

**Sports Events after the COVID-19 Pandemic: Assessing Runners’
Intentions for Future Participation in Running Events in COVID-19 era –
Evidence from Greece**

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Abstract

The COVID-19 pandemic is an unprecedented world health crisis that has spread to almost all countries of the world and has affected all the aspects of people's lives. All the sports events – including the Olympic Games in Tokyo, for the first time in the history of the modern games - have been cancelled or postponed with no clear indication yet of how or when this will be resolved. The present study focused on Greek runners who participate in running events, both in the Greek territory and abroad, in order to explore the issues they are concerned about when deciding in which race they are going to participate in the COVID-19 era. A data set was created by 621 Greek respondents who answered the e-questionnaire of this study. Two research hypotheses were tested. Factor analysis (exploratory and confirmatory) was used to test the research hypotheses. The results confirmed that there are issues of the race destination and the race conditions that Greek runners are worrying due to the pandemic. The conclusions are useful mainly for practitioners and authorities that are involved in the organization of running races in order to organize safe running events that will attract runners and thus tourists and visitors to their areas.

Keywords: sports tourism, running events, COVID-19, intention for participation; factor analysis; event destination management

1. Introduction

Sports tourism has been known as a fast growing type of tourism globally. It is used as marketing tool to promote the destination and market differentiation in the tourism segment. Hosting a sport event is vital in promoting the tourist destination, increasing the exposure of the host destination to the world, stimulating the host destination's economy and creating a number of media attentions (Bennekom, 2014). Sport events can range from mega-sporting events such as Olympic Games to medium size sports events such as national championships to smaller scale events such as local cycling, walking and running events (Getz, 2008; Vassiliadis & Fotiadis 2020). In the last decades many cities, regions, and countries have implemented strategies to systematically organize sports occasions, and have allocated human and financial resources to attract sport events. A specific category of such events are the running events. They are sports tourism attractions that take place in many cities around the globe and the marathons and half-marathon events are now very popular attractions for runners around the world (Papanikos, 2015).

Unfortunately the unprecedented COVID-19 pandemic, which is the greatest world health crisis of the last years, has spread to almost all countries of the world and has affected all the aspects of people's lives, including sport events. The pandemic has caused the most significant disruption to the worldwide sporting calendar since World War II. It has impacted virtually every sporting event world-wide. The Olympics have been postponed until 2021, World Championships and World Cups for virtually every sport have been cancelled or postponed and the calendars for most major sports have been severely disrupted with no clear indication yet of how or when this will be resolved. Among the sports events that have been postponed are the running events, in international, regional or local level. At the same time, serious concerns arose regarding the resumption of these events, the rules of their conduct but also the intention of the runners to participate in them (Burrows & Flynn, 2020). The sports

events' organizers, like every other business in tourism and cognate industries, will have to provide evidence of the implementation of satisfactory health and safety measures to convince customers to come back again (Seraphin, 2020).

Due to the unpredictable and unprecedented nature of the COVID-19 crisis, which is still ongoing and it is unknown when it will be overcome, there is an obvious lack in the existing literature regarding the intentions and moods of the potential participants in sports events, and more specifically in running events. The research of the intentions of runners to participate in running events, whenever they are going to be organized, in the midst of the pandemic, is necessary so that the responsible organizers will be more prepared to organize events, which will not only comply with the rules of hygiene and virus protection, but will also meet the expectations of participants both as athletes and as tourist visitors. As Daniels & Norman (2003) and Gratton (2004) suggest, the understanding of travel behavior of runners is very vital for developing tourism products and services as runners and their companions (family or friends) are potential tourist visitors for the race destinations.

The present study focused on Greek runners who participate in running events, both in the Greek territory and abroad, thus becoming tourist visitors in the same time for the race destinations, in order to explore the issues they are concerned about when deciding in which race they are going to participate in the COVID-19 era. The conclusions of the study are useful mainly for practitioners and authorities that are involved in the organization of running races in order to organize safe running events that will attract runners and thus tourists and visitors to their areas.

2. Sports Tourism

The term sports tourism has been adopted in recent years to describe sport related leisure travel (Gibson, 1998; Redmond, 1991; Kurtzman and Zauhar, 1993). Sports tourism is an

important part of the travel industry drawing thousands of travelers and fans to various competitions and championships. Over the past decades, sports tourism has been known maybe as the fastest growing type of tourism globally. According to BusinessWire (2017), global sports tourism counted for 25% market share of the global tourism market in 2016 and generated a total revenue of 1,41 trillion USD with an expected increasing revenue to USD5.75 trillion for the year 2021. Unfortunately this target is unachievable after the unprecedented COVID-19 pandemic (UNWTO, 2020).

Sport events can range from mega-sporting events such as Olympic Games to medium size sports events such as national championships to smaller scale events such as local cycling, walking and running events (Getz, 2008; Vassiliadis & Fotiadis 2020).

A sport event is considered to be an important component of the marketing mix of a tourist destination. It is used as a marketing tool by destination marketers to promote the destination and to differentiate the destination from other destinations in the tourism market (Koo, 2013; Priporas et. al, 2018; Fotiadis et.al 2018). Furthermore, hosting a sport event plays a vital role in promoting the tourist destination, increasing the exposure of the host destination to the world, stimulating the host destination's economy and creating a number of media attentions (Bennekom, 2014).

Mega and small scale sports tourism has the potential to contribute to the social, cultural, economic and infrastructural development of the host country or city. Visitors generate tremendous activity through different forms of expenditure on sporting and non-sporting activities. Cities provide them with a number of multifunctional, complex, multiuser environments. They are able to simultaneously receive domestic and international tourists but also business tourists and people visiting friends and relatives (VFR) (Koens et al., 2018).

According to Gibson (1998b) it is generally recognized that there are three broad categories of sports tourism: watching sporting events, visiting sports related attractions, and

active participation. Hall (1992) proposed a different categorization of sports tourists : the Activity Participants' who engage in sport related travel as a form of leisure, and the 'Hobbyists' who are amateur 'players' who travel to take part in competitions in their chosen sports. Nogawa et al. (1996) suggest that sport tourists can be divided into: (1) event participants, those individuals whose primary purpose in travelling is to take part in an organized sport event; (2) event spectators whose primary purpose is to watch an organized sport event; and (3) sport lovers who travel to take part in "self organized" sports.

In this paper we focus on running event participants, who are mainly amateur runners who travel outside their home place in order to participate in a running race event – most of them small scale events - becoming simultaneously visitors - tourists for the host destination. They usually combine their running race participation with a travel experience whether the race destination is within a day trip distance long or a multiday trip away from home (Priporas et. al, 2018; Fotiadis et.al 2018).

3. The Running Events as Tourist Events

Since the 1960s, the "running sport" has been growing internationally as part of a specific trend which is defined as "desportification and deinstitutionalization of the sport sector". This trend implies that adults no longer engage in sports because of the competitive aspect, but mainly because sports are first of all healthy, relaxing, adventurous or pleasant (Malchrowicz-Moško, 2018).

Running events are sports tourism attractions that take place in many cities around the globe and the marathons and half-marathon events are now very popular attractions for tourists around the world (Papanikos, 2015). Many running enthusiasts have the opportunity to travel to incredible places and run through picturesque locations full of interesting attractions: big cities, mountains etc. Running events are intended to be mass events fully

accessible to people with different levels of efficiency and disability, of different ages, sexes and races. These sporting events satisfy the desire to experience strong emotions and psychological needs, which are at the top of hierarchy of post-modern human needs. For active participants of such running sports events, the desire to win is not the most important. More important is to be able to participate in a sports competition—the willingness to test oneself or the desire to achieve the avowed goal (Malchrowicz-Moško & Poczta, 2018).

Within the past decades, millions of people have taken part in running events organized by running clubs, municipalities and state or local authorities or even by companies and individuals. The idea was generated in the western world. The rise of social media has undoubtedly promoted running events and therefore contributed to the increase on the number of runners participating. Nowadays, the Association of International Marathons and Distance Races (AIMS) has 472 certified races members in 120 countries (AIMS, 2020). The mass movement of runners and the corresponding running events has an outstanding position in the “sports for all” around the world.

Active participation in mass street running generates national and international tourism. More and more runners travel to take part in competitions, contributing to the development of domestic and the outbound tourism. Running events, organized in the centers of big cities and smaller towns or in rural areas, are an effective form of popularization and promotion of the region and may themselves form a touristic value activating the area and actuating the image of the city (Malchrowicz-Moško, 2012). The organizers of running competitions lay the run routes out allowing for their sightseeing advantages. Promotion of event is inextricably linked with the promotion of the town in which it takes place, therefore participants often receive numerous promotional materials from the organizers (like folders, brochures, leaflets, tourist guides, gadgets with symbols of the region, discounts on tickets to museums, local attractions) (Nowak, 2015).

The understanding of travel behavior of runners is very vital for developing tourism products and services. Previous research findings indicated that participants and spectators usually spent a large amount of money in the host cities (Daniels & Norman, 2003; Gratton, 2004). Other research findings indicated that foreigners spent more money in the host city than attendees from the home country (Schurack, 2003; Walo et al., 1996). One obvious reason for this effect is that foreigners stay longer in the city and, thus, spend more money on staying, eating, purchasing and sightseeing than locals. It must be noted that expenditures also depend on opportunities where money could be spent (e.g. attractions and sights in the city).

As many running races are annual events, consumer expenses can be regarded as a stable revenue source for the host community. It is essential for the host city and the event organizers to understand their consumers and consequently take informed actions to nurture consumer revisits of the city and the running event (Wicker et al., 2012).

4. Running Events in Greece

One of the main things that differentiated Greeks and their culture from the other people of Southeast Mediterranean, Mesopotamia and even the Far East (China) ever since Antiquity was the fact that the people of all cities and regions in the Greek territory took part in Sports. In every single city either large or small the stadium and the gym were essential educational resources creating a strong bond with the city culture, its structures, its operation, its mentality and self-existence. The citizens' involvement in mass popular sports along with the culture of the spirit led to the success of the ancient Greek civilization. There are many examples of athletes in ancient times who stood out for their performance and their achievements (Agaias from Argos who run 110 km in a day, Feidippidis from Epidaurus who run 450 km in 5 days, Efhidas who run 180 km in a day and died and many others) (Koufos, 2016)

In the last 30 years there was an important progress for the running movement. Greek society more and more recognizes the importance of the physical exercise, thus the running movement is constantly increasing which also implies positive consequences for the domestic sports tourism economy. What is important nowadays is that the contact point for the modern Greek runners is not only the stadium and the gym like the ancient times, but every free space available like parks, mountains and even the streets of the cities and the villages.

The Hellenic Association of Mass Popular Sports and Ultra Running was founded in 2006 as a natural development of the significant development of the running movement in Greece. It is the runners' collective body representing 64 runners' associations from all over Greece. Running clubs were established all over the Greek territory. Hundreds of running events are organized annually in Greece. Most of them are small scale events (Vassiliadis & Fotiadis, 2020). According to the most popular running web page in Greece, www.runningnews.gr, 367 running events were organized in Greece in 2019, ranging from international well known races that attract tens of thousands of participants, such as Athens Marathon the Authentic and Alexander the Great Marathon in Thessaloniki, to smaller scale local events with some hundreds of participants. The majority of these events are repeated annually in the same city or region, thus creating tourism revenues for the host destinations.

5. The COVID-19 Pandemic and the Running Events

The COVID-19 pandemic is an unprecedented world health crisis that has spread to almost all countries of the world. It has affected all the aspects of people's lives. Social and physical distancing measures, lockdowns of businesses, schools and overall social life, which have become commonplace to curtail the spread of the disease, have disrupted many regular aspects of life, including sport and physical activity. In addition, the global economy is

affected in three main ways: by directly affecting production and demand, by creating supply chain and market disruption, and by its financial impact on firms and financial markets.

Travel and tourism is among the most affected sectors with airplanes on the ground, hotels closed and travel restrictions put in place in virtually all countries around the world (UNWTO, 2020). The situation is unprecedented. Within the space of months, the framing of the global tourism system moved from overtourism (e.g. Dodds & Butler, 2019; Seraphin et al., 2018) to nontourism, vividly illustrated by blogs and newspaper articles depicting popular tourism sites in ‘before’ and ‘after’ photographs (Gössling et al., 2020). The World Tourism Organisation delineates that five to seven years’ worth of growth will be lost because of COVID-19 and this prediction is made without any current signs of a solution, such as a vaccine or a cure for the disease (Polyzos et al., 2020).

According to UNWTO (2020) available data points to a double-digit decrease of 22% in Q1 2020, with arrivals in March down by 57%. This translates into a loss of 67 million international arrivals and about USD 80 billion in receipts. Prospects for the year have been downgraded several times since the outbreak in view of the high level of uncertainty. Current scenarios point to declines of 58% to 78% in international tourist arrivals for the year, depending on the speed of the containment and the duration of travel restrictions and shutdown of borders, although the outlook remains highly uncertain (the scenarios are not forecasts and should not be interpreted as such). This is by far the worst result in the historical series of international tourism since 1950 and would put an abrupt end to a 10-year period of sustained growth since the 2009 financial crisis.

The current COVID-19 pandemic has impacted virtually every sporting event world-wide. To safeguard the health of athletes, participants, visitors and others involved, all the sporting events at international, regional and national levels have been cancelled or postponed – from marathons to football tournaments, athletics championships to basketball games, and

more. The Olympics, for the first time in the history of the modern games, have been postponed until 2021, World Championships and World Cups for virtually every sport have been cancelled or postponed and the calendars for most major sports have been severely disrupted with no clear indication yet of how or when this will be resolved (Borrows & Flynn, 2020).

The big issue that is not yet clear is what further consequences and disruption will be caused by postponed events being rescheduled. The time available in the global sporting calendar is limited and with a large number of events that now need to be completed at another time the calendar over the course of the next few years is going to get crowded very quickly. Should another wave of the coronavirus follow either globally or in a specific location, this would have a devastating affect and may render it simply impossible to hold rescheduled events (Borrows & Flynn, 2020).

Many developed countries (USA, China, France, Italy, Spain, Brazil and others) have experienced extremely high numbers of disease cases and even more deaths.

In Greece, the government took measures in time in order to slow up the disease spread. All the mass gathering activities were suspended by special laws issued for the occasion since the beginning of March 2020. The restrictions affected obviously all the sporting and the running events. Most of them were canceled while the rest were postponed to take place during autumn, provided that there will not be a disease outbreak that time of the year. Although, fortunately, these restrictions have led to a significant reduction in the spread of the disease (Greece is considered to be as a success story in the management of the COVID-19 crisis, based on the number of incidents and deaths) they have affected the domestic sports tourism activity based on running events. At the same time, serious concerns arose regarding the resumption of these events, the rules of their conduct but also the intention of the runners to participate in them.

6. The Conceptual Framework of the Research

The COVID-19 disease has created a new reality in the way that we have to behave and interact with others. More specifically, health safety measures and restrictions have affected the way that runners chose the races they are going to participate in. New issues are taken into account in order to decide in which race they will participate in or not. Although they feel strong desire for new running races challenges, they are thinking of issues, some of which they didn't used to think or to be afraid of in the pre-COVID-19 era.

In order to reveal these issues an analytical discussion took place with a focus group of 10 experienced runners. All of them are members of running clubs in Greece. They have long experience in participating in running events both in Greece and abroad, so they have a complete view of the needs and the aspects of a running event. This discussion revealed that the two most important issues - parameters that runners take into consideration, are the destination where the running event is going to take place and specific issues related with the services that are provided before, during and after the race itself posing mass gatherings phenomena and health issues concerns.

These issues have many similarities with the specific features and parameters that the World Health Organization (2019) underlines and should be considered by event organizers, such as the crowd density, the nature of contact between participants, whether the event will be attended by registered and non-registered participants, the number of participants coming from countries or areas affected by the COVID-19 outbreak within 14 days before the event, the type or purpose of event (for example, sporting, festival, religious, political, cultural), the duration and mode of travel of participants, etc.

6.1. Race Destination

The focus group members reported that the race destination is a parameter that runners – and all the sports tourists - seriously consider when they make their plans and choices of the running and sport events they are going to participate in and therefore to act and operate as sports tourist visitors.

After the COVID-19 pandemic, serious questions have arisen due to the race destination: a) Distance away from home. If the race destination is far away from home, an overnight staying – or more - is necessary, which means that the runner has to use an accommodation for the day before or after the event. Will this accommodation fulfil the COVID-19 requirements? b) Mode of travel to the race place. The use of public transportation is considered to be more dangerous in relation to disease transmission than the private owned vehicles. c) The race destination's COVID-19 profile. Runners like all tourists take the area COVID-19 crisis management profile seriously into account. People hesitate to travel to a place that has been reported with a great number of COVID-19 cases and more over deaths.

Race destination has been underlined as a crucial factor for runners' decision making process in the pre-COVID-19 era existing literature. According to Murphey & Lee (2012) location is the crucial pull factor for runners when deciding whether or not to participate. Location is referred to in two ways. First, if the race is close to home and convenient, they are more likely to participate because they are already in the area. Second, location is referenced in terms of a vacation option based on the destination. The race becomes an excuse for runners to take a trip with their family when the event is out of state or not easily accessible from home. If runners are to travel outside of their local area, the race would need to be in an attractive location and/or somewhere they had always wanted to go. The place of the event was recognized as one of the key components by Weed and Bull (2009) and Poczta et al. (2020). Kaplanidou & Vogt (2007) suggest that the destination can also affect the sports event image because they are providers of the destination experiences that are related to the

event. Hallman et al. (2010) suggests that the destination type also interacts with the sports event image perceptions. Moreover, in the COVID-19 era literature, mobility has been reconsidered (Renaud, 2020), with a greater tendency for individual to think more in terms of community and to stay local (Lapointe, 2020), as part of a global movement to develop strategies to combat climate change (Prideaux et al., 2020), and to stop the spread of the COVID-19 (Jamal & Budke, 2020). This trend seems possible to affect sports events too.

Consequently, the following hypothesis was tested:

H1: There are special issues regarding the race destination that the potential participants (runners) worry about due to the COVID-19 pandemic.

6.2. Race Conditions Issues

The second set of issues that the focus group members have posed was about the race conditions related with the services provided before, during and after the race itself posing mass gatherings phenomena and health issues concerns. After the COVID-19 pandemic serious questions have arisen due to the race conditions: a) Is it necessary for all the participants to have negative COVID-19 test proof in order to participate in the race? b) The race landscape. Races that are conducted in a city area usually attract much more participants and spectators than those taking place in mountains or rural areas. c) The number of participants and the race meeting points such as the start and the finish point, the race reception, the provisioning stations along the race route are places that a great number of runners usually crowded. d) The compliance with the hygiene rules by the race's participants and other stakeholders (volunteers, race support staff etc). e) If the organizers have taken all the necessary measures and have prepared a COVID-19 contingency planning for any case (i.e. a report of COVID-19 case among participants). f) The consumption of the products that will be offered to the athletes during the race: bottles of water, beverages, food, medical stuff

etc. Runners worry about these issues after the COVID-19 pandemic because all of them increase the statistic potential to disease transmission. g) The use of common use facilities such as the locker rooms, the toilets etc.

In the pre-COVID-19 period literature, there are references that support the role of race conditions and services provided in the overall satisfaction experience of sports tourists. Fotiadis et al (2016) refer to the differentiation of urban or rural environment in which the event is situated. Papanikos (2015) argued that the number of participants - either athletes or attendants – also determines the size of the event: small, medium and mega events. Wicker et al (2012) suggest that the services provided at the event should be of high quality as this fosters the overall satisfaction and leads to future visits. This begins with registering for the race, the ease of picking up the race number, the services provided around (e.g. pasta party) and during the race (e.g. variety of drinks and food offered along the course), and ends with the certificate provided for the athletes after the race. In addition, good spots to see the athletes – including music bands to create a favorable atmosphere while waiting for the runners – along the course should be easily accessible for the spectators and coaches. Moreover, an enchanting atmosphere can be provided through dedicated volunteers assisting the runners before, during, and after the race.

Consequently, the following hypothesis was tested:

H2: There are special issues regarding the running race conditions that the potential participants (runners) worry about due to the COVID-19 pandemic.

6.3. Variables Definition

In order to test the two hypotheses 14 variables were selected coming from literature review and the discussion with the focus group members. Table 1 shows the variables X1 to X5 that were used for race destination factor (RD) and the variables X6 to X14 that were used for the

race conditions factor (RC). The variables were measured by a five-point Likert scale (1= definitely no, 5=definitely yes). The proposed model that was tested is given graphically in diagram 1.

(Table 1. Factors and the used variables)

(Diagram 1. The Conceptual Model)

7. Research

7.1. Data Collection Process

The sample size for this study was defined following Sudman's (1976) proposed method of the average sample size of similar research studies. Thus, the sample sizes that were analyzed in similar runners' surveys were recorded. The data is presented in the Table 2

(Table 2. Size of samples in relative research)

According to this data, the average sample size of similar surveys was found to be 484 participants. So, the sample of this study should be at least 484 respondents, requirement that was fully accomplished by the current study as the final number of the responses collected was 621 respondents.

A questionnaire was used to obtain data on the factors influencing runners' decision process for the choice of running events in the COVID-19 era. The data was gathered during the period June 3rd to June 14th 2020.

The data was totally obtained through an online survey using an e-questionnaire created in Google Forms. In order to ensure that the questionnaire will be answered by runners from all over Greece, the invitation to participate in the survey and the link of the survey were promoted through specific channels. More specifically, the link was forwarded in two ways: a) Through the biggest specialized running websites in Greece such as runningnews.gr, runster.gr and sportevent.gr. Greek runners use these websites to keep them up to date on everything related to running and running events. B) Through direct message to

the Facebook page of 27 Runner Clubs from all over Greece. In both ways, runners were invited to participate in the research by answering and submitting the questionnaire on line through their computer or smartphone.

The questionnaire had 17 questions in three parts. The first part of the questionnaire focused in the variables related to the race destination variables (X1 to X5) while the second part focused in the variables (X6 to X14). In the end of the questionnaire there were 3 questions regarding the demographic profile of the participants in the research.

7.2. Data Analysis and Results

From the total of 621 participants in the study, 524 were men and 97 women, 483 have the highest education level and 138 have a secondary education level, 103 are up to 35 years old, 247 between 36-45, 218 between 46-55 and 53 more than 56 years old.

The readiness and the favorability of the questionnaire measurement items were analyzed with a pilot sample of thirty runners before the final measurement. More specifically, every item of the main body of the questionnaire has been analyzed with SPSS cross-tabulation based on the respondents' answers. These answers were related with the option favorable and unfavorable questionnaire item, from 15 two-pair respondents. Cohen's Kappa value was between min 0.83 and max 0.87 (Values $k_n=0.81-1.00$ with $p=0.00$ This k value indicate a quite perfect agreement between the paired respondent judgments) (Cohen, 1960; Altman, 1999).

In the next step of the analysis, Factor Analysis (FA) and more specifically Exploratory Factor Analysis (EFA) was used. FA approach with *Oblimin* rotation technique was used to test the construct validity on the research study selected data set. The FA results satisfy the criteria of construct validity examination for this study. More specifically loadings are at minimum level equal to the critical factor loading value of 0.40 and all the items with

cross loadings above this score were cleared. The construct discriminant validity was also tested by using a model of CFA approach that was based on the results of the EFA approach (Taherdoost, 2016; Hair et al., 2015).

More specifically, in the EFA analysis the initial 14 variables were examined and only those with loadings of 0.4 or greater and also those who charged to a single factor were extracted. Variables charging below 0.4 and charging simultaneously to both factors attributed by factor analysis were ignored. The variables X3, X6, X7, X8, X10, X13 and X14 were removed and ignored from the original theoretical model and were not subsequently included in the following Confirmatory Factor Analysis (CFA). The *Kaiser-Meyer-Olkin* (KMO measure of sampling adequacy) statistical index was used as a criterion of adequacy of sampling to assess the suitability of the sample for Factor Analysis. The KMO value was for this study equal to 0.800 [KMO values greater than 0.5 are acceptable (Hair et al., 2015)] and the *Bartlett's Test of Sphericity* statistical significant at the 0.001 level (Apr. Chi-square=1952,65, df=21). The two-factor FA solution explained the 60,8 % of the total variance. The extraction method of Maximum Likelihood (ML) and the *Oblimin* Rotation technique of the FA with *Kaiser Normalization* yielded two factors showing four variable loads on the first factor [X5 (0.855), X1 (0.805), X2 (0.721) and X4 (0.627)] as well as three loads on the second factor [x11 (0.831, X12). (0.808) and X9 (0.472)].

More analytically, the internal consistency reliability level of the scale structure of the measurement items shows a quite high consistency level between the parts of the measurement tool. The *Cronbach Alpha* coefficient measures the reliability of the Likert type scales that was used to develop this study. The total *Cronbach Alpha* value for the 7 items after the EFA analysis was equal to 0.839 with min=0.796 and max=0.835 values that are ranking for this study between the following “high reliability” cut-off points 0.70-0.90 (Taherdoost, 2016; Hair et al., 2015). Respectively for the two factor solution, the 4 variables

measurement items of the factor one (RD; Race Destination) gives a reliability value equal to 0,850 while the second factor (RC; Race Conditions) based on 3 measurement items gives a value of 0,779.

Summarizing the result of Exploratory Factor Analysis in an initial statistical quantitative statistical analysis model, it yielded two alternative factor models namely the First Order Factor Model (Figure 2) with two factors and the Second Order Factor model (Figure 3) with one basic unique factor, presented below. IBM Amos 7.0 software for SEM modeling approach was used in this analysis.

(Figure 2. The Initial model and Final result of the First Order Confirmatory Factor Model)

(Figure 3. The Initial model and Final result of the Second Order Confirmatory Factor Model)

The above models can be regarded as acceptable if we follow the theoretical model fit determinations using the criteria of GFI, CFI, RMSEA, CMIN/df and TLI.

(Table 3. Model fit criteria and values)

More specifically, based on the results that are presented in the table 3 the two models show good fit (CFI and GFI>0.90) to the CFI & GFI indices. While the best adaptation between the two models can be considered for the first order model, we identify two discrete factors to describe the runners' races participation behavior in the COVID-19 era. These are the race destination and the race conditions. Consequently, the two research hypotheses are supported by these data.

8. Discussion and Conclusions

The present study revealed that there are issues regarding the race destination and race conditions that runners worry about due to the COVID-19 pandemic. Race destination and race conditions issues were identified in the existed literature as factors that influence participants in the running events to decide which running event to chose, but there was no evidence or prior research related to the new reality that COVID-19 brought to all people's lives, including tourism and sports events.

The data analysis showed that seven of the total fourteen issues that were initially selected by the literature review and the discussion with a runners' focus group are important for runners' decision to participate in a running event in the COVID-19 era. The first one is how far the race destination from the home place is. A destination far away from home that is not within a daily trip convenient distance poses the need for accommodation for the participants. So they have to stay in an unknown facility which is not their home. It is logical for them to worry if the facility is safe for their stay due to COVID-19 disease. The next two issues have to do with the COVID-19 profile of the race destination area (inland or abroad). Although the pandemic data changes as time goes by, there are countries or regions within a country that are considered to be infected more than others by the epidemic. So restrictions on travel may be applied, or potential travelers and visitors are negative to go there in order to participate in a running event. Another big issue that is linked with the race destination is the means of transport to the destination, especially when it is far away from home. The use of the private owned vehicle is obviously considered to be much safer than the use of the public transport, which is the only way to go if the race destination is far away from home place. COVID-19 context is offering local businesses opportunities to grow, as it appears that local tourism is going to be more popular than outbound tourism (Seraphin, 2020).

In addition to the race destination issues the research revealed the race conditions issues that are serious for the runners. More specifically, they are concerned about the number of participants. Races with great numbers of participants are possible to lead to mass gathering phenomena, situation that has been identified as one of the most serious dangers for the virus transmission by the responsible health authorities. Perhaps the three most important protection measures that are promoted in order to limit the disease transmission is the use of a face mask, the thorough wash of hands and the avoidance of many people gathering in closed places. Another important issue is whether the race support staff will comply with the safety measures. Before, during and after the race, runners usually come in contact with the race support staff: first when they register, then along the race route when they want to consume the food and drink product supplies offered by the organizers (water, beverages, energy bars, snacks etc), and finally at the race finish point. Last but not least is the organizers' contingency planning preparation in order to deal with a COVID-19 incident if there is so. It is now necessary for such events not only to be organized according to special safety protocols but the organizers should take care of the elaboration of COVID-19 emergency management plans. As Seraphin (2020) argues,

From the results of the research it is obvious that the pandemic, as expected, has significantly affected the runners in the decision-making process for the selection of the road races that will now participate. Understanding the specific issues facing runners in relation to COVID-19 can greatly help the organizers of future road races. Seraphin (2020) supports that in order for event organizers to be perceived positively by their customers, they will have to focus on the health and safety aspect, as this will be a key concern of customers (as indicated by the results section). So doing, event organizers (and other professionals and businesses), will need to keep themselves informed in terms of health and safety legislations after the lockdown in order to ensure a safe and sound environment to their customers (logos).

It is certain that no race destination or event would want to be identified with a COVID-19 infection. This would result in the negative publicity and promotion of this destination and the event in question, which would have a negative impact on the tourist promotion and activity of the affected area.

Therefore, the attention of the organizers should be focused on two main directions. The first direction is related to the prevention and minimization of the possibility of participation of infected people in the event (either as runners or as support staff). This can be achieved by implementing measures such as requiring them to have a recent virus test (which means extra financial burden), pre-race thermometry and banning people from areas with a high number of COVID-19 cases to participate. The second direction is related to ensuring the full compliance of the prescribed measures and safety rules during the race. For this purpose, they only have to follow and implement faithfully the health protocols issued by the competent authorities and concerning the organization of such events in order to prevent the transmission of the virus. These measures should be presented and promoted in a simple and understandable way so that they can be understood and implemented by potential event participants.

It is certain that until effective treatment or preventive active vaccine against COVID-19 is found, the organization of running events and sports tourism in general will not be the same as in the pre-COVID-19 era. However, there are conditions for the organization of running events with a high level of safety so that they continue, even to a lesser extent than in the pre-COVID-19 era, to contribute in increasing the number of visitors to the area where the event is organized and to further to have positive influence to the local economy.

Future research could focus on exploring views on the issue for runners from other countries. In addition, it would be very important to investigate the experience of the participants in running events that will be organized during the COVID-19 era, in order to

evaluate issues that they worry about in relation to their preparation and participation in the race. The outcomes of these researches would be useful to running events organizers in order to offer more safe experiences for potential participants.

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Table 1. Factors and the used variables

Factors	Variables	Description
Race Destination (RD)	X1	Participate in a race conducted in Greece far away from home with night staying accommodation need
	X2	Participate in a race conducted in a Greek region with a remarkable number of COVID-19 incidents
	X3	Participate in a race conducted abroad in a country with a small number of COVID-19 incidents
	X4	Participate in a race conducted abroad in a country with a great number of COVID-19 incidents
	X5	Participate in a race (within Greece or abroad) that I have to use public transportation to go to
Race Conditions (RC)	X6	Prefer all race participants to have previously undergone a COVID-19 diagnostic test
	X7	Participate in a running race held in an urban area
	X8	Participate in a running race held outside an urban area (rural area, mountain etc)
	X9	Concerned about the gathering of many people in different parts of the race (secretariat, start, provision stations, finish).
	X10	Concerned about the compliance with the personal hygiene measures by the other participating runners
	X11	Concerned about the compliance with the personal hygiene measures by the other race's stakeholders
	X12	Concerned about the measures taken by the organizers to deal with a possible suspicious COVID-19 incident
	X13	Consume nutrition and hydration products provided by the event organizers.
	X14	Make use of the shared facilities (locker rooms, WC etc)

Table 2. Size of samples in relative research

Previous relative research samples	Sample size
Wicker et al (2012)	576
Koronios et al (2015)	268
Nowak (2015)	669
Koronios et al (2016)	321
See & Seah (2017)	383
Malchrowicz-Moško and Poczta (2018)	560
Poczta & Malchrowicz-Moško (2018)	312
Parra - Camacho et al. (2019)	937
Sanchez Garcia et al (2019)	40
Poczta et al (2020)	774
Average sample size	484

Table 3. Model fit criteria and values

<i>Model Fit Criteria</i>	<i>First order CFA model</i>	<i>Second order CFA model</i>	<i>Cut – off criterion value</i>	<i>Reference</i>
GFI	0.943	0.936	GFI >0.90	Byrne, 1994
CFI	0.938	0.925	CFI >0.93 CFI >0.90	Byrne, 1994 Maruyama, 1998; Tabachnik & Fidell, 2013
RMSEA	0.133	0.139	RMSEA < 0.08	Hu & Bentler, 1999
CMIN/df	11.939	13.056	CMIN/df < 5	Schumacker & Lomax, 2004; Jöreskog & Sorbom, 1993
TLI	0.882	0.870	TLI > 0.95	Hu & Bentler, 1999

Note: Where RMSEA = Root Mean Square Error of Approximation; CFI = Comparative Fit Index; TLI = Tucker Lewis Index; GFI = Goodness of Fit index

Diagram 1. The Conceptual Model

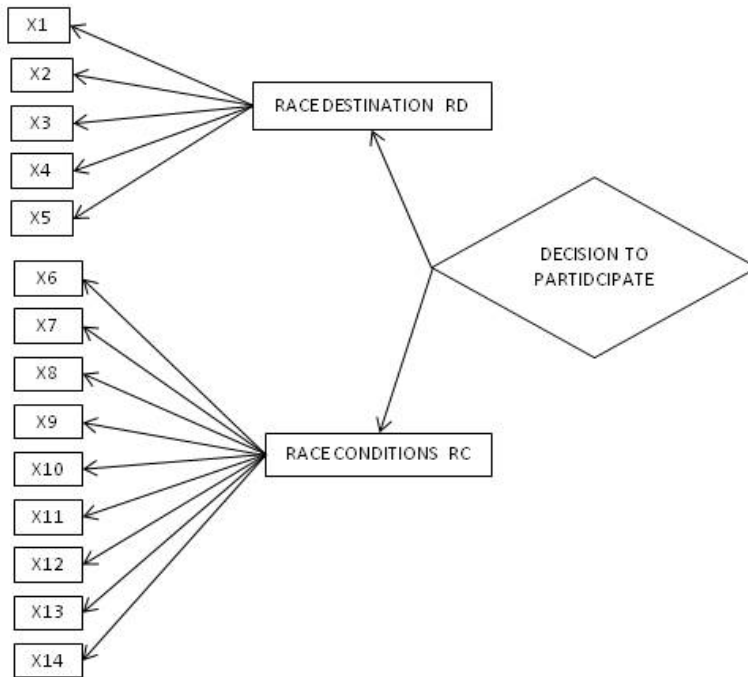


Figure 2. The Initial model and Final result of the First Order Factor Model

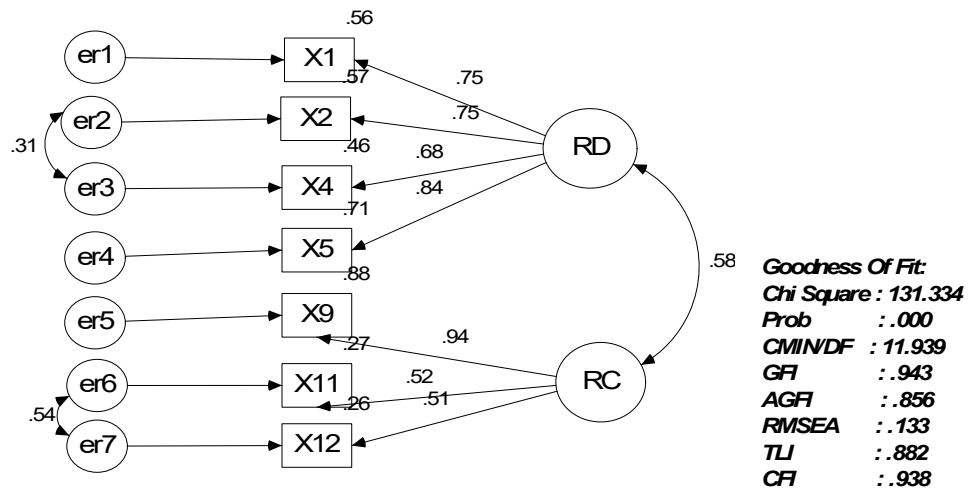


Figure 3. The Initial model and Final result of the Second Order Confirmatory Factor Model

