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Determinants of physical recreation among Generation Z people

Abstract. The aim of the study was to characterize the determinants of physical recreation undertaken by people from Generation Z. The research was conducted in 2024. The research sample consisted of 109 respondents. The study used a survey technique. The link to the questionnaire was posted on Facebook. The most frequently indicated source of inspiration for undertaking physical activity for the respondents were social media, as well as friends. The most frequently mentioned motives for practicing physical recreation included improving physical fitness, maintaining fitness and improving figure. The most frequently undertaken forms were walking, cycling and strength training. The respondents most often exercised in their own home, apartment or dormitory. The factor hindering more frequent physical activity was mainly lack of strength and fatigue, as well as insufficient free time.

Keywords: physical recreation, physical activity, determinants, generation Z

Introduction

Physical recreation, considered by many researchers to be the most important type of recreation, brings many benefits not only to the individual but also to the entire society. Practiced individually or in a group, it has a positive effect on physical health, including strengthening muscles and increasing the body's efficiency, but also affects mental health by reducing stress and improving mood. Nowadays, good health and physical activity are treated as a condition for basic professional and social competences, as well as a means to achieve a better quality of life (Skalski et al., 2022; Di Renzo et al., 2020; Biernat, 2014).

It is therefore reasonable to say that physical activity is one of the basic aspects of a healthy lifestyle and has a significant impact on health (Ogłodziński and Parzonko, 2023; Baj-Korpak et al., 2022). The human body was created to move, which is why it requires regular physical activity to function optimally (Czarnecki et al., 2022; Leger et al., 2012). Physical activity is also essential for proper human development, especially when modern society is exposed to a sedentary lifestyle or various threats resulting from lifestyle diseases (Marelli et al., 2021).

In today's world, where technology plays an important role in the life of every person, especially among Generation Z, and all digital devices are available everywhere, physical activity falls into the background. This means that people spend less and less time on physical exercise, which results in a sedentary lifestyle and the emergence of various lifestyle diseases. Stępień et al. (2019) also point out that global organizations such as WHO (World Health Organization), FIMS (Federation Internationale de Medecine Sportive), CDDS (Committee for the Development of Sport), concerned about the growing hypokinesia, have called on countries to promote health-promoting physical activity as a fundamental goal of a modern public health strategy.

Thus, the authors attempted to identify the determinants of physical recreation undertaken by people from Generation Z, taking into account their gender and place of residence. Diagnosis of the sources of inspiration, motives and difficulties in undertaking physical recreation may allow a better understanding of the changing needs of this generation, help to adjust the recreational offer and more effectively promote a healthy lifestyle among representatives of Generation Z.

Physical recreation in Generation Z

The term "recreation" comes from the Latin "recreo", meaning "to renew, to nourish" (Pośluszny and Lapina, 2011). This concept has been defined and cited many times in the works of many authors (e.g. Gosik, 2015; Winiarski, 2011; Wolańska, 1997), therefore it is worth emphasizing some of its key elements, without which it is difficult to talk about the existence of recreation, namely (Pośluszny and Lapina, 2011):

- voluntariness (action without external coercion, in accordance with one's own choices),
- lack of economic motivation (action that does not intentionally lead to material benefits),
- satisfaction (an activity that brings pleasure; however, it is worth mentioning here that in some situations recreation may cause frustration or lead to psychophysical discomfort resulting from failures in acquiring new skills or health problems caused by the activity undertaken; Hurd, Anderson and Mainieri, 2023),
- activity (purposeful and conscious undertaking of specific actions),
- fun and entertainment (acting not for the competition, but for positive emotions and experiences).

A type of recreation is physical recreation, which is a type of physical activity of a person, which is also entertainment. It has numerous advantages, including increasing activity in free time, developing interests, enriching personality, relieving states of nervous tension, and serving to rebuild physical and mental strength of a person (Pięta, 2014).

Recreation is available to everyone, regardless of any characteristics or social position of the individual. It is worth noting, however, that the key criterion for dividing recreation participants is age, understood as a stage of the human life cycle, which is automatically associated with specific needs – in this approach, the following periods can be distinguished (Orfin, 2011):

- childhood and early youth,
- young age,
- mature age,
- older age.

Generation Z members, as young people, undoubtedly belong to the second stage. Theoretically, this age favors extreme forms of activity, associated with great effort and commitment, while at the same time being resistant to fatigue. At this stage, young people should prefer physical activity, often combined with risk and high physical and mental demands, thanks to which they learn to control their emotions and reactions to the environment (Orfin, 2011).

Generation Z, people born between 1995 and 2010, are considered the first to grow up in an environment dominated by digital devices. For this generation, the Internet, and especially social media, has become a natural environment for functioning, a catalyst for which was the widespread use of smartphones. This factor was crucial for shaping the preferences of this group, on the one hand predisposing its representatives to move around in the virtual world, and on the other hand often limiting their interactions with reality (Nadobnik and Eider, 2015). This impact has of course not spared the issue of physical recreation, as the time spent on the Internet, and especially social media, results in a decrease in the amount of free time that can be spent on other activities. Despite this, in recent years, some positive phenomena related to physical activity have been observed among Generation Z representatives. One of them was the significant increase in interest in walking since the pandemic, not only as a form of activity itself, but also in terms of its intensity (Sportkonsulting, 2022). Unfortunately, they do not balance other, increasingly popular ways of spending free time in this generation, such as playing computer games (Stefaniak, 2023) or the so-called “bed rotting” (Hui, 2024), which directly or indirectly encourage limiting physical activity. It is worth emphasizing that technology can also be used to directly support physical activity, and in a way that effectively affects representatives of Generation Z – an example of this are mobile devices with applications for monitoring physical activity, the so-called WAT (Wearable Activity Trackers), especially those that are connected to social media, which allows interaction with peers and public sharing of one’s achievements (Łopuszańska-Dawid, 2020).

Previous studies on the physical activity of Generation Z representatives (not only at the level of higher education) have shown that, for example, in the case of Filipino students, as many as 40% were not interested in participating in sports and recreational activities, as well as learning the rules and practice of individual sports disciplines (Gapa and Tagare, 2023). Although this may seem like a rather exotic point of reference, it is worth emphasizing that as many as 1/3 of the Filipino population are Generation Z representatives (Tagare and Villaluz, 2021). The reasons for the reluctance to engage in physical recreation given by Filipino respondents included health problems, but also negative experiences such as fatigue, exhaustion, or fear of injury and physical pain (Gapa and Tagare, 2023). It also turned out that technology and social media, especially access to addictive online games, were barriers to physical activity for respondents

(Gapa and Tagare, 2023). In another study, involving a sample of 110 Filipino students, it was found that the number of students dropping out of academic physical education classes increased from semester to semester, primarily due to the pressure of other academic and social obligations, but also due to a reluctance to engage in theoretical and methodical sports teaching (Tagare and Villaluz, 2021). It is therefore not surprising that respondents preferred recreational activities that allowed them to have fun and had a social dimension, allowing them to spend time with friends in a non-competitive atmosphere (Tagare and Villaluz, 2021). It also turned out that peer mentoring may be a way to increase interest in physical recreation, because friends and family are perceived first and foremost as desirable support when undertaking physical activity (Gapa and Tagare, 2023).

It is worth noting that similar conclusions were drawn by Biber et al., who in 2013 made a research on students from American elementary schools in Indiana and Georgia, i.e. respondents who are currently of university students age. The authors have observed that Generation Z representatives expect immediate effects and reward for the effort made (which is rather difficult to achieve with regular physical activity, which requires determination and time), and are primarily interested in recreation in which they can participate with friends, which provides support and mutual encouragement (Biber et al., 2013). Also in this study, the respondents' concern about the possibility of sustaining injuries and failure in the process of improving sports skills was clearly visible (Biber et al., 2013).

In turn, Behzadnia et al. (2018) demonstrated in a study on a group of 140 Iranian college students that the approach presented by physical education teachers influences the achieved results and students' engagement in independent physical activity. The key to achieving the desired results in this area was providing support to students and guaranteeing them autonomy in making choices – teachers who presented such an approach achieved significantly better results than those who excessively controlled and put pressure on their students (Behzadnia et al., 2018). Interestingly, Cardinal, Yan and Cardinal (2013) additionally proved, by examining a group of 293 American undergraduate students, that even such a negative experience from sports activities in the form of being chosen last for the team in team games, results in lower participation in physical activity in later life.

Research methodology

Empirical research, using the webankieta.pl portal, was conducted in the period February-May 2024. The research method was a diagnostic survey using the survey technique. The questionnaire was distributed via the Internet. The use of this technique was conditioned by the fact that it allows reaching a large number of people in order to collect the desired information. The link to the questionnaire was distributed on thematic groups devoted to physical activity on Facebook and addressed to representatives of Generation Z. However, only adults were qualified to complete the survey. Respondents recruited on the social networking site were additionally asked to forward the invitation

to the study to other people of a similar age. Thus, the snowball method was also used to recruit respondents (Naderifar, 2017; Voicu, 2011; Sadler et al., 2010), which increased the scope of the study. Correctly completed questionnaires were obtained from 109 respondents. Each of the respondents taking part in the survey was informed about its anonymity and the purposes of the study.

Characteristics of respondents

The respondents were dominated by women, who made up 69.7% of the sample. The age of the respondents, despite the fact that they were only adult representatives of Generation Z, was varied and ranged from 18 to 29 years. People aged 23 dominated.

The vast majority (76.1%) of the respondents were city dwellers. The majority (39.4%) were people from large urban centers with over 500 thousand inhabitants. People from cities with no more than 50 thousand inhabitants and from 50 to 150 thousand inhabitants constituted 10.1% and 11.9% of respondents, respectively, 14.7% of respondents represented cities with 150 to 500 thousand inhabitants.

Due to the nature of the group, the vast majority of the respondents were people studying (41.3%). 26.6% of respondents combined their studies with professional work, and 32.1% were professionally active. The respondents assessed their own financial situation positively. Very good and good were indicated by 13.8% and 45.0% of respondents, respectively. It was described as average by 38.5%, and bad by only 2.7% of respondents.

Research results

Being physically active often requires some kind of inspiration. It can not only encourage to exercise, but also affect attitude and way of thinking, which can affect the choice of forms of physical activity and the frequency and regularity of doing so. For the respondents, such sources were primarily social media (mainly for women), acquaintances and friends (mainly men), but also the broadly understood Internet and famous people (Figure 1).

It may be surprising that school or university were indicated very rarely by the respondents. This is quite worrying, as it may indicate, among other things, that in these places little emphasis is placed on imparting knowledge about the positive impact of physical activity on human health, and that education for physical recreation is not carried out effectively. The results of the study also indicate that these functions are not sufficiently implemented by parents and other relatives of the respondents.

The reasons for which the respondents took up physical activity were quite diverse, as presented in Figure 2. Regardless of gender, the most frequently indicated reasons were improving physical fitness and maintaining fitness, as well as improving the figure.

A significant proportion of the respondents (with a clear predominance of women) engaged in physical activity for entertainment purposes. This form of recreation was also often undertaken to relieve stress or escape from everyday life (in this case, women

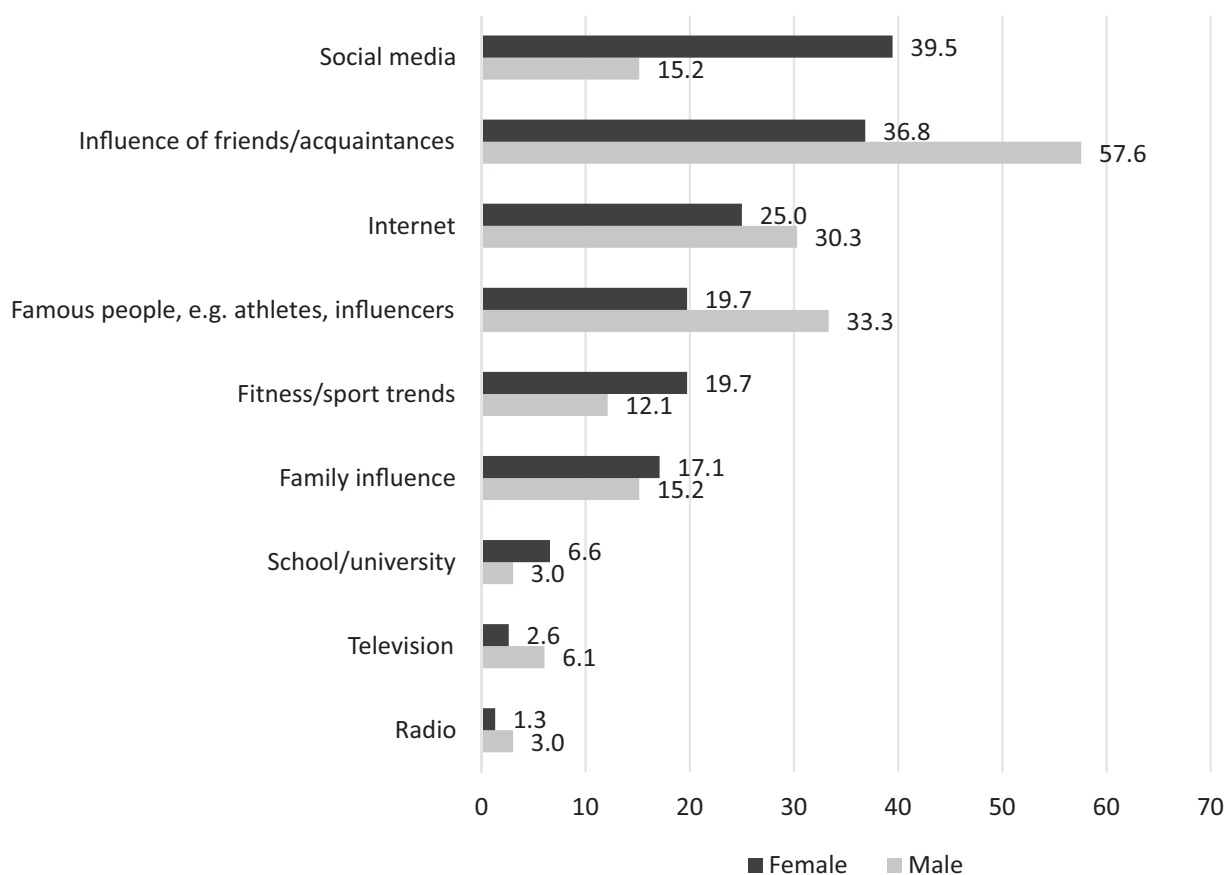


Figure 1. Sources of inspiration for physical recreation indicated by the respondents [%, N = 109]

The respondents could indicate more than one answer.

Source: own research.

again dominated). Interestingly, for a significant proportion of the surveyed men, engaging in physical activity resulted from the desire to be in the company of other people. The respondents were also asked specifically about the most important goal of taking up physical recreation. Women *ex aequo* indicated improving fitness and maintaining fitness, and improving figure (27.6% of responses each). Men also most often indicated improving fitness and maintaining physical fitness, but in their case the percentage of responses was as high as 39.4%.

Physical recreation is characterized by a large variety of forms, and their selection depends on individual preferences and needs, which is why the respondents were asked to indicate the types of physical activity they undertake systematically (if weather conditions allow it). The most frequently undertaken (69.7% of the total, with a significant predominance of women) was walking (Figure 3).

Cycling and strength training at home or in the gym were also very popular (34.9% and 33.9% of the total, respectively), but they were more preferred by men. Men were also much more likely to swim, run and play team sports. They were not interested in yoga, dancing or aerobics.

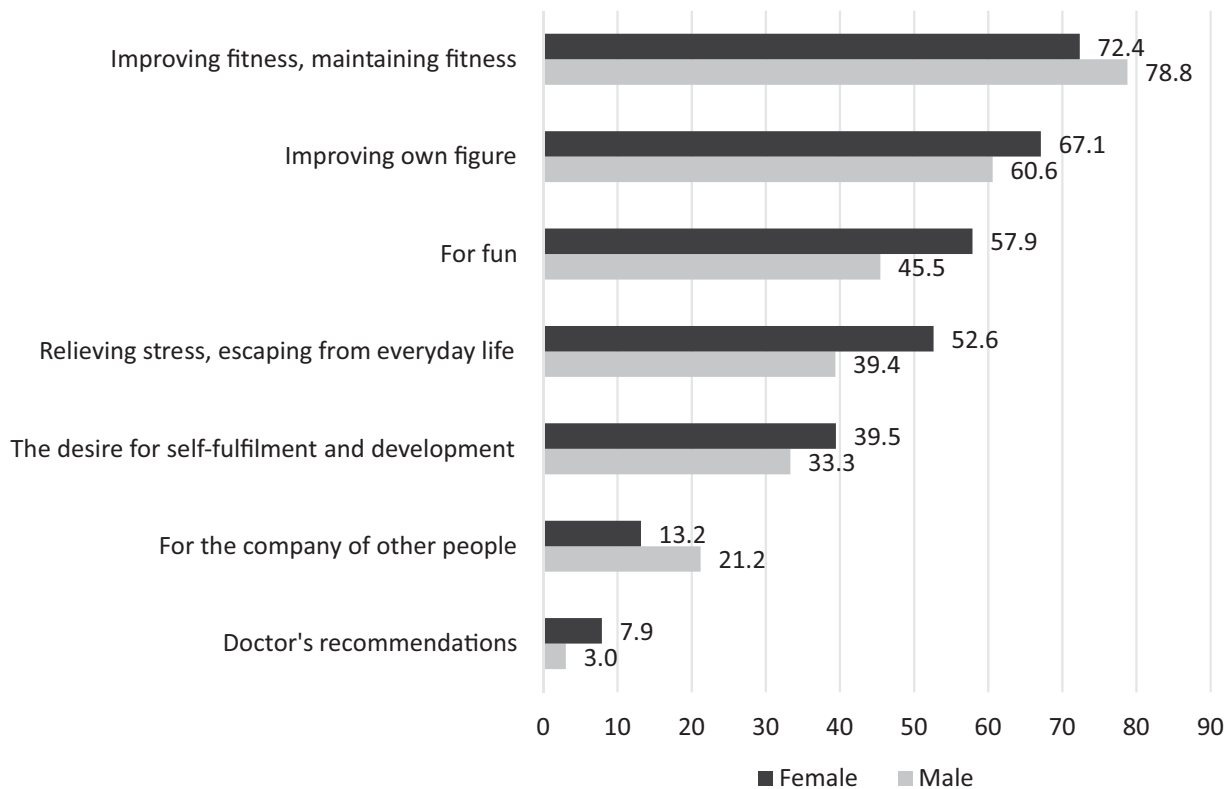


Figure 2. Motives for practicing physical recreation among the respondents [% , N = 109]

The respondents could indicate more than one answer.

Source: own research.

Diversification of preferred forms of physical activity could also be observed in relation to place of residence. People from cities were much more willing to do swimming, exercises on an elliptical trainer, rower, treadmill, exercise bike, etc. performed at home, as well as strength training. Village residents, on the other hand, showed significantly greater involvement in cycling, but also rollerblading or scootering. This may be due to more favorable conditions for undertaking such activities in rural areas, which may result from lower traffic intensity on local roads, but also from greater accessibility of routes located, among others, in forest areas.

An important determinant of undertaking physical recreation is access to an appropriate area, place or facility where it can be practiced. Therefore, the respondents were asked to describe their preferences in this regard, as presented in Table 1. Women were equally willing to exercise at home, in an apartment, in a student dormitory or in a garage, as well as outdoors (over 60% of responses). Men, on the other hand, preferred the gym, but were also willing to exercise outdoors.

Rural residents exercised much more often in their place of residence, which may be due to the lower availability of commercial sports and recreation facilities.

Generation Z representatives are attached to digital devices, as well as the applications used on them. Hence, an attempt was made to recognize the impact and use of these technologies in the field of physical recreation. Women very often

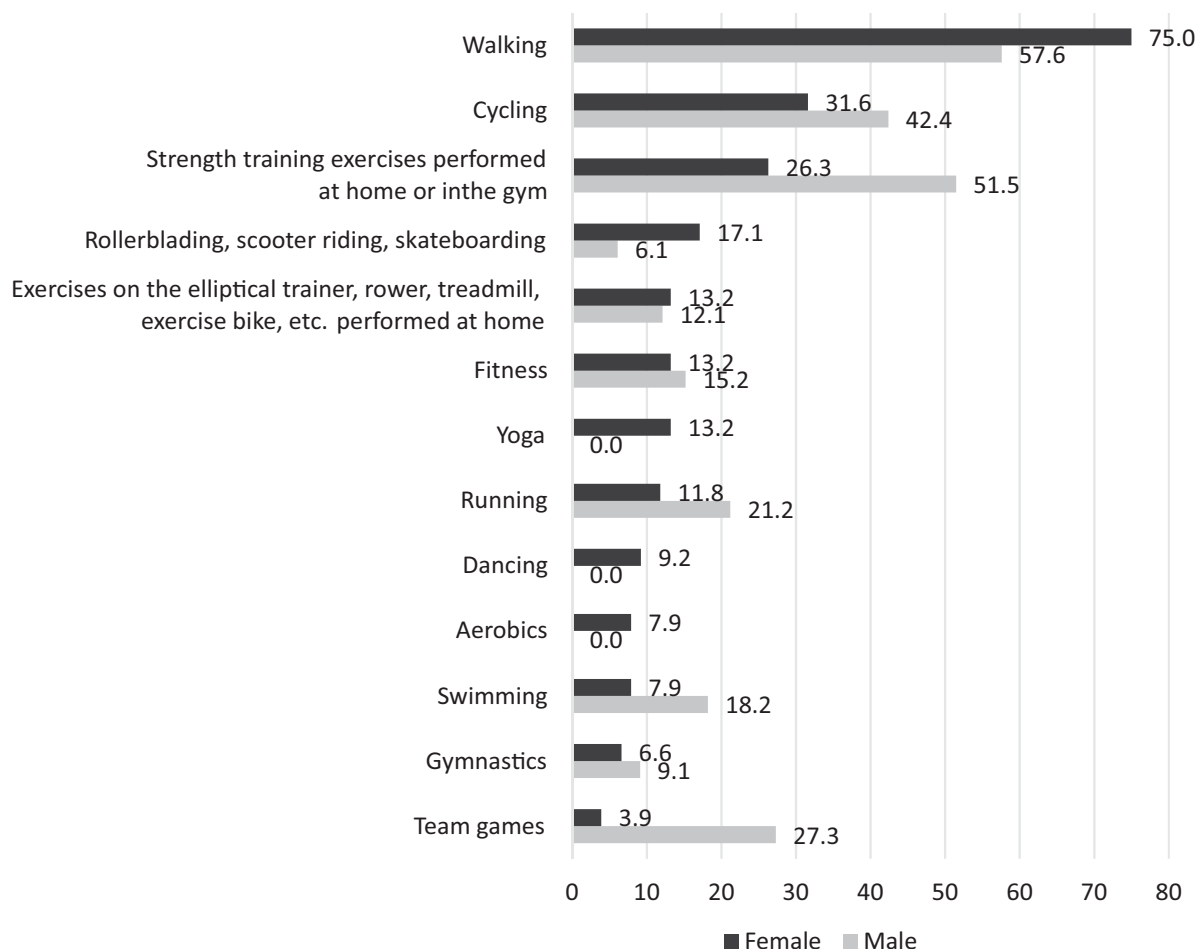


Figure 3. Forms of physical activity undertaken systematically by the respondents [% , N = 109]

Source: own research.

Table 1. The place where the respondents engaged in physical recreation [% , N = 109]

Answers	Respondents			
	sex		domicile	
	female [N = 76]	male [N = 33]	city [N = 83]	village [N = 26]
I exercise at home, in my apartment, in my dorm, in my garage, etc.	60.5	33.3	47.0	69.2
Outdoors	60.5	39.4	55.4	50.0
Gym	25.0	42.4	36.1	11.5
Swimming pool	10.5	15.2	13.3	7.7
Sports hall	6.6	9.1	4.8	15.4
Fitness club	6.6	12.1	8.4	7.7
Sports field	1.3	27.3	8.4	11.5
Others	1.3	3.0	2.4	0.0

The respondents could indicate more than one answer.

Source: own research.

supported themselves with online training available on social media channels (e.g. YouTube). Interestingly, men practically did not use them at all. In fact, they used any technology during physical exercises much less often (Table 2).

Table 2. The use of modern technologies to support physical activity undertaken by the respondents [%, N = 109]

Answers	Respondents			
	sex		domicile	
	female [N = 76]	male [N = 33]	city [N = 83]	village [N = 26]
I use online training available on social media channels (e.g. YouTube)	43.4	3.0	27.7	42.3
I use mobile training applications available on my phone	34.2	24.2	27.7	42.3
I use wearable accessories that monitor physical activity such as smartwatches, smart bracelets, wristbands, etc.	27.6	30.3	30.1	23.1
I don't use it	26.3	51.5	37.3	23.1

The respondents could indicate more than one answer.

Source: own research.

It is also worth noting that online training on social media and training apps were much more popular among residents of rural areas. The reasons can again be found in the lack or lower access to sports and recreation facilities in these areas.

An important element of the study was also diagnosing the barriers that prevent Generation Z from regularly practicing physical recreation. These include various limitations, including physical, psychological, economic and social ones. The most frequently indicated by all respondents was the lack of free time, as well as (especially among women) lack of strength and fatigue (Table 3).

Women were also slightly more likely to point out laziness and the resulting desire for passive recreation. These barriers were also more often highlighted by rural residents. These people, unlike city inhabitants, also indicated a lack of company and a shortage of interesting places to exercise in the area. Interestingly, no one pointed to a shortage of appropriate equipment. Financial constraints were also of little importance. It is worth emphasizing that almost 15% of the respondents (with a significant predominance of men) stated that there are no such constraints and that they exercise as much as they want. It should also be noted that almost 15% of the respondents stated that their health condition was a barrier to more frequent physical recreation. This is surprising and at the same time worrying due to the young age of the respondents.

Table 3. Factors hindering the respondents from engaging in physical recreation more often [%, N = 109]

Answers	Respondents			
	sex		domicile	
	female (N = 76)	male (N = 33)	city (N = 83)	village (N = 26)
Lack of strength, fatigue	63.2	36.4	54.2	57.7
Not enough free time	57.9	54.5	55.4	61.5
Laziness	34.2	27.3	30.1	38.5
The desire for passive rest	25.0	12.1	20.5	23.1
My health condition doesn't allow it	15.8	12.1	13.3	19.2
There are no such constraints – I exercise as much as I want	11.8	21.2	14.5	15.4
There are no interesting places to exercise in the area	6.6	6.1	4.8	11.5
No company	6.6	3.0	3.6	11.5
No money	5.3	12.1	8.4	3.8
Lack of proper equipment	0.0	0.0	0.0	0.0
Others	0.0	6.1	2.4	0.0

The respondents could indicate more than one answer.

Source: own research.

Conclusions

The study showed that the main sources of motivation for taking up physical activity for Generation Z were social media (but also the broadly understood Internet), acquaintances and friends. This is consistent with observations made by other researchers in other countries (e.g. Gapa and Tagare, 2023; Biber et al., 2013). The most important reasons for exercising were to improve physical fitness and maintain fitness, and to improve figure. Unfortunately, the main systematic activity among respondents was only walking, which is not very intensive and demanding, the next most popular were cycling and strength training. It can therefore be seen that respondents most often undertook such activities that do not require special preparation, equipment and infrastructure. This was also confirmed when identifying the place of undertaking the activity, which most often turned out to be one's own home or an outdoor area. It is worth emphasizing that empirical observations do not reflect theoretical assumptions regarding the expected leading forms of activity in the young generation.

An interesting observation was made in the case of supporting exercise programs with modern technological solutions – it turned out that although representatives of Generation Z were inspired by digital media when undertaking recreation, they used them directly less often than expected for specific activities related to physical activity. This also concerned WAT devices, which were used by only every third respondent.

The most important barriers to physical activity were fatigue and time constraints, which are elements identical to the observations made by other researchers (Gapa and Tagare, 2023); in this context, it is also worth mentioning the health limitations of the respondents, which – despite their young age – appeared in our study and in the sample of Filipinos.

Undoubtedly, the fact that educational institutions (schools, universities) were of completely marginal importance to the respondents in undertaking physical activity turned out to be a worrying element. This may mean low effectiveness of teaching and promoting physical recreation in these places. Referring to the studies of Tagare and Villaluz, (2021), Behzadnia et al. (2018), and Cardinal, Yan and Cardinal (2013) one can even risk stating that school may discourage activity more often than it encourages it. This is all the more dangerous because the respondents confirmed at the same time that family and relatives do not sufficiently motivate recreation and instill knowledge about its positive impact, while other studies show that these groups are crucial in encouraging physical activity.

Our research had numerous limitations, including the small sample size and significant gender disproportion of respondents (female dominance). Given the location where it was conducted, it can be assumed that it mainly covered Warsaw youth. It is therefore desirable to repeat it, but this time on a significantly larger sample, representing the most important academic centers in Poland. The ideal solution would be to track changes in preferences for physical activity among Generation Z representatives from primary school to university, as well as to learn about the context of its teaching in individual educational institutions. However, these studies require a significant outlay of resources and a long time perspective, which is beyond the authors' capabilities.

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