# Sport-Tourism Running Events in the Post-COVID-19 World: Any Sign of Change?

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The COVID-19 pandemic has led to significant restrictions on sports and the sporttourism event industry. Consequently, event organisers must consider and implement new safety strategies to protect event attendees. This empirical study focuses on active runners and their intention to attend future running events following the COVID-19 crisis, and the perception of how important they find some of the nonpharmaceutical safety-related protective measures when attending sporting events (e.g. limited number of people, prescribed minimum distance, no-contact payment etc.). To collect data, a survey questionnaire was conducted in February 2021 among the running community in Croatia. Besides descriptive statistics, ANOVA and t-test were employed to test whether statistically significant differences exist in the perception of safety protective measures among participants depending on their motivation and the type of running event. Respondents are very impatient regarding events and it seems they do not perceive the safety protective measures as very important. The majority of respondents plan to attend one-day races in their home country within a few weeks and they are mostly motivated by competition and improvement of racing skills, socializing and fun. The type of motivation and the type of running event are not found to have a major influence on the perception of safety protective measures. Even though running is an outdoor sport, safety protective measures might be a challenge for event organizers in the future. Revealing the runners' intentions to visit running events and their attitudes towards safety protective measures, this study could shape event organizers' future managerial and security strategies.

Keywords: sport-tourism events, running, COVID-19, safety-related protective measures

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# Introduction

Event tourism (culture, sporting and business-related events) has become a rapidly expanding segment of the leisure travel market in the last decades (Alexandris & Kaplanidou, 2014; Getz & Page, 2016; Maditinos et al., 2021; Shifflet & Bhatia, 1999). The connection between sport and tourism is not new, and scholars have considered the rise of sporting events as one of the most significant components of event tourism and one of the most extensive elements of sporting tourism (Getz, 1998; Gibson, 1998). The growing use of sporting events is an attempt to expand economic development opportunities and achieve tourism growth (Zhang & Park, 2015).

Given the contemporary circumstances, one of the earliest signals of the severity of the spread of the COVID-19 virus in countries was the swift cancellation or postponement of many highly prominent local, national or international amateur and professional sporting events (Borovcanin et al., 2020; Cooper & Alderman, 2020; Perić et al., 2021). The cancellation of such events due to the COVID-19 pandemic was to protect the health and safety of individuals and communities; but it resulted in economic loss in tourism revenue for local economies and deprived travellerfans (Cooper & Alderman, 2020). 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 (Lapointe, 2020; Turnšek et al., 2020; UNWTO, n.d.). Sport participation, business activity and related travel have thus been significantly affected (Gössling et al., 2020).

Still, the sport events industry is a big business (ATM Team, 2017; UNWTO, n.d.; Weed, 2020) and in order to minimize the listed losses, organizers attempted to re-arrange the events while waiting for the population to be fully vaccinated. Many sporting events and professional leagues made plans to resume competition and bring attendees back to events, and some of them have already resumed (with or without a limited number of spectators inside the venue) with significant changes in the experience (DiFiori et al., 2020). Certain safety aspects such as technical features, security checks at entry and the presence of medical staff are common practice in the case of sporting events (Kaplanidou & Vogt, 2010; Pickering et al., 2010; Perić et al., 2019). However, in the light of COVID-19 and uncertainty about vaccination success and validity, some additional safety measures should be considered. For instance, non-pharmaceutical protective measures such as temperature checks for competitors, staff and spectators, no-contact payment for all services, prescribed minimum distance between spectators, limited food and beverage offer and limited

number of visitors in common places were considered (Perić et al., 2021).

When it comes to predicting future participation, some recent studies show that people are eager to participate in sport (and) tourism activities (Hemmonsbey et al., 2021), but not all participants share the same motivations to attend and attitudes towards safety protective measures might differ (Perić et al., 2019; 2021). It is assumed that outdoor competitions will resume faster than indoor, and this is especially true for competitions held in nature, that is, outside the stadiums. Given this, running events, which are very popular all over the world (Lee et al., 2017; Nowak, 2015; Zach et al., 2017; Scheer et al., 2020), might be a reasonable option to start with. Still, the attitudes of people belonging to the running community towards their participation in post COVID-19 running events and towards their perception of safety protective measures have not been analysed to date.

This empirical study therefore focuses on the intention of runners to attend future running races and the perception of how important they find some of the safety-related protective measures when attending running races in post COVID-19 times. It will also test whether perception of safety protective measures among participants depends on the type of running event they participate in and their motivation to participate. The results should be a guideline for event planners and organizers, practitioners and governing bodies, who should adopt safety measures which the attendees would like to see put in place before events resume.

This paper now turns to present a review of sport tourism during the pandemic as well as motivation to participate in sport and running as a popular type of sport activity. The next sections will then present the research methodology and main findings. The paper concludes with a discussion and some concluding remarks highlighting the theoretical and practical implications and future research paths.

## **Literature Review**

#### Sport Tourism During the Pandemic

Sport tourism is a symbiosis between people, places and activities (Turco et al., 2002; Weed & Bull, 2009;

Perić et al., 2019). During the pandemic, social gatherings were strictly limited or forbidden, thus challenging the essence of sport tourism. The devastating impact of COVID-19 for each of the intersecting areas of professional sports events (Swart & Maralack, 2020) and global tourism became clearer during February and March 2020, when sports event hosts and administrators began to consider whether their events should be postponed or cancelled (Weed, 2020). The pandemic has clearly dealt an economic blow to many nations through the postponement or cancellation of sport tourism activities, especially in emerging nation contexts. The scale of the global disruption to the sector is highlighted by the postponement and potential cancellation or curtailment of sport megaevents (Hemmonsbey et al., 2021). For instance, the UEFA Euro 2020, the Tokyo 2020 Olympic Games, and the 2021 IAAF World Championships were postponed and rescheduled while the 2020 Wimbledon Championships was cancelled. On the other hand, the list of cancelled small-scale sport events is endless.

The various levels of lockdown experienced by countries around the globe meant that domestic leagues and international sporting fixtures that would usually attract both a travelling live audience and large mediated television audiences stopped abruptly. This left television networks with gaps to fill in their schedules, and sports fanatics with gaps to fill in their lives (Hemmonsbey et al., 2021). To satisfy the need of spectators and media houses, professional leagues (like the NBA and MLB leagues in the US, football leagues across the world, etc.) resumed competitions but in most cases without spectators inside the venue, and with additional non-pharmaceutical protective protocols implemented (Ludvigsen & Hayton, 2020; Perić et al., 2021).

Additionally, as more and more people are vaccinated, spectators are getting permission to participate at events, although in a limited number. However, the entire population cannot be vaccinated in this short time (and some people do not want to be vaccinated) and what the future of the sport tourism industry will look like and how it will change in order to adapt to changing global conditions remains to be seen (Hemmonsbey et al., 2021). Running as a Popular Type of Sport Activity According to Nowak (2015), running is one of the simplest forms of human movement and the most natural way of experiencing psycho-physical fatigue. During the last few decades, running has been commonly recognized as an effective preventive measure against diseases of civilization. For many, running constitutes a permanent component of a healthy lifestyle; for others, it is a way of life and satisfactory leisure activity (Nowak, 2015). According to Lee et al. (2017), running is a popular and convenient leisure-time physical activity with a significant impact on longevity and in general, runners have a 25–40% reduced risk of premature mortality and live approximately 3 years longer than non-runners.

Besides being a leisure activity, running is also a competitive sport. For instance, in athletics, there are many short, middle and long courses disciplines. The marathon, a running race of 42.2 km, is an example of a long-distance race held as a rule in urban areas. Marathon races have become popular all over the world and they have been undergoing a unique revival (Borovcanin et al., 2020; Nowak, 2015), while the number of attendees determines the prestige of each race. Marathon participants include professional athletes and amateur joggers, the able-bodied and the disabled, and the old and the young, together forming a diverse and colourful crowd (Nowak, 2013). Global participation in running races, according to Andersen (2021), peaked in 2016 with a total of 9.1 million participants and then it declined to 7.9 million (a decline of 13%) in 2018; the change in participation in the last 10 years results as an increase in participation of 57.8% (from 5 to 7.9 million participants).

Additionally, there is a growing trend in the popularity of off-road races. Although the categories and terminologies are often used interchangeably and without precision, trail running, mountain running, sky running, fell running, orienteering, obstacle course racing and cross-country running all take place predominantly in nature and off-road terrain (Scheer et al., 2020). Despite the fact that there is no clear definition of nature sports in the academy (Krein, 2014), these sports could be included in this group because they are mostly practiced on off-road paths located in natural spaces and, in many cases, in protected areas of high natural and ecological value.

The context and overall atmosphere of road and country races differ a lot, and runners are fully aware of traits as well as risks, including the safety issues, associated with the venues (Perić & Slavić, 2019; Perić et al., 2019). Hence, the runners' perception of safety protective measures might depend on the type of the event, that is, whether it is road (mostly in urban areas) or off-road (mostly in country) races. Still, regardless of the type of event, the common denominator for all long-distance running activities is that their effectiveness depends on the durability of one's psychical, physical and motor dispositions (Maditinos et al., 2021; Nowak, 2015; Scheer et al., 2020). In the case of ultra-marathons (any running event over marathon distance conducted in any terrain and surface), it is not clear whether they can be explicitly classified as a competitive sport event or extreme recreation because the overall classification relies more on its psychosocial context rather than on the type of activity (as sport or recreation).

Motivation to Participate in Sport and Running Events Different theories like the needs theory of personality (Murray, 1938), hierarchy of needs theory (Maslow, 1943) or concept of optimal level of stimulation (Berlyne, 1960) might explain why people participate in various sport, leisure and tourism activities. Regarding spectators, that is, passive participants, the quest for fun and excitement, social interaction (with family members, friends, and business associates), selfactualization generated by team identification, and nostalgic association are the main motives to visit sport events (Cassidy, 2005; Duan et al., 2020). When it comes to active participants, the motives for participating in sport are manifold and can be divided into physical (e.g. refreshment of body and mind, health and weight control, and pleasure), interpersonal motivators (social interaction, sense of affiliation, to have fun, to seek new and different experiences), and psychological, status and prestige motivators (personal development, goal achievement and winning, and ego enhancement) (McIntosh & Goeldner, 1986; Hodeck & Hovemann, 2016; Xie et al., 2020). For nature sports,

enjoying nature is a strong motive, too (Hodeck & Hovemann, 2016; Perić et al., 2019).

Race runners share similar motives for participation. The motives of marathon runners have been widely explored and motives are mainly categorized as psychological (maintaining or enhancing self-esteem, coping with negative emotions), social (sense of affiliation and receiving recognition or approval from others), physical (general health, weight concern), and achievement (competition with other runners and personal goal achievement) (Masters et al., 1993; Deaner et al., 2011; Zach et al., 2017). The motivations of runners have been further analysed in different sport event contexts (i.e. different venues and course lengths), but the conclusions were very similar (Yates, 1991; Ogles et al., 2000; Shipway & Jones, 2007; Poczta et al., 2018; Malchrowicz-Mośko et al., 2020).

Finally, previous studies confirmed that people driven by different motives usually have different expectations about event and destination attributes (Kaplanidou et al., 2012; Buning & Gibson, 2016; Perić et al., 2019), and therefore it might be expected that the type of motivation is the factor that influences participants' perception of safety protective measures. Hence, the different motivations displayed by runners might affect their attitudes towards competition in general as well as attitudes towards some event attributes including safety protective measures.

### Methods

In order to fulfil the research goals, a survey questionnaire was conducted in February 2021 in Croatia.

## **Questionnaire Development**

The first part of the questionnaire encompassed participants' intentions to attend running races, running race preference (cross country, mountain running, trail, ultra-trail, road and track running; according to World Athletics, n.d.), type and motives of participation, duration and the destination of the running race. Five different motives for participation at running races have been used, namely fun (Hodeck & Hovemann, 2016; Perić et al., 2019), socializing (Masters et al. 1993; Perić et al., 2019), to enjoy nature

Safety protective measures	Source			
Availability of hand sanitizers/cleaners	Lee et al. (2012), Perić et al. (2021), Xiao et al. (2020)			
Official personnel wearing personal prot. equipment (masks)	Lee et al. (2012), Perić et al. (2021), Xiao et al. (2020)			
The spectators wearing personal protective equipment (masks)	Lee et al. (2012), Perić et al. (2021), Xiao et al. (2020)			
Temperature checking for the competitors before the competition	authors			
Temp. checking for the staff/employees before the competition	Perić et al. (2021)			
Temperature checking for the spectators upon arrival	Perić et al. (2021)			
Exclusive online registration	Perić et al. (2021)			
Limited number of competitors	authors			
Limited number of spectators	Gössling et al. (2020), Perić et al. (2021)			
The start of the race at intervals in small groups	authors			
The minimum distance between spectators is prescribed	Lee et al. (2012), Perić et al. (2021)			
Limited food and beverage offer	Perić et al. (2021)			
Limited number of visitors in common places (rest., toilets)	Perić et al. (2021)			
No contact payment for all services	Perić et al. (2021)			

(Hodeck & Hovemann, 2016; Perić et al., 2019), and to enhance health and to look better (Masters et al., 1993; Perić et al., 2019). The second part focused on respondents' perception of the importance of the COVID-19related protective non-pharmaceutical measures when attending running races. Most items have been designed according to Gössling et al. (2020), Lee et al. (2012), Xiao et al. (2020), and Perić et al. (2021) (e.g. availability of hand sanitizers/cleaners), while a few items that reflect the context of running were amended by authors (e.g. the start of the race at intervals in small groups). The final version which included 14 items related to personal safety protective measures is given in Table 1, but respondents were left with an option to add any other safety measure they wished to identify.

Among safety protective measures, there was no item referring to respondents' opinion about how important they perceive vaccination before attending the running race, because the questionnaire was about non-pharmaceutical safety protective measures and, in the period of the empirical research, there was no possibility for people who were not part of vulnerable groups in Croatia to receive the vaccine. Respondents' perception was measured on a 5-point Likerttype scale, meaning: 1 = not important at all, 2 = of little importance, 3 = of average importance, 4 = important, and 5 = very important/essential. The final part of the questionnaire comprised socio-demographic data. The questionnaire was prepared and conducted in the Croatian language. An independent certified translator carried out forward and backward translation to ensure the content validity of the questionnaire.

# **Data Collection**

Data for this preliminary analysis were collected in February 2021 by an online questionnaire due to the limited mobility and recommended social distancing. The link leading to the electronic version of the questionnaire was active from February 4th 2021 until February 22nd 2021. The questionnaire was distributed within the social networks of five running clubs/groups thanks to the groups' leaders who allowed us access to share the link among members and followers.

Participation in the survey was voluntary and the answers remain anonymous. In total, 248 survey questionnaires were collected, but after additional check, 183 valid responses were acceptable and proceeded to further analysis.

#### Data Analysis

Descriptive statistics present respondents' characteristics and their preferences as well as their assessment of the importance of the safety-related protective measures when attending running races. Besides descriptive statistics, ANOVA and *t*-test were employed to test whether statistically significant differences exist in perception of safety protective measures among participants depending on their motivation and type of running event. Due to the similar contexts regarding types of running races or running styles, the respondents have been merged from six to two groups. Respondents that expressed their intention to participate at cross country running, mountain running, trail running and ultra-running events were classified as off-road running groups, while those who intend to participate at road running and track running events were classified as the road running group. To examine and analyse the research data, SPSS software was used.

## Results

## Sample Profile

The respondents' socio-demographic data show that 63% (115) of the respondents are women and 37% men (Table 2). Most of the respondents are middle aged 35–44 years (39%), living on the north coast of Croatia (57%) and central Croatia (36%). In general, respondents are highly educated, with around 70% of them having a university diploma. They are mostly employed, in either the private sector (55%) or public sector (38%).

### **Respondents' Intentions**

By concluding the empirical part of the study and analysing the answered questions, it was easy to conclude that all the respondents are very eager to attend running races. The vast majority of respondents (140 or 77%) are ready to attend an event within 7 days while 13% (23) would like to attend a running race in 2 or 4 weeks. Only 11% (20) of the respondents would like to wait a couple of months (1–2, 3–4 or more than 6 months). For their next running race, most of the respondents prefer events in Croatia (171 or 93%). Further, a majority choose trail running (98

	<b>0</b>	
Gender	Female	115
	Male	68
Age	19-24	4
	25-34	31
	35-44	72
	45-54	68
_	55-64	8
Place	East Croatia	11
	Central Croatia	56
	Mount. Croatia	3
	North Coast	105
	South Coast	8
Education	Without education	0
	Elementary school	1
	High school	52
	College	95
	Postgraduate study (Special., PhD)	35
	Without education	0
Employment	Public sector	69
	Private sector	101
	Unemployed	2
	Retired	1
	Student	5
	Other	5

or 54%) and road running events (65 or 36%). Actually, 110 respondents (60%) belong to the group of off-road runners and 73 (40%) to the group of road runners (Table 3).

Regarding respondents' motivation for event participation, they are mostly motivated by competition and to improve racing skills (47 or 26%), socializing (45 or 25%) and fun (42 or 23%). Enjoying nature (27 or 15%) and health reasons (22 or 12%) were lessmentioned motives (Table 4).

Additionally, in most cases respondents will revisit the event (157 or 86%), meaning that they have already participated in the event in previous years, while for 26 respondents (14%) this would be their first visit to a chosen event. Respondents would usually travel with

Table 2 Respondents' Socio-Demographic Data

Type of running race	(1)	(2)
Cross country running	6	3
Mountain running	4	2
Trail running	98	54
Ultra-running	2	1
Road running	65	36
Track running	8	4
Total	183	100

Table 3 Type of Running Race Respondents Want to Visit First

*Notes* Column headings are as follows: (1) frequency, (2) percent.

 
 Table 4
 Respondents' Main Motives for Attending the Running Races

Motives	(1)	(2)
Fun	42	23
Socializing	45	25
Competition and improv. of racing skills	47	26
Enjoy nature	27	15
Health and good looks	22	12
Total	183	100

*Notes* Column headings are as follows: (1) frequency, (2) percent.

friends (89 or 48%) or with a partner (36 or 20%). Around 17% (31) would travel alone and 15% (27) with their family. Since most of the events are one-day (140 or 77%) or two-day (34 or 19%) competitions, respondents will in most cases stay only for a day (52%) or two (25%) in the destination where the competition is held. Only 24% of respondents will stay three or more days in the destination of the event venue.

Respondents' Attitudes to Safety Protective Measures The respondents do not find safety protective measures particularly important when attending running races. Table 5 shows that respondents do not find any of the proposed measures as (very) important. However, just five measures, that is, *Official personnel wearing personal protective equipment (masks ...)* (mean 3.2), *Registration of competitors exclusively online* (3.1.),

Table 5	Respondents' Perception of the Importance of
	Safety Protective Measures while Attending the
	Running Races

8		
Safety protective measures	(1)	(2)
Availability of hand sanitizers/cleaners	2.8	1.33
Official personnel wearing personal protec- tive equipment (masks)	3.2	1.36
The spectators wearing personal protective equipment (masks)	2.7	1.37
Temperature checking for the competitors before the competition	2.9	1.46
Temperature checking for the staff/employees before the competition	3.0	1.45
Temperature checking for the spectators upon arrival	2.3	1.32
Exclusive online registration	3.1	1.30
Limited number of competitors	2.7	1.31
Limited number of spectators	2.5	1.37
The start of the race at intervals in small groups	2.7	1.40
The minimum distance between spectators is prescribed	2.7	1.38
Limited food and beverage offer	2.4	1.25
Limited number of visitors in common places (restaurants, toilets)	3.1	1.34
No contact payment for all services	3.0	1.35

*Notes* Column headings are as follows: (1) average, (2) standard deviation.

Limited number of visitors in common spaces (restaurants, bars, toilets ...) (3.1), Temperature checking for the staff/employees before the competition (3.0), and No contact payment for all services (3.0) are recognized as moderately important. All the other measures respondents evaluate as less important, with averages below 3.

The results of the *t*-test imply that statistically significant difference between groups exists in only one item (Table 6). Off-road runners find *Limited food and beverage offer* as a significantly more important safety protective measure than road runners (p = 0.009), but mean values of both groups are quite low implying this measure is of little importance.

Availability of hand sanitizers/cleaners Official personnel wearing personal protective equipment	(1) Road Off-road Road	(2) 73 110	(3) 2.95	(4)	(5)	(6)	(7)	(8)
Official personnel wearing personal	Off-road		2.05				.,,	( )
		110	4.90	1.363	0.160	1.357	181	0.176
	Road	110	2.67	1.307	0.125			
protective equipment	Itouu	73	3.25	1.267	0.148	0.404	181	0.687
protective equipment	Off-road	110	3.16	1.418	0.135			
The spectators wearing personal protective equipment	Road	73	2.70	1.340	0.157	-0.093	181	0.926
	Off-road	110	2.72	1.434	0.137			
Temperature checking for the competitors before the competition	Road	73	2.86	1.427	0.167	-0.209	181	0.835
	Off-road	110	2.91	1.481	0.141			
Temperature checking for the staff/employees before the competition	Road	73	3.00	1.462	0.171	-0.372	181	0.710
	Off-road	110	3.08	1.453	0.139			
Temperature checking for the spectators upon arrival	Road	73	2.19	1.221	0.143	-0.803	181	0.423
	Off-road	110	2.35	1.418	0.135			
Exclusive online registration	Road	73	2.93	1.251	0.146	-1.245	181	0.215
	Off-road	110	3.18	1.383	0.132			
Limited number of competitors	Road	73	2.71	1.184	0.139	0.199	181	0.842
	Off-road	110	2.67	1.395	0.133			
Limited number of spectators	Road	73	2.38	1.401	0.164	-0.901	181	0.369
	Off-road	110	2.57	1.384	0.132			
The start of the race at intervals in small	Road	73	2.73	1.294	0.151	0.244	181	0.807
groups	Off-road	110	2.67	1.539	0.147			
The minimum distance between spectators	Road	73	2.51	1.324	0.155	-1.585	181	0.115
is prescribed	Off-road	110	2.84	1.411	0.135			
Limited food and beverage offer	Road	73	2.11	1.087	0.127	-2.635	172.795	0.009
	Off-road	110	2.58	1.323	0.126			
Limited number of visitors in common	Road	73	2.96	1.348	0.158	-0.583	181	0.561
places (restaurants, toilets)	Off-road	110	3.08	1.428	0.136			
No contact payment for all services	Road	73	2.92	1.516	0.177	-0.215	181	0.830
	Off-road	110	2.96	1.340	0.128			

Table 6 Road and Off-Road Runners' Perception of Importance of Safety Protective Measures

*Notes* Column headings are as follows: (1) running race, (2) N, (3) mean, (4) standard deviation, (5) standard error of the mean, (6) t, (7) DF, (8) significance (2-tailed).

Finally, the results of the One-way ANOVA implied that statistically significant difference in perception of safety protective measures among participants depending on their motivation exists only in one of the safety protective measures (Temperature checking for the spectators, p = 0.039). However, the Hochberg GT2 post hoc test indicated that there are no statistically significant differences within groups. Therefore, it could be concluded that no statistically significant difference among the respondents in regard to different motives exists and that the recorded difference occurred by chance.

# Discussion

This study's results showed that most respondents will attend sporting events in their home countries within a few weeks after all restrictions on movement and sporting event attendance have been lifted. This can be compared and is in line with previous studies (Perić et al., 2021; Reade et al., 2020) which together show the optimism not only regarding running events but sporting events and tourism in general in the post COVID-19 period.

This optimism is also visible through the respondents' perception of safety protective measures that they would expect to be implemented at running events. Both road and off-road runners share similar attitudes and there are almost no differences regarding the importance of proposed safety protective measures. What runners found moderately important are the safety protective measures regarding the staff they would be more in contact with (the wearing of personal protective equipment and temperature checking). At running races, competitors and spectators are usually quite dispersed along the course, but protection for all attendees (staff, competitors and even spectators) can be assured by a limited number of visitors in common spaces. In addition, the competitors are running in their running paths and are not in direct contact with the spectators. This is especially true for the off-road running events where the number of spectators is lower and the course through the country terrain is difficult to access (Krein, 2014; Scheer et al., 2020). This might explain why respondents did not give much importance to safety protective measures regarding spectators (their limited number, temperature, personal protective equipment, and prescribed minimum distance). On the other hand, euphoria before the start of the race can explain that the start of the race at intervals in small groups was not perceived as important for the runners. The only statistically significant difference between road and off-road groups was found in limited food and beverage offer at the event. Off-road runners do not expect an abundant food and beverage offer along the running paths during the race because of the country terrain (mountains, wood, mud, sludge) and found this safety protective measure more important than road runners. Nevertheless, both groups found this measure as less important. To summarize, although runners perceived these measures as moderately or less important, social distancing will remain a key non-pharmaceutical safetyrelated strategy in preventing the pandemic (Gössling et al., 2020; Perić et al., 2021). In addition, modern technologies such as online registration of competitors and no contact payment can help the organizers prevent the spread of COVID-19 infection. This means that organizations' existing business models will have to adapt and innovate, focusing on new strategies to generate revenue such as ticketing strategies, digitalization strategies, and media involvement (PwC, 2020).

Furthermore, although running is often perceived as an individual sport (Masters et al., 1993; Deaner et al., 2011; Zach et al., 2017), this study found that almost 83% of the respondents will not travel and visit the event alone. This indicates that people missed social gatherings during the pandemic. Many respondents motivated by socializing and fun also confirm the previous assertion. This is in line with other studies highlighting the social and entertainment factors as strong motives for participation in sports activities (Buning & Gibson, 2016; Perić at al., 2019; Xie et al., 2020). Still, a number of runners remain motivated by competition and improvement of their racing skills, focusing on their individual goals. However, regardless of their motivation, respondents' attitudes toward safety protective measures do not differ, suggesting that the running community might be a very homogenous group regarding risk aversion. Dominant optimistic intentions and attitudes towards safety protective measures might imply low perception of risks associated with travelling and attending events, especially when it comes to those few minutes spent all together sharing the same area during the race start. However, the fact that the vast majority of respondents would prefer to attend the next event in their home country might suggest a hidden safety concern. According to Maditinos et al. (2021), destinations far away from home that are not within a daily trip or convenient distances pose the need for accommodations for the participants, and they have to stay in unknown facilities. In addition, there are countries or

regions that are considered to be affected more than others by the epidemic, so restrictions on travel may be applied, or potential travellers and visitors are unwilling to go there in order to participate in a running event. The respondents' intentions to participate in events organized in their home country are also in line with contemporary tourism trends that suggest people are occupied by their jobs and families and favour shorter visits. To summarize, the relationship between the health risk perception and readiness to implement non-pharmaceutical interventions was found to be positive in previous studies (Lee et al., 2012). Also, the lower perception of risks usually results in higher intention to (re)visit a destination or attend an event (Karl, 2018; Reade et al., 2020; Yang et al., 2017) but this study did not examine this relationship directly.

# Conclusion

In order to bridge the research gap of the lack of literature and researches on the connection between motivations, types of running races and safety protective measures in the post COVID-19 period and improve participation in running events, this empirical study focused on active runners' intentions to attend future running events following the COVID-19 crisis, and perception of how important they find some of the safety-related protective measures when attending sporting events depending on running motives and type of running event. The analysed nonpharmaceutical safety protective measures when attending sporting events are related to competitors (temperature check, online registration, limited number, start of the race in intervals), spectators (temperature check, wearing protective equipment, limited number, prescribed minimum distance), the staff (temperature check, wearing protective equipment) and to all of the stakeholders (availability of hand sanitizers, limited number in common spaces, no-contact payment).

The results suggest that the safety-related measures are not recognized as distinctly important by the running community in Croatia. It seems that runners do not care much about safety and that there are no major differences in attitudes between the groups of runners. It is possible that runners' attitudes regarding safety could be misguided by the fact that running is an outdoor sport, but in this specific period where the world is still fighting against the pandemic (i.e. virus mutations), safety will remain the focal event attribute for organizers and governments. As argued by Kaplanidou et al. (2012), Mohan (2010), and Chersulich Tomino et al. (2020), it is necessary to focus on strategic elements necessary for efficient and effective event planning and organization in order to achieve positive and sustainable events. Safety for all stakeholders, the organizers, competitors and local population is a strategic event attribute of utmost importance. Proper and consistent implementation of safety-related protective measures, especially if these are confirmed by the running community and implemented at a higher level of safety than prescribed by public authorities, would be a value-added activity for event planners and organizers. In this special situation, they should point to some additional measures where safety protective kits are available for all involved in the event. Also, they should organize an automatic temperature check point to reduce the staff-spectator-competitor contact. The food and beverage offer should be packed into portions and served as closed packaging in outdoor spaces to reduce indoor gatherings. Registration should be exclusively online and the payments for all services without any contact, by credit or debit card or mobile phone. While primarily focused on event participants, all these activities should also consider the benefits of host communities that have become vulnerable during the COVID-19 context, as argued by Lapointe (2020).

There are a few limitations of this empirical study. The first limitation relates to the sample size and sampling method and the respondents, members of clubs and groups related to running, originating from one country, Croatia. Collecting data online using social networks can potentially lead to false data representations (Leiner, 2019), but due to cancellations of sporting events, limited mobility, and recommended social distancing during the data collection period, it was a reasonable choice. As has been argued by Alexandris et al. (2017) and Risitano et al. (2017), each sport, event or country is specific and it would be important for future studies to consider these particularities when proposing or analysing safety-related protective measures. Future research should examine the importance of safety protective measures in other sports because the characteristics of running as an outdoor sport can impose some bias in runners' perceptions as mentioned above. Also, as suggested by Perić et al. (2021), studying larger samples from countries that experienced the pandemic differently (i.e. countries very successful and unsuccessful in the battle against COVID-19) would increase the generalizability of the results. Finally, it can be important to clarify the terms and develop a universal language for the running field in general, while overlaps exist between these running events (Scheer et al., 2020), mainly through the common denominator of off-road or road terrain, and distinctions need to be recognized.

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