



## **RUNNING IN NATURE AS AN IMPORTANT ELEMENT OF LIFESTYLE MEDICINE: MOTIVATIONS AND ENVIRONMENTAL ATTITUDES OF MODERN RUNNERS AND SPORTS TOURISTS**

**Abstract** - The aim of the study is to identify the motivations and attitudes of participants of running events, taking place outside the city, and their socio-demographic profile. For this purpose, a face-to-face interview was conducted with 107 participants of the Warta Challenge running event held in the Wielkopolska Voivodeship. The results of the study revealed that mass running events, organized outside a large city, are most often attended by young and middle-aged men, from large cities, with higher education and professionally active. Participants of the Warta Challenge regularly take part in running events. It motivates them to participate in the marathon, improves the quality of their lives, not so much due to the sports results achieved, but due to contact with nature and with other people. Over 80% of respondents prefer running outside the city. They mostly appreciate lack of crowds at their running routes, surrounded by nature.

**Keywords:** running; motivations; nature; life satisfaction; sports tourism.

## **CORRIDA NA NATUREZA COMO ELEMENTO IMPORTANTE DA MEDICINA DE ESTILO DE VIDA: MOTIVAÇÕES E ATITUDES AMBIENTAIS DE CORREDORES MODERNOS E TURISTAS ESPORTIVOS**

**Resumo** - Objetivo do estudo é identificar a motivação e as atitudes dos participantes de eventos de corrida, realizados fora da cidade, e seu perfil sociodemográfico. Foi realizada uma entrevista presencial com 107 participantes do evento de corrida Warta Challenge, realizado na Voivodato, Polônia. Os resultados do estudo revelaram que os eventos de corrida de massa, organizados fora de uma grande cidade, são mais frequentados por homens jovens e de meia-idade, oriundos de grandes cidades, com formação superior e profissionalmente ativos. Os participantes do Warta Challenge participam regularmente de eventos de corrida. Motiva-os a participar na maratona, melhora a qualidade de vida, não tanto pelos resultados desportivos alcançados, mas pelo contacto com a natureza e com outras pessoas. Mais de 80% dos entrevistados preferem correr fora da cidade. Eles apreciam principalmente a falta de multidões em suas rotas de corrida, cercadas pela natureza.

**Palavras-chave:** corrida; motivações; natureza; satisfação com a vida; turismo desportivo.

## **CORRER EN LA NATURALEZA COMO ELEMENTO IMPORTANTE DE LA MEDICINA DEL ESTILO DE VIDA: MOTIVACIONES Y ACTITUDES AMBIENTALES DE CORREDORES MODERNOS Y TURISTAS DEPORTIVOS**

**Resumen** - Objetivo del estudio es identificar la motivación y actitudes de los participantes en eventos de carrera celebrados fuera de la ciudad y su perfil sociodemográfico. Se entrevistó personalmente a 107 participantes de la carrera deportiva Warta Challenge celebrada en la Voivodato, Polonia. Los resultados del estudio revelaron que, a las carreras masivas, organizadas fuera de una gran ciudad, asisten con mayor frecuencia hombres jóvenes y de mediana edad, de grandes ciudades, con educación superior y profesionalmente activos. Los participantes del Warta Challenge participan regularmente en eventos de carrera. Les motiva a participar en el maratón, mejora su calidad de vida, no tanto por los resultados deportivos conseguidos, sino por el contacto con la naturaleza y con otras personas. Más del 80% de los encuestados prefiere correr fuera de la ciudad. Sobre todo, aprecian la ausencia de aglomeraciones en sus rutas para correr, rodeados de naturaleza.

**Palabras-clave:** correr; motivaciones; naturaleza; satisfacción con la vida; turismo deportivo.

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## Introduction

People are more and more willing to actively participate in physical activity outside urban agglomerations, not only due to the beautiful landscapes, peace and cleanliness of the air. Street running contests, organized in polluted cities, may be less attractive than events in natural surroundings. The runners are afraid to take part in the runs, organized in polluted cities, as they believe that it may lead to a decrease in a lung capacity. They are also threatened by the impact of the city running event on their health, and above all, they are afraid of training in large, polluted cities, full of smog and crowds of athletes, fans and inhabitants. In addition, as the research has shown, air pollution from car traffic in the biggest urban agglomerations can significantly contribute to cardiovascular and respiratory diseases<sup>1</sup>. In urban areas, exposure during physical activity is bigger due to the increased respiratory rate and proximity to emissions, produced by vehicles. Exposure to road pollution may contribute to acute changes in blood pressure, autonomic function, and microcirculatory function. Regional concentrations of air pollutants may modify the impact of these exposures on autonomic functions<sup>2</sup>.

The development of urbanization increases the frequency of visits to parks/forests among sports tourists, seeking contact with nature, which also creates an opportunity for the development of marginalized rural areas. More and more people prefer to do sports in unusual scenery and in contact with nature, not in the ‘concrete jungle’<sup>3,4</sup>. Running outside the urban agglomeration allows for contact with nature, which is conducive to the regeneration of psychophysical strength and stress reduction. According to Bodin and Hartig, researchers who study the influence of the type of external environment on the psychological benefits of exercise, runners prefer to run in parks away from urban environments, because they perceive them as more conducive to mental regeneration<sup>5</sup>. In addition, sporting events in natural environment arouse much enthusiasm among its participants, as such events create numerous positive emotions and feelings. These are additional motivators for runners to meet in a given place and during the given time to participate together in a sporting event. It is very beneficial for their health. In the contemporary world, where health-related problems are omnipresent (despite a vast progress in medicine), it is of special importance. In addition, sports and recreation events, such as running contents, can become an effective instrument of regular and life-long education for a healthy lifestyle of children and adults. It could happen, however, only if

they are widely available and easily accessible. They should also draw media attention and be popular, regular, and provide a specific program and a good, positive atmosphere<sup>6</sup>.

Moreover, running in natural environment can be very beneficial not only for physical, but also for mental health. As Brymer and Gray have noticed, the athletes often form an intimate and reciprocal relationship with the natural world. In their research, they have found out that running outside in natural environment produce positive changes in emotions, focus and attention, occurring while running outdoors, and significantly contribute to decreasing in levels of anxiety, depression and anger of its participants<sup>7,8</sup>.

Furthermore, as Gladwell et al. have noticed, running outdoors, surrounded by the natural environment, can have significant, beneficial influence on reducing the alarming trend of decreasing in taking up physical activity, especially in the Western world. Exercising in natural environment may help facilitate and motivate people to be physically active. It is very beneficial for their physiological and mental health. As the authors claim, the combination of exercise and exposure to natural environment could be a powerful tool to help fight both the growing physical inactivity, as well as non-communicable diseases<sup>9</sup>. All of these, positive and very needed in the contemporary world values and features, can be achieved by organizing regular, running contests in natural environment for runners, who can be attracted and motivated to participate in them on a regular basis.

The Warta Challenge event is a kind of a tournament, consisting of a series of five running events, giving both amateurs and professional competitors the opportunity to run in long-distance, small-scale, local cross-country running. It is a series of winter runs on forest paths. The attractions on the route include picturesque forests with over 100 monumental oaks, a very diverse, hilly area of moraine hills and riverside escarpments, a view of the crane over the Warta River in the town of Czerwonak, the post-Cistercian monastery and basilica in the village of Owińska and the Palace in Biedrusko near Poznań. In addition to sightseeing and natural attractions, a series of cross-country runs on hilly terrains will perfectly help to detrain after the summer season and to build endurance and strength for running enthusiasts for the upcoming competition season. Warta Challenge is a running event for everyone. After the run, the participants are hosted in the stylish basement of the Palace, enjoying a hot meal and a nice, friendly atmosphere. Special guests usually conduct lectures and photo-video shows. During one of the first

events, the lecture was given by Marek Śliwka, the Extremist, this year's winner of the Crown of World Marathons. Marek Śliwka is a globetrotter and the owner of the Logos Travel Marek Śliwka – a travel agency in Poznań. From November to March, every month, male and female runners compete for the main prize, medals, cups and diplomas on the full (called “royal) distance of a marathon and its half-distance, and additionally, male and female walkers compete in the Nordic Walking march over a distance of 21.3 km. There are always prizes and competitions for the accompanying persons who will support the participants on the route. As part of the Warta Challenge Marathon&Half, the Polish Journalist Championships are also held. Columnists, bloggers and sports journalists from most sports editorial offices of the press, radio, television and social media are invited to the championships. The number of places is limited (200 runners).

The aim of this study is thus to identify the motivations and attitudes of participants of such running events, taking place outside the city, and their socio-demographic profile. The analysis will be done on the example of the Warta Challenge event.

## Material and methods

The research consisted of conducting face to face interviews with 107 participants of the Warta Challenge running event held in the Wielkopolska Voivodeship. The socio-demographic structure of the participants is presented below (Table 1).

Table 1 - Socio-demographic structure of respondents.

Gender n=107	n	%
Female	36	33.64%
Male	71	66.35%

Source: author.

According to the research results, the Warta Challenge is more often attended by men – 2/3 of the participants – than women.

72.89% (78 people) of them were runners between 36-50 years old, 20.56% (22 people) between 26-35 years old, 4.67% (5 person) - 51-70 years old and just 1.86% (2 person) - 18-25 years old.

On the example of the Warta Challenge, it can be seen that young and middle-aged people (26-50), over 90% of the respondents, run most often outside the city.

The inhabitants of Poznań and the surrounding area from the Wielkopolska Voivodeship most often took part in the running event near Poznań – over 80% of the participants of the run. 49.53% of runners (53) live in Wielkopolska but outside of Poznań. 34.57% of them (37) were residents of Poznań and 15.88% (17) live outside of Wielkopolska region.

Population of the place of residence. Runners usually come from a large city with a population of over 500,000 inhabitants– 38,31 % of respondents. Second group are runners from Village - 34.57% (37 people). Next are coming from a city with a population of 10,000-100,000 inhabitants 18.69% (20 people). From a city with inhabitants less than 10,000 were 5.60% (6 person). And the smallest group were runners from the city 100,000-500,000 inhabitants - 2.80% (3 person).

To take part in the Warta Challenge and to compete in the forest area, about 30% of participants had to cover a distance of over 50 km. However, the Warta Challenge is a sporting event mainly of a local character. 42.99% of the runners (46) travel less than 20km to the starting point. 26.16% of them (28) - 21-50km, 17.75% (19) - 51-100km, 8.41% (9) – travel between 101-300km and 4.67% of them (5) - 301-500km.

Most of the participants of the running event declared high education level (Master's degree – 72%). 72.89% (78) graduated from higher education with a master's degree. The second group were runner with Secondary School level of education 16.82% (18), 5.60% (6) have Bachelor degree and 4.67% (5) has Vocational education.

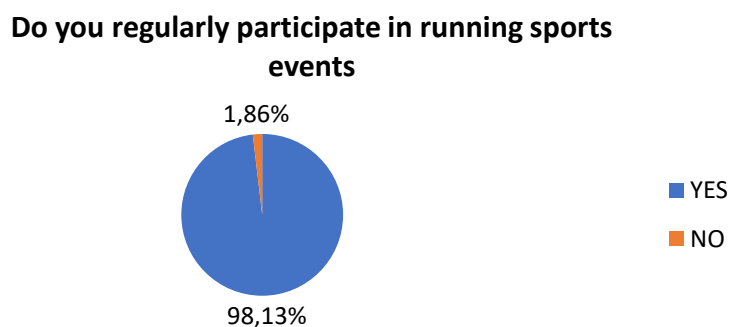
We also ask participant about current professional situation. Most of the respondents at the time of the survey were working people– 88,78% (95), 11.21% were the student.

Summing up, it can be noticed that mass running events, organized outside a large city, are most often attended by young and middle-aged men, from large cities, with higher education, and professionally active. The Warta Challenge is a sporting event mainly of a local nature.

## Results

Below (Figure 1), there are the answers of the respondents – participants of the Warta Challenge event – presented.

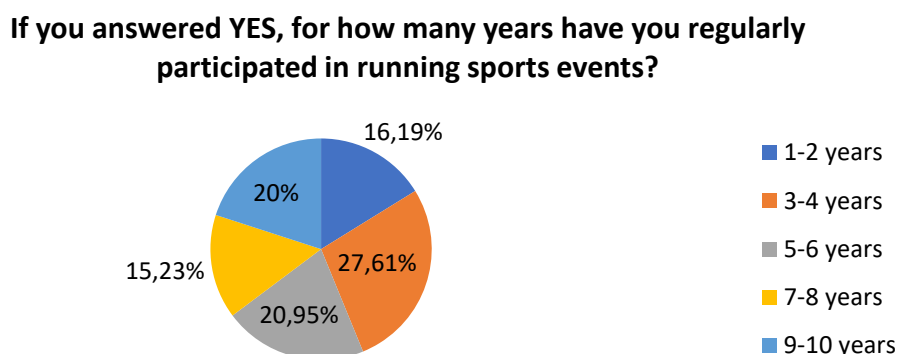
Figure 1 - Do you regularly participate in running sports events (at least 4 events per year) (n=107)?



Source: author.

The results of the research has shown that the participants of the Warta Challenge, taking place in the forest area, are primarily people who regularly take part in various running events. 98% of the surveyed runners take part in at least 4 or more running events a year (Figure 2).

Figure 2 - If you answered YES, for how many years have you regularly participated in running sports events? n=105

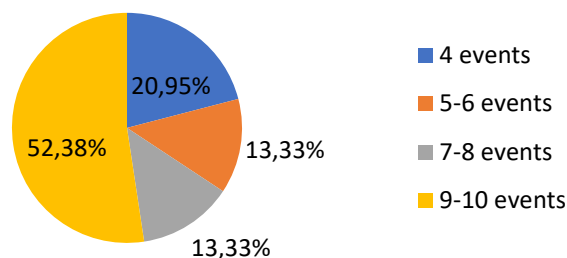


Source: author.

The surveyed people have usually taken part in running events on a regular basis for 3 to 4 years - nearly 1/3 of the participants (27.61%) (Figure 3).

Figure 3 - If you answered YES, how many running sports events do you take part in a year? n=105

**If you answered YES, how many running sports events do you take part in a year?**



Source: author.

Respondents most often take part in more than 9 running events a year (more than half of them – 52.38%). This is a very high result, indicating that most of runners take part in an event almost every month (Table 2).

Table 2 - What are the main motivations for participating in the Warta Challenge running event? n=107 (You can select more than 1 answer)

	n	%
Losing weight, improving physical appearance	60	56.07%
Physical health	105	100%
Mental health	93	86.91%
Improvement of self-esteem	59	55.14%
Improvement of the image in the eyes of other people	38	35.51%

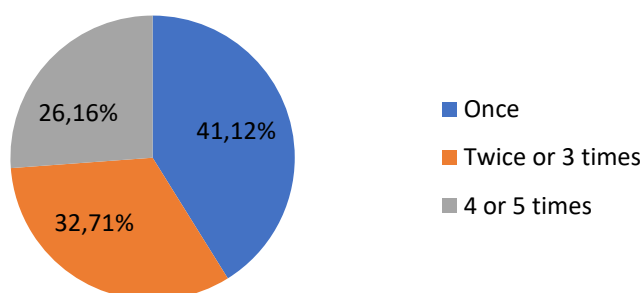
Source: author.

The most common motivations of the runners to participate in running events are: physical health (100% of participants), mental health (86.91% of participants) and the desire to lose weight and to improve their physical appearance (56.07%).

The issues of improving self-esteem and the image in the eyes of other people are less important for this group of respondents (Figure 4).

Figure 4 - How many times have you participated in the Warta Challenge running event?  
n=107

**How many times have you participated in the Warta Challenge running event?**

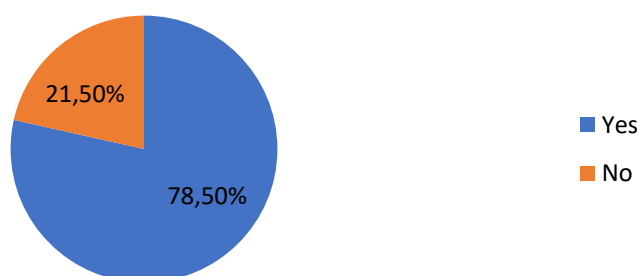


Source: author.

The surveyed people regularly take part in the Warta Challenge – for nearly 60% of the respondents, it is two or more starts in life (Figure 5).

Figure 5 - Does participation in the Warta Challenge motivate you to prepare for the marathon? n=107

**Does participation in the Warta Challenge motivate you to prepare for the marathon?**

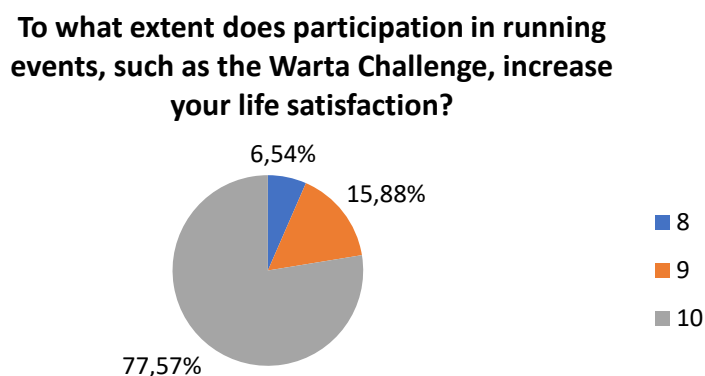


Source: author.



It also turned out that the participation in a cyclical running event, like the Warta Challenge, motivates the runners to prepare for the marathon (for nearly 4/5 of the study participants) (Figure 6).

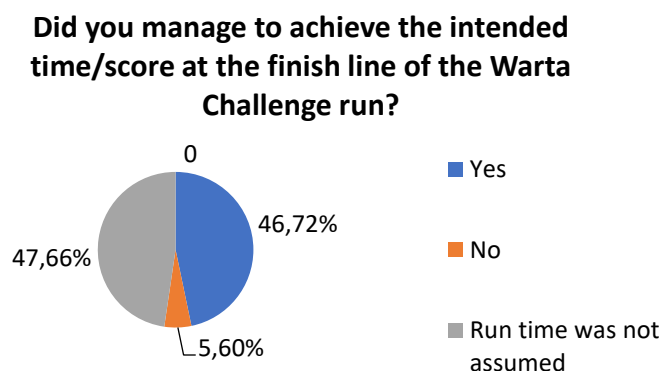
Figure 6 - To what extent does participation in running events, such as the Warta Challenge, increase your life satisfaction? (1-very low, 10-very high) n=107



Source: author.

Running in the forest and participating in sports event significantly increased the life satisfaction among the participants – to a very high extent. This applies to over 3/4 of the runners (77.57%) (Figure 7).

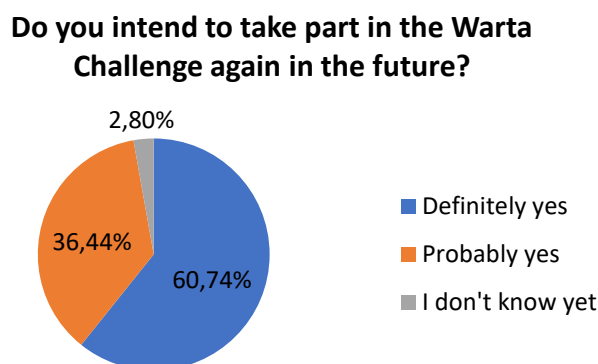
Figure 7 - Did you manage to achieve the intended time/score at the finish line of the Warta Challenge run? n=107



Source: author.

The above-mentioned satisfaction was not necessarily impacted by the achievement of the intended sport aim, as more than a half of the respondents either did not assume their sport goal at all or did not achieve it. Therefore, it is the natural environment and contact with people that have the power to improve the quality of life (Figure 8).

Figure 8 - Do you intend to take part in the Warta Challenge again in the future? n=107



Source: author.

The vast majority of the Warta Challenge's participants intend to take part in this sporting event again in the future (over 95%) (Table 3).

Table 3 - What positive aspects of running outside the city do you see? (You can select more than 1 answer) n=107

	n	%
Contact with nature	100	100%
Open area	84	93.45%
No crowds	82	76.63%
Fresh air, no smog	77	71.96%

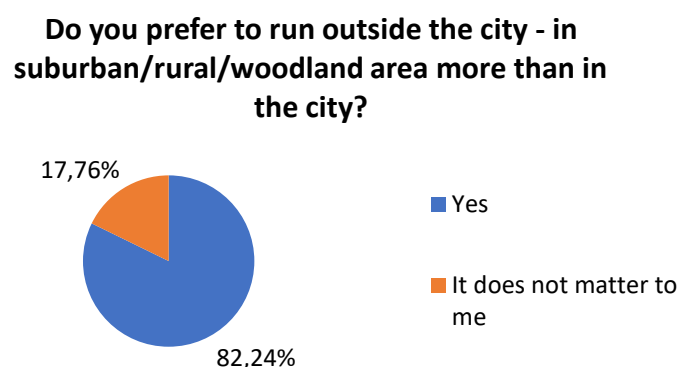
The route outside the city buildings - it is safer	62	57.94%
No traffic jams, no car traffic	60	56.07%
Soft ground	58	54.20%

Source: author.

An important point of this research was finding the answer to the question of what motivates contemporary runners to exercise outside the city.

The most important motivations indicated by runners are: contact with nature (100%), running in the open area (93.45%) and lack of crowds (76.63%) (Figure 9).

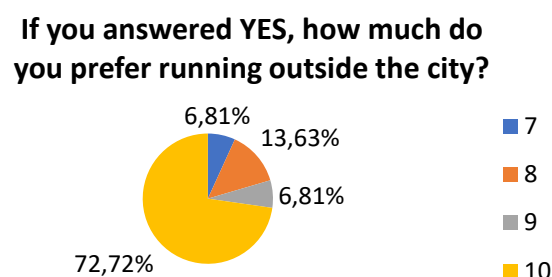
Figure 9 - Do you prefer to run outside the city - in suburban/rural/woodland area more than in the city? n=107



Source: author.

A high percentage of respondents (over 80%) indicated that they generally prefer running outside the city – 88 people (Figure 10).

Figure 10 - If you answered YES, how much do you prefer running outside the city? n=88 (10-very high, 1-very low)



Source: author.

Nearly  $\frac{3}{4}$  of the respondents (72.72%) are much more encouraged by running outside the city than by running in the city.

## Discussion

The other research on similar issues have shown, that for the runners, running in nature is an important motivation to take part in running events. It is especially true when they run in a specifically attractive environment. Ólafsdóttir et al. have shown, that for the majority of international runners, taking part in The Laugavegur Ultra Marathon in Iceland, specific wild nature was the most important aspect in the runs, like this<sup>10</sup>. Even in less specific environment, runners still often prefer more ‘green’ routes. As Bodin and Harting<sup>11</sup> has shown, runners preferred running in parks than in over urban surroundings and considered them more restorative when it comes to psychological benefits<sup>11</sup>. Similar results have been found by Deelen<sup>12</sup> in their research about the relationships between perceived environmental characteristics of the running surface and perceived attractiveness and restorative capacity of the running environment. They have found that for runners, perceived environmental characteristics, including green and lively routes, was more important than other runners’ motives and attitudes. It was especially true for less experienced runners, for whom green and lively elements in the running environment were even more important than for more experienced runners<sup>12</sup>. This is a trend that is supposed to be increasing. Some researchers even talk about the so-called ‘nature sports’. The reasons for taking up such sports are mostly nature and adventure<sup>13</sup>.

However, it is more frequent when the runners run at daytime. When they run at night, their choices can be different. In an interesting research, Rozmiarek et al. have shown, that their respondents mostly did not choose running events outside the urban area<sup>14</sup>. However, this is understandable, that running at night in more “green” areas, such as forests, or even parks, outside urban areas, can be uncomfortable for runners who could be afraid of the darkness, animals or other threats.

## Conclusions

The results of the study have shown that mass running events organized outside a large city are most often attended by young and middle-aged men, from large cities, with higher education and professionally active.

The surveyed people usually take part in running events on a regular basis for 3 to 4 years – nearly 1/3 of the participants (27.61%). Respondents usually take part in more than 9 running events a year (more than half – 52.38%) and this is a very high result, indicating that most of runners take part in an event almost every month. Runners most often participate to improve their physical health (100% of participants), mental health (86.91% of participants) and to lose weight and improve their physical appearance (56.07%). The issues of improving self-esteem and image in the eyes of other people are less important for this group of respondents. The surveyed people regularly take part in the Warta Challenge – for nearly 60% of the respondents it is two or more starts in life. It also turned out that participation in the cyclical event, such as the Warta Challenge, motivates runners to prepare for the marathon (nearly 4/5 of the survey participants). Running in the forest and participating in sports competition also significantly increased the life satisfaction among the participants – to a very high extent. This applies to over 3/4 of the runners (77.57%). This satisfaction was not necessarily influenced by the achievement of the intended sport goal, as more than half of the respondents either did not assume their sport goal at all or did not achieve it. Therefore, it is the natural environment and contact with people that have the power to improve the quality of life. The vast majority of the Warta Challenge participants intend to take part in this sporting event again in the future (over 95%). An important point of this scientific research was to find the answer to the question, what motivates contemporary runners to be physically active outside the city. The most important motivations indicated by runners are contact

with nature (100%), running in the open area (93.45%) and lack of crowds (76.63%). A high percentage of respondents (over 80%) indicated that they generally prefer running outside the city – 88 people. Nearly  $\frac{3}{4}$  of the respondents (72.72%) are much more encouraged by running outside the city than by running in the city.

To sum up – the participants of the Warta Challenge regularly take part in running events, which motivates them to participate in the marathon, improves the quality of their lives, not so much due to the achieved sports results, but more due to contact with nature and with other people. Over 80% of respondents prefer to run outside the city than in the city and they appreciate the lack of crowds on the route, surrounded by nature.

The ever-increasing number of participants in marathons, organized in large cities, and the growing air pollution mean that an increasing number of amateur athletes will look for opportunities for physical activity in the open air – including in the protected areas – which creates new challenges for people, managing sports events, landscape parks and national parks.

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