



## THE RUNNING TRIBES: TYPOLOGY OF THE LONG-DISTANCE RUNNING COMMUNITY OF GREECE

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### **Abstract:**

The purpose of this research is to create a typology of the long-distance running community of Greece. The sample consisted of 3228 participants/runners in the "Athens Marathon, The Authentic". The variables used for the segmentation included the demographic, social, attitudinal, and behavioral characteristics of the individuals participating in running as a leisure time physical activity. A cluster analysis was implemented using Python K-Mode by creating a code and using the Elbow method because all the variables were categorical. The analysis yields five (5) different clusters, with some similarities but discernible differences, which distinguish each one of the clusters, making them unique. According to the recorded differences, each one of the clusters was assigned a name. The first cluster was named Leisure Health-Oriented Joggers, the second cluster Older Competitive Marathon Runners, the third Health Oriented Experienced Marathon Runners, the fourth Lonely Marathon Runners, and the fifth Sports Oriented Social Marathon Runners. This is the first-ever presentation of a typology of the Greek running community. Moreover, such a typology could benefit the private and public sectors. Specifically, the segmentation of the running community could influence the sport industry in regard to services, products or merchandise as well as entrepreneurial initiatives. By focusing on the characteristics of each distinctive cluster, the public sector could use this as a guide in planning and implementing new physical activity policies, projects and programs.

**Keywords:** Marathon, Running movement, Physical Activity, Segmentation, Habits, Attitudes, Sport industry, Market segmentation, Gender gap

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## 1. Introduction

Running as a physical activity is part of the daily life of millions of people worldwide and is one of the most popular leisure activities. Systematic mass participation in running as a physical leisure activity has been characterized in world literature as the running movement. This is observed by the increase of events in long-distance races, marathons and ultramarathons around the world, but also by the rise of amateur runners in mass road races (Bridel, Markula, & Denison, 2015).

The first running movement in Greece did not appear in the 1960s and 1970s, although during those decades, it had spread from the USA to Europe. The second-running movement had been developing globally since the 1990s, and especially in the year 2000, certainly including Greece. The "Athens Marathon, The Authentic" – although it was the first modern marathon to take place as an Olympic sport in 1896 – was established in 1972 on an annual basis, gaining international recognition, prestige and mass participation. Taking part in "The Authentic" are amateur runners, in addition to runners with an official capacity, such as professional or elite athletes from the Hellenic Athletics Federation (S.E.G.A.S.). Participation has increased sharply since 1972, reaching the safety limits set by the organizers (S.E.G.A.S.) and exceeding 50,000 runners in all the races of the three-day event. Today, it is described as a famous and prestigious mass participation race, a result of its remarkable development since 2001.

Subsequently, the "Athens Marathon, The Authentic" gained the interest of the sport industry and the business sector (i.e. athletic products, merchandise and services) and now covers new markets and fields such as those involved in implementing corporate social responsibility strategies and policies, including diverse entrepreneurial initiatives and innovations (Kamberidou, 2020). Even the smallest sponsorship reaps profits, and domestic organizers generate revenues and increase their brand value.

Additionally, the quality of the services provided to runners in Greece has been upgraded, reaching the level of similar events abroad. Concerning sponsorships, it is important to point out here that the successful organization of the 2004 Athens Olympics and their global visibility played a role in this development. Undeniably, historical continuity had become a point of reference, giving meaning to the concept and ideals of the Marathon and the Marathon Race as regards the classic, the unique, and the authentic, to wit symbolically confirming national continuity with semantic reference to the greatness and glory of the past (Patsantaras & Kamberidou, 2022; Patsantaras, 2017; Patsantaras, 2015)

All this has resulted in a progressively increasing participation in the running movement. Furthermore, the marathon has triggered the development of street race events in which there is growing mass participation in Greece. Although there is some research on the "Athens Marathon, The Authentic" as an event, studies that refer to the participants of the running movement and the "The Authentic" are limited or incomplete (Georgiou, Patsantaras & Kamberidou 2019, 2017).

To date, no extensive research has been carried out to identify and describe the characteristics of the participants in the running movement, outlining the profile of Greek

runners and marathoners. Studies have never segmented the typology of the Greek running community. The originality of the present study concerns the segmentation and the development of a typology for the entire running community in Greece, as well as the method by which the cluster analysis is carried out, which is a first. To reiterate, there are no other studies focusing on this subject.

## 2. Literature Review

The typology of long-distance runners has always been a controversial and appealing research topic for both the private and public sectors. As regards public interest, the segmentation of such a market could form the basis for drawing up policies, programs or projects related to increasing the levels of physical activity and, as a result, the general health of the population. Moreover, the private sector could use the characteristics of the segments in a specific market to develop new products, merchandise and services to satisfy the demands/needs of the participants. Developing a typology of the running community can be defined as a thorough segmentation of the target market.

Market segmentation has always been the most popular method to detect and identify particular market groups with unique characteristics and different needs, allowing the development of market innovations, new products and services. Segmentation does not refer exclusively to companies. It can also be related to governmental institutions for policy making, in addition to social entrepreneurship (Kamberidou, 2020) and emerging technologies (Patsantaras, 2020). A deeper view of segmentation is the typology, namely the formulation of subgroup segments with even more detailed and specified characteristics. These can be based on sociodemographic factors such as behaviors, habits, attitudes, and psychological variables. In fact, countries interested in participating in mass running events, like the Netherlands and Belgium, have presented interesting results concerning their amateurs' running typology (Ogles & Masters, 2003, 2000; Scheerder & Boen, 2010; Van Bottenburg & Hover, 2009; Vos, Scheerder, Boen, & Feys, 2008; Vos, Walravens, Hover, Borgers, & Scheerder, 2014).

To illustrate, Ogles and Masters (2003) provided results concerning the typology of marathon runners. Their survey was based upon an earlier one conducted by Masters, Ogles and Jolton (1993), where the researchers established a scale that could measure motivation in the marathon runners' population. Ogles and Masters (2003), with multivariate cluster analysis, identified five distinctive and definitive subgroups based on their motivational profiles. Clustering was based upon four general categories: (1) *the motives of the scale* (physical health, health orientation, body weight concern); (2) *social motivation* as affiliation and recognition; (3) *achievement motivation* as competition and personal achievement, and (4) *psychological motives* such as psychological coping, self-esteem, and life meaning. The results showed five types of marathon runners: the running enthusiast, the lifestyle manager, the personal goal achiever, the personal accomplisher, and the competitive achiever.

The research that followed also identified five types of runners: the individual runner, the social competitive runner, the companionship runner, the fitness runner, and

the individual competitive runner (Vos & Scheerder, 2009). Additionally, further research was completed based on runner motives and attitudes (Scheerder & Boen, 2010).

Subsequently, Forsberg's (2015) research on amateur mass running participation in Denmark also describes five types of runners: the traditional runner, the social runner, the challenge-seeking runner, the self-organized runner, and the health-conscious runner.

Combining the factors related to the nature of running (individual vs. group) and the formalization of participation (discipline vs. spontaneity), Llopis-Goig and Vilanova (2015) identified four distinct types of runners: the solitary hedonist, the competitive individualist, the social animal and the disciplined group runners.

Lastly, according to the results presented by Topič and Rauter (2015), using as factors the frequency, intensity, and participation in running events, there are three types of runners: the incidental runner, the enthusiast participant runner, and the serious participant runner.

All research outcomes and findings seem to agree with the running market segmentation results associated with the types of runners, specifically: the holidayer runner, the socializer runner, and the marathoner (Delnoij, 2004; Hallmann & Wicker, 2012; Rohm, Milne, & McDonald, 2006).

The factors used to describe the runner types were gender, age, occupation, income level, educational level, the habitual running routine such as their training frequency, running load in kilometers, frequency-regularity of participation in organized running events, training programs and methods, the organized club participation, and the use of web services to improve their knowledge concerning their running life.

In Greece, only a few studies have described the characteristics of marathon runners. Petridis and Batrakoulis (2013) and Petridis (2015), the latter using Forsberg's (2015) questionnaire, presented the results of two surveys concerning the description of the characteristics of Greek marathon runners.

As regards Petridis and Batrakoulis (2013), the results (n=323) were extracted with frequencies and Chi-square analysis. The findings showed that marathon runners are principally males (83%) in their 30s, from the middle-income class, highly educated private sector employees, with minor training time periods in the long-distance amateur running area. Motivators for participating are mainly the physical and psychological benefits of running. Finally, they present a strong identity and feel notably honored for this, while at the same time, they have a high level of engagement with the activity. Factors used to evaluate and create the participants' profiles were motives, habits, attitudes, behaviors, and, of course, the demographic variables of the runners.

In their study, Georgiou, Patsantaras and Kamberidou (2017) questioned 3,228 Greek long-distance runners (2,386 men 73.9% and 842 women 26.1%) through an electronic motivation questionnaire based on Petridis (2015), with 13 questions about reasons for engaging in running. The results showed that physical, mental, and psychological wellbeing are the primary motivations for long-distance runners.

Although the first attempt to describe the essential characteristics of the marathon runners in Greece was successful, there still needs to be a typology of the Greek long-

distance runners based upon a cluster analysis method. This study aims to create the typology of long-distance runners in Greece based on a cluster analysis method and to describe the prevalent characteristics that constitute and shape the running tribes, viz., the running community in Greece.

### 3. Material and Methods

#### 3.1 Participants

The sample (n = 3228) consisted of 2386 (73.9%) males while 842 (26.1%) were females. Most respondents (n = 1360, 42.1%) belong to the age group of 36-45, while 2853 participants (89.3%) belong to the age spectrum of 26-55. Most of the respondents are public sector employees (n = 1418, 43.9%), they have a typical family in a household in marriage with children (n = 1723, 53.4%), they have a M.Sc. or a PhD degree (n =1231, 38.1%) while 78.8% (n = 1930) have university education of all levels. Most of the respondents have an annual income within 12.001-20.000 (n = 914, 23.3%), 1444 (44.7%) respond that they do not belong to a running club, 746 (23.1%) that they used to be running club members but not anymore while the rest (n = 1038, 32.2%) they declared a running club membership. Among them, 1940 (60.01%) are marathon finishers, and 1288 (39.99%) have never completed a marathon race in the past (Table 1).

**Table 1:** Sample and participation behavior

	N	Marginal Percentage
<b>Marathon finisher</b>		
Yes	1940	60,1%
No	1288	39,9%
<b>Gender</b>		
Male	2386	73,9%
Female	842	26,1%
<b>Age group</b>		
15-25	170	5,3%
26-35	737	22,8%
36-45	1360	42,1%
46-55	756	23,4%
56-65	174	5,4%
65+	31	1,0%
<b>Occupation</b>		
Student	138	4,3%
Private sector employee	1418	43,9%
Public Servant/Armed Forces Officer	597	18,5%
Freelance/self-employed: Manual labor	153	4,7%
Freelance/self-employed: Office work	464	14,4%
Businessman	140	4,3%
Farmer	14	0,4%
Pensioner	109	3,4%
Unemployed	116	3,6%
Other	79	2,4%

<b>Family situation</b>		
I am a family man/woman	1723	53,4%
I live with my parents	332	10,3%
I live with a partner without children	372	11,5%
I live with a partner with children	87	2,7%
Single-parent family	78	2,4%
I live alone	636	19,7%
<b>Education level</b>		
Elementary school	5	0,2%
Junior high/high school	368	11,4%
Vocational / Technical Education	311	9,6%
Highest Technological Education	388	12,0%
Highest Educational University Institute	925	28,7%
M.Sc./PhD	1231	38,1%
<b>Income (in Euros)</b>		
>12.000	694	21,5%
12.001-20.000	914	28,3%
20.001-30.000	666	20,6%
30.001-50.000	489	15,1%
50.001<	275	8,5%
No income	190	5,9%
<b>Club member</b>		
Yes	1038	32,2%
No	1444	44,7%
Used to be	746	23,1%

### 3.2 Measurements

The Sports Sociology lab of the School of Physical Education and Sport Science of the National and Kapodistrian University of Athens (NKUA), Greece, initially adopted the principles presented in the physical activity research and findings by Forsberg (2015), Petridis (2015) and the Eurobarometer (2018) to formulate-prepare a sociodemographic questionnaire containing as variables demographics such as gender, age, occupation, family situation, education level, income, occupation and type of job. The questionnaire also includes attitudinal variables such as possible running club membership, systematic running in the present and the past, the years of systematic engagement in running, the reasons that led to running, the interest of being a typical organized running club member, the feeling of the oppressive nature of engaging within a formally organized running club. Other types of variables used are the habitual ones, such as the frequency and volume of weekly running sessions, the training program, the systematic avocation with another sport, the need for a specialist concerning running, the use of the internet in learning about running issues, the number of road races per year, the distances they compete, being a marathon runner or not, and the purpose of the participation in races. Finally, there are some behavioral variables like the reason for running, the view of running as a social activity that contributes to establishing social relations, the sense of pride in being a runner, the sense of identification with other runners, the sense of being

a runner, and the belief that running contributes as a means of self-projection and self-affirmation.

### 3.3 Data collection and analysis

The data for this study were collected by the *Sociology and Sport Sociology Studies Lab* of the School of Physical Education and Sport Science of the National and Kapodistrian University of Athens, Greece, in cooperation and with the support of the organizing committee of the "Athens Marathon. The Authentic" and the Hellenic Athletics Association of Greece (S.E.G.A.S.). The data collection had two stages: from 9 November 2016 until 30 January 2017. During the first stage, an electronic questionnaire developed by the *Sociology and Sport Sociology Studies Lab* was sent to S.E.G.A.S., and the latter disseminated the questionnaire to all the Greek participants/runners in the 5km (morning and afternoon), 10km, and Marathon race (42.195m). In other words, the runners received the questionnaire through email via the S.E.G.A.S. communication platform. Through this procedure, researchers never came in touch with the sensitive personal data of the participants since their responses/answers were automatically imported into an Excel sheet, ensuring the runners' anonymity and privacy. The "Athens Marathon. The Authentic", is the biggest running event in Greece—expected to reach 80.000 participants in all the races by the year 2026, the 130<sup>th</sup> anniversary since the 1<sup>st</sup> Marathon—and because of its authenticity, one of the most famous and prestigious marathon races in the world, especially since it takes place in the topos of its origin, the authentic/original route from the Marathonas battlefield to the Kallimarmaro Stadium, where the 1<sup>st</sup> modern Olympic Games were held in 1896.

Regarding the clustering procedure, a variety of clustering techniques are available. Most of these methods can be summarized into hierarchical, partitioning, density-based, and grid-based methods (Han, Pei, & Tong, 2022). Selecting an appropriate clustering algorithm depends on various factors. That is the nature of the data, such as their size, the type of expected cluster, and the desired output. In this case, and due to the type of data (i.e., categorical variables), k-mode clustering was employed (Chaturvedi, Green, & Carroll, 2001). K-modes is an unsupervised clustering that groups data objects into a specified number of clusters based on their categorical attributes. As can be easily inferred, unlike traditional clustering algorithms that use distance metrics, k-modes work by identifying the modes (i.e., the most frequent values).

## 4. Results and Discussion

Different measures have been proposed in the literature to find or identify an appropriate number of clusters. One of the commonly employed is the Elbow method. The elbow method is a graphical method for finding the optimal K value in partitioning clustering algorithms and works by finding the within-cluster sum of squares (W.C.S.S.). In our case, the elbow method revealed that the optimal number of clusters equals 5. Lastly, it is worth noting that the procedure above was implemented in Python 3.12.

#### 4.1 Clusters of Greek Long-Distance Runners' Community

Cluster analysis (K-Modes) yielded five cluster solutions based on the Elbow method. The scree plot schematically represents the analysis result (Figure 1).

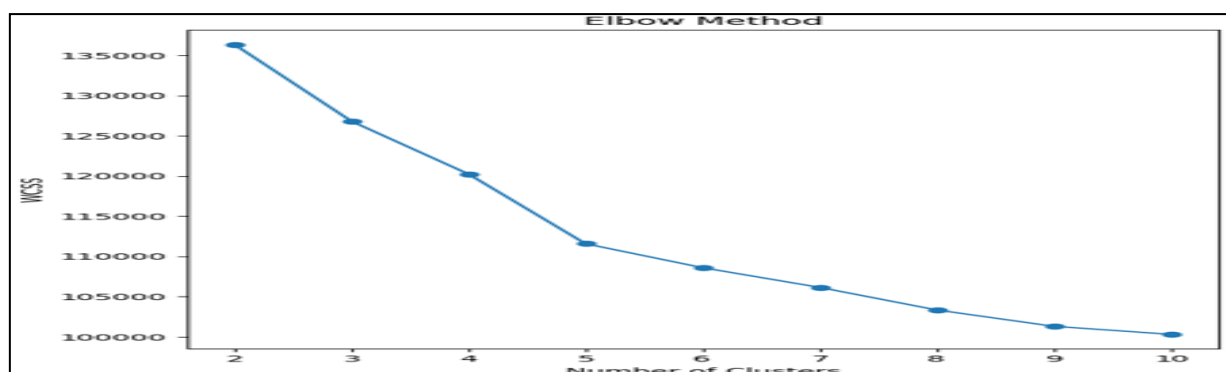


Figure 1. Scree plot schematical representation of the five clusters

The first cluster consists of 939 cases (29.09%), the second of 862 cases (26.7%), the third of 588 cases (18,22%), the fourth of 498 cases (15.43%) and finally the fifth of 341 cases (10,56%) (Table 2).

Table 2: Cluster Number of Cases

		Frequency	Percent	Clusters' Percent	Cumulative Percent
Clusters	1	939	29.09	29.09	29.09
	2	862	26,7	26,7	55,79
	3	588	18,22	18,22	74,01
	4	498	15,43	15,43	89,44
	5	341	10,56	10,56	100,0
	Total	3228	100,0	100,0	

The first cluster's participants accounted for 29.09% (N = 939) of the total sample. This cluster consists of 63.4% (N = 595) of males who belong to the age group of 36-45 (48,85%), occupation at 57,45% is as private sector employees and 69.78% have office seating, type of job not physically tiring. Concerning their family situation, 57.23% declared that they live in a typical family (in a household, married and with children); as for their educational level, most of the participants of the cluster and with the highest percentage of the sample, up to 55.53%, hold an MSc or a PhD degree. They also declare an income between 12.001-20.000€ (24.68%). Concerning their running habits and attitudes towards running as a free time physical activity, 55.43% declared they are not members of any running club; they run systematically (58,83%). However, they were not systematic runners in the past (74.68%), but only in the last two years did they participate actively in the running community (54.47%). They run once or twice per week (72.98%) and up to 10km/per week (60.49%), and they do not follow a training program, but they run freely according to their free time and their mood (63.40%). The decision to engage in running was not affected by any other extrinsic-external factor (T.V. shows, social media, or health issues), but it was their personal decision (92.34%). They are not interested in being a



typical organized running club member (88.1%), running is their main physical activity, and they do not engage in systematic basis with other sports activities (67.31%); they sometimes use the internet to get answers on any issues relating to running (73.62%), but at the same time agreed that anybody who is engaged in running activities should get advise by a sports specialist (59.15%). They prefer to run alone (84.26%). They also participate in road running races (85.53%) and distances not more than 10k (47.77%). Thus, they are not marathon runners (75.85%); they take part in up to five races per year (70%), and their primary purpose of taking part in races is their performance (56.49%). The main reason they started running as a systematic physical activity was to acquire an excellent physical condition (82.66%). They seem neutral about running as a social activity that helps establish social relations (42.92%); they agree that they feel pride, and they are proud to be runners (45.96%). However, they are neutral about their identification with other runners (41.49%), and only a minority of the cluster slightly agreed that they consider themselves runners (32.23%). At the same time, they disagree that running is a means of self-projection and self-affirmation (34.47%).

The second cluster's participants accounted for 26.7% (N = 862) of the total sample. This cluster consists of 79.49% (n = 685) males who belong to the age group of 46-55 (42,64%), their occupation at 29,89% as private sector employees, and 50.42% have an office seating type of job not physically tiring. Concerning their familial situation, 55.74% declared that they live in a typical family (in marriage with children); as for their educational level, 33.14% hold an MSc or a PhD degree, and they also declare an income between 12.001-20.000€ (35.57%). Concerning their running habits and their attitudes towards running as a free time physical activity, 65.82% declared that they are not members of any running club, they run systematically (96.06%), they were not systematic runners in the past (66.40%) and approximately one-third of the cluster (34.72%) runs systematically between 3-5 years. They run 3-4 times per week (61.88%) and between 31-40km/per week (28.19%), and they do not follow a training program, but they find it on the internet (36.62%). The decision to engage in running was not affected by any other extrinsic factor (T.V. shows, social media, or health issues), but it was their personal decision (95.94%). They are not interested in participating as a typically organized running club member (68.37%), running is their main physical activity, and they are not engaged on a systematic basis with another sports activity (73.47%); they always use the internet for getting answers on any issues relating to running (69.29%), but they also believe that they should get advised from a specialist of the field of running (63.15%). They mainly they run alone (71.84%). They also participate in road running races in the highest percentage of the sample (98.38%), in distances up to Marathon races (71.38%). Naturally, they are marathon runners (83.20%), they take part in between 6-10 races per year (41.02%), and their primary purpose of taking part in races is their performance (70.70%). The main reason they started running as their systematic physical activity is to have excellent physical fitness (89.34%). They seem to be neutral about the perspective of running as a social activity that helps in establishing social relations with the highest percentage of the sample (49.07%); they agreed that they feel proud of being runners with the highest percentage of the sample (83.55%), they agreed about their identification with

other runners with the highest percentage of the sample (44.26%), and they agreed that they consider their selves as runners, also with the highest percentage of the sample (69.53%), while at the same time, they are neutral considering that running is a means of self-projection and self-affirmation (21.21%).

The third cluster's participants accounted for 18.22% (N = 588) of the total sample. This cluster consists of 82.68% (N = 486) males who belong to the age group of 36-45 (48.81%), their occupation at 45.58% as public sector or armed forces employees, and 60.03% have office seating type of job not physically tiring. Concerning their familial situation, 59.86% declared that they live in a typical family (in a household held in marriage with children); as for their educational level, 43.71% hold a bachelor's university degree, and they also declare an income between 12.001 - 20.000€ (33.33%). About their running habits and their attitudes towards running as a free time physical activity, 58.67% declared that they are members of some running club, they run systematically (94.56%), they were systematic runners in the past with the highest percentage of the sample (78.40%), and they do run systematically more than ten years (46.26%). They run 3-4 times per week (71.94%) and more than 60km/week (32.12%), presenting the highest percentages of the sample in both frequency and volume of training. They do not follow a training program but run freely according to their free time and mood (54.76%). The decision to engage in running was affected by any other extrinsic factor (T.V. shows, social media, or health issues), but it was their personal decision (92.18%). They are highly interested in being a typically organized running club member (81.80%), running is their main physical activity, and they are not engaged on a systematic basis with another sports activity more than the other clusters (77.55%); they sometimes use the internet for getting answers on any issues relating to running (65.65%), and they believe that they should not always get advised from a specialist of the field of running (59.86%). They mainly run alone (92.69%). They also take part in road running races (95.58%), in distances up to Marathon races (77.04%), and they are marathon runners (81.63%); they take part in up to five races per year (50.34%), and their primary purpose of taking part in races is their performance, presenting the highest percentage of all the clusters (76.70%). The main reason they started running as their systematic physical activity was to have an excellent physical condition (92.86%), the highest percentage of the clusters. They do agree about the perspective of running as a social activity that helps in establishing social relations with the highest percentage of the sample (35.20%), they agreed that they feel proud of being runners (78.06%), they are neutral about their identification with other runners (40.99%), and they agreed that they consider their selves as runners (63.61%). At the same time, they disagree about considering running as a means of self-projection and self-affirmation (37.59%).

The fourth cluster's participants accounted for 15.43% (N = 498) of the total sample. This cluster consists of 82.33% (N = 410) of males who belong to the age group of 36-45 (41.57%), their occupation at 36.68% as private sector employees, and 47.59% have office seating, type of job not physically tiring. Concerning their familial situation, 61.48% declared that they live in a typical family (in a household in marriage and with children), which is the highest of all clusters; as for their educational level, 44.26% hold a bachelor's

degree from a university department, and they declare an income between 12.001-20.000€ (33.81%). Regarding their running habits and their attitudes towards running as a free time physical activity, 43.78% declared that they are not members of any running club, they run systematically (91.16%), they were not systematic runners in the past (66.06%), and they do run systematically less than two (2) years (55.42%). They run 3-4 times per week (68.47%) and between 40-60km/per week (28.72%), and they find their training program on the internet (44.78%). The decision to engage in running was not affected by any other extrinsic factor (T.V. shows, social media, or health issues), but it was their personal decision (94.37%). They are not interested in being a typical organized running club member (86.35%), running is their main physical activity, and they are not engaged on a systematic basis with another sports activity (74.30%); they sometimes use the internet on a higher percentage than the other clusters for getting answers on any issues relating to running (80.12%), but they also believe that they should be advised from a specialist of the field of running (54.02%). They mainly run alone more than any other cluster (92.77%). They also take part in road running races (95.38%), in distances up to a Marathon race (73.09%), and they present the highest percentage as marathon runners (84.14%) from all the rest of the clusters; they take part in up to five races per year (49.40%), and their primary purpose of taking part in races is their performance (66.87%). The main reason they started running as their systematic physical activity is to have an excellent physical condition (73.49%). They seem to be neutral about the perspective of running as a social activity that helps in establishing social relations (39.56%), they agreed that they feel proud of being runners (65.06%), they agreed about their identification with other runners (36.15%), and they agreed that they consider their selves as runners (48.8%). At the same time, they disagree about considering running as a means of self-projection and self-affirmation (40.36%).

The fifth cluster's participants accounted for 10.56% (N = 341) of the total sample. This cluster consists of 61% (N = 208) of males, who belong to the age group of 26-35 (52.20%), occupation at 46.63% is as private sector employees and 57.48% have office seating, type of job not physically tiring. Concerning their familial situation, 41.64% declared that they live alone in different from all the other clusters; as for their educational level, 41.35% hold a bachelor's university degree, and they declare an income of less than 12.000€ (44.28%). Concerning their running habits and their attitudes towards running as a free time physical activity, 53.67% declared that they are members of some running club, they run systematically (65.69%), they were systematic runners in the past (70.1%), and they do run systematically the last 3-5 years (57.48%). They run 3-4 times per week (71.26%) and between 31-40km/per week (49.85%), and they do not follow a training program, but they run freely according to their free time and their mood with the highest percentage of all the clusters (67.45%). The decision to engage in running was affected by any other extrinsic factor (T.V. shows, social media, or health issues), but it was their personal decision (94.14%). They are not interested in being a typically organized running club member (80.06%), running is their main physical activity, and they are engaged on a systematic basis with another sport activity (65.69%); they sometimes use internet for getting answers on any issues relating to running (79.18%),

they also believe that they should be advised from a specialist of the field of running which is the unique cluster with this belief (70.68%), and they particularly run alone (79.77%). They also take part in road running races (88.56%), in distances up to marathon races (39.30%), and they are marathon runners (71.55%), they take part in up to five races per year (63.64%), and their primary purpose of taking part in races is their performance (61.29%). They started running mainly because of their systematic physical activity, which was to have excellent physical condition (81.23%). They agree about the perspective of running as a social activity that helps in establishing social relations (39.30%), they agreed that they feel proud of being runners (54.25%), they agree about their identification with other runners (36.95%), and they agreed that they consider themselves as runners (37.24%). At the same time, they are also neutral about considering running as a means of self-projection and self-affirmation (40.76%).

### **5. Concluding remarks: integrating the gender dimension-closing the gender gap**

A common point of the overall running community in Greece is the level of education, as most of the participants have master's or doctoral degrees, while the vast majority are tertiary education graduates. In combination with the low levels of unemployment depicted in our sample (average to middle-high-income levels, employment or type of work), the running community can be characterized as 'high' social capital. This suggests that there may be a link between social capital (Kamberidou & Patsadaras, 2007) and the choice-decision to engage in this physical activity. This choice seems to hold basic values such as the promotion of physical, mental and social health. This is confirmed in the main reasons given by the participants for engaging in running, which are fitness, health and well-being, both on an individual level as well as a social one.

Greek long-distance running participants constitute a distinctive sports community based on particular sociodemographic, attitudinal, and habitual characteristics. However, even within this distinct running community, there are diverse or distinctive tribes. Consequently, further research is required to focus on the characteristics of these specific tribes of the running community, information that could contribute to both the private and public sectors. The findings/results of the present study and future research could be used as a guide for the development of new and specialized products and services for each one of the specified or distinctive clusters. As for the public sector, the results could be used by government agencies and institutions to design and implement new policies that would contribute to the further development of physical activity with all the subsequent individual, social, and economic benefits. For example, essential policies and measures for various age groups to increase participation and inclusion: older adults, the elderly, younger generations, and individuals with special needs (Kamberidou, Bonias, & Patsantaras, 2019). This would improve their quality of life and health; promote senior wellness; and assist in the adoption of a lifelong healthy lifestyle, especially for younger generations, to name a few.

As regards basic human values related to inclusivity, the gender dimension must be integrated in all discussions and studies on this subject. Why are women in Greece still

underrepresented in the "Athens Marathon. The Authentic"? What could be done to increase participation? We need to reiterate that the male participants/runners prevail (73,9%), revealing the underrepresentation of female runners (26,1%), as listed in Table 1 (2386 male runners and 842 female). Undeniably, this is nothing new in the social space of sports. Today, for example, women are still underrepresented in sport leadership positions, specifically in all sports governing bodies, in all hierarchical structures: sport federations, the International Olympic Committee (IOC), National Olympic Committees, and so forth (Kamberidou, 2019; Kefi-Chatzichamperi & Kamberidou 2021). Evidently gender stereotypes persist, although women's participation rate in the Olympics is nearly equal to that of men's (approximately 49% female athletes participated in the 2020 Olympics held in Tokyo in 2021) and are expected to reach 50% in the 2024 Paris Olympics.

The gender gap in women's participation in the "Athens Marathon, The Authentic" provides an opportunity for both the private and public sectors to revisit this subject and explore the reasons for the low levels of female participation (26,1%), as well as collaborate or work together in training and implementing programs, projects and policies. It is to their advantage to close the gender gaps. The reasons for women's non-participation, such as the "*multitasking whirlpool*" (Kamberidou, 2020), part of the work-life imbalance, can guide both the public and private sectors in developing initiatives to enhance women's participation (ex., daycare services at work; flexi-hours) and the private sector could benefit from the emergence of a new and large profitable market.

Collaborations are possible. Incorporating-integrating the gender dimension in all sport, social, political, and educational bodies is part of the agenda. For example, in Greece, sport as a tool for the promotion of gender integration and social justice has been included in the National Action Plan for Gender Equality (NAPGE) for 2021-2025 by the General Secretariat for Demography and Family Policy and Gender Equality of the Ministry of Labor and Social Affairs. The NAPGE priority areas focus on promoting health; supporting equality in education, training, culture, sport, and the media; eliminating gender-based violence; promoting social integration and equality. The sport was also included in the previous NAPGE, formulated for 2016-2020 by the General Secretariat for Gender Equality (GSGE) of the Ministry of the Interior (Kefi-Chatzichamperi & Kamberidou 2021). As regards education, the main objectives include eliminating gender stereotypes and all forms of discrimination. Research shows that women's sport participation challenges gender stereotypes.

Certainly, we still have a long way to go since gender stereotypes persist, and not only in the social space of sport. Women confront gender barriers in most social spheres that provide visibility and active participation, such as sports and politics. This is a result of the deep-rooted gender order, to wit, socio-cultural dynamics that are clearly reflected in the latest Global Gender Gap Report and Index (WEF, 2023), which shows that the overall global gender gap (inequalities) could be closed in 131 years if we continue at this pace!

The World Economic Forum's latest Global Gender Gap Report and Index, using population-weighted group averages, tracks 146 countries on their progress towards

gender parity across four thematic dimensions: (1) Economic Participation and Opportunity, (2) Educational Attainment, (3) Health and Survival, and (4) Political Empowerment. It is the longest-standing index, annually tracking the progress of numerous countries' efforts to close these four gender gaps since 2006 (WEF, 2023). Undeniably, gender integration is vital; we should not have to wait 131 years to reach full parity.

### **Conflict of Interest Statement**

The authors declare no conflicts of interest.

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