation which is of high importance among other forms of spending leisure time. Similar conclusions were reached in studies by Biernat [5], Parnicka [25], Lipowski [16] and Maszorek-Szymala et al. [31]. Imposed standards regarding the perfect figure are a model that women try to follow, often at any cost. An increasing number of women are taking better care of their bodies by attending fitness clubs, spa centers, participating in individual health training, etc.

The results of our research concerning sports and recreational skills of respondents are similar to those obtained in studies conducted by other authors. According to the majority of research centers, e.g. the Public Opinion Research Center (Polish: CBOS), and researchers [5, 16, 25], cycling is the most popular form of recreational activity performed during leisure time. CBOS reports that 12–18% of Polish people cycle regularly [30,29]. Apart from cycling, regularly performed physical activities include different forms of gymnastics. According to CBOS and the Central Statistical Office, the number of respondents engaging in gymnastics respectively equals 30% [30] and 28.3% [32]. Swimming and team games are forms of spending leisure time chosen by 23.6% and 22% of the respondents, respectively. Biernat reports that 19% of Polish women play volleyball, 22.5% play other team games, 23% swim and 12.4% run [5]. Summer sports, winter sports and horseback riding are considered to be elite sports. People living in EU countries prefer to engage in forms of physical activity such as going on walks, dancing or gardening rather than participating in classes organized by clubs. Of the respondents, 27% from the EU (26% from Poland) regularly participate in classes organized by clubs, 38% of the respondents from EU (34% from Poland) attend such classes quite frequently, 20% of the surveyed EU citizens (19% of Polish people) rarely take part in organized forms of physical activity and 14% of the EU citizens (17% of Polish citizens) have never engaged in such forms of physical activity.

German and Austrian citizens prefer classes organized by clubs: 61% of German citizens and 57% of people living in Austria are members of clubs offering sports and recreational classes.

The results of our research, as well as the data obtained by other authors including Winiarski [33], Garstka [34], Kozdroń [17], etc., indicate that healthy behavior is becoming more popular and that an increasing number of people pay greater attention to physical fitness. Furthermore, physical activity is starting to be considered as an important element of a healthy lifestyle.

Fitness clubs are following the trends and the fashionable image of a woman. They put great emphasis on popularizing such benefits as an attractive look, a good figure and good physical condition [16].

The results of our research allow us to draw the following conclusions:

1. Physical activity in the leisure time structure of women who regularly participate in fitness classes is of high importance.
2. The amount of time spent by the studied participants on physical activity per week depends on age, but does not statistically depend on their BMI value, education, marital status or the number of children they have.
3. Cycling, playing volleyball, swimming, and ice skating are the most popular sports and recreational skills that the respondents have and use.
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LITERATURE


