

Endurance sport events in Switzerland – Master Thesis

Erarbeitet von
Romy Steingruber

11.5

**Endurance sport events in Switzerland:
An examination of the competition characteristics
that define the ideal event from the Swiss
participant's perspective and clarify their motivators
for event participation**

Master Thesis

Master of Science in Business Administration – Major in Tourism and Change
University of Applied Sciences of the Grisons

Author	Romy Steingruber Kantonsstrasse 72 CH-7205 Zizers romy.steingruber@gmail.com
Advisor	Roland Anderegg Lecturer at the Institute for Tourism and Leisure Rebbüelstrasse 11 CH-7076 Parpan roland.anderegg@fhgr.ch
Co-Advisor	Walter Burk Project Leader at Graubünden Trailrun Bahnhofplatz 7 CH-7000 Chur walter.burk@fhgr.ch
Submission	04 March 2022

Abstract

Previous studies examining motivations to participate in an endurance sports event have primarily focused on perceptions and characteristics of the participant him/herself or characteristics relating to the event. However, they overlooked participants desired competition characteristics of an event: (1) number of different sport types; (2) respective sport types; (3) event duration; (4) length of distance; (5) evaluation form; (6) social form and (7) event format. To fill the void, the aim of this study was to investigate the characteristics that define the ideal endurance sports event from the Swiss participants point of view and clarifying their motivators for event attendance. The empirical research was conducted through 13 expert interviews with interviewees from various event organisations to gain insight into the endurance sports event industry. Followed by an online survey, completed by 385 Swiss individuals with experience in participating in endurance sport events in Switzerland, to investigate the competition characteristics and motivational factors. A focus group, as well as three expert talks for deeper interpretation and better understanding of the results, concluded the research. The results of the study showed that the ideal endurance sports event consist of one up to three sport types, which are mainly road run, trail run, mountain bike or road bike. Event duration is between half a day and a whole day, the race distance is medium, evaluation form is a ranking list according to time. Participants want to complete the event as a single athlete and in the classical race format. Most important motivation motives to participate in an event are challenge, experience / fun, comparison with self and others, as well as motivation for training. The results from this study provide endurance sport event organisations in Switzerland with current expectations and perceptions of participants about their ideal competition characteristics, including motivations to participate in events.

Table of Contents

1. Introduction	1
2. Literature overview	3
2.1 Sport	3
2.1.1 Definition	3
2.1.2 Endurance sports	3
2.1.3 Sports behaviour of the Swiss population	4
2.1.4 Sports tourism	5
2.2 Event	6
2.2.1 Definition	6
2.2.2 Event dynamics	7
2.2.3 Drivers and barriers to participate and re-participate in sport events	9
2.2.4 Organisers	14
2.2.5 Status quo sport events Switzerland	16
2.3 Trends	18
2.3.1 Demographic trends	18
2.3.2 Health trends	19
2.3.3 Technological trends	20
3. Methodology	23
3.1 Research questions and aim	23
3.2 Research design	23
3.2.1 Expert interviews	24
3.2.2 Survey	25
3.2.3 Focus group	26
4. Results	27
4.1 Expert interviews	27
4.1.1 Data set	27
4.1.2 Main findings	29
4.2 Survey	34
4.2.1 Data set	34
4.2.2 Main findings	37
4.3 Focus group	44
4.3.1 Data set	44
5. Discussion	45
6. Summary	60
6.1 Managerial implications	60
6.2 Limitations and further research	64

7. Conclusion.....	65
References	66
Acknowledgments.....	79
Appendix.....	80
Appendix A: Expert interviews	80
Experts	80
Questions.....	81
Codebook	82
Appendix B: Survey	95
Questionnaire	95
Declaration.....	99

Table of figures

Figure 1: Age group distribution of survey participants.....	35
Figure 2: Canton of residence of survey participants	35
Figure 3: Sport types of participated sport events	37
Figure 4: Sport types practiced in training	38
Figure 5: Sports type of the favourite sports event	38
Figure 6: Motivation to participate in the favourite sports event.....	39
Figure 7: Sports type of a different sports event.....	40
Figure 8: Motivation to participate in the different sports event.....	40
Figure 9: Number of sport types in one race	41
Figure 10: Sport types in one race	41
Figure 11: Event duration.....	42
Figure 12: Race distance	42
Figure 13: Evaluation form.....	43
Figure 14: Social form.....	43
Figure 15: Race format	44

Table of tables

Table 1: Sport types included in this study.....	4
Table 2: Overview of the experts	28
Table 3: Sport types of participated sport events and sport types practiced in training ...	46
Table 4: Motivation to participate in the favourite sports event and in the different sports event.....	47
Table 5: Correlation of sport types and number of sport types included in the ideal sports event.....	49
Table 6: Combinations of sport types in the ideal sports event	51
Table 7: Correlation of event duration and social form of the ideal sports event	52
Table 8: Correlation of event duration and race distance of the ideal sports event.....	53
Table 9: Correlation of race distance of the ideal sports event and gender	54
Table 10: Correlation of race distance of the ideal sports event and age	55
Table 11: Evaluation form of the ideal sports event	56
Table 12: Correlation of social form of the ideal sports event and gender.....	56
Table 13: Correlation of social form of the ideal sports event and age	57
Table 14: Correlation of race format of the ideal sports event and gender	58
Table 15: Correlation of race format of the ideal sports event and age	59
Table 16: Detailed event profiles of the experts	80

1. Introduction

«Here is the start, there is the finish. In between you need to run.» - With these words, Emil Zátopek, a famous Czech runner and multiple European and Olympic champion of the 1950's, brought the goal of running events to the point (crazy about sports, n.d.). Around 70 years passed by since this statement was made. Meanwhile, the running event industry in Switzerland has been in constant movement – new large scale events originated, event density raised and number of participants increased (Brüschweiler, 2020a). Not only running events experienced an evolution, but the entire sports scene got more diverse and colourful (Lamprecht et al., 2020). New sport providers, new sport forms, new sport groups as well as new needs and motives enabled more and more individuals to get access to sports and find a suitable offer - «sports for everyone» became the reality (Lamprecht et al., 2020). This trend can for instance be seen in the high amount of endurance sport events in Switzerland: overall, Switzerland hosted around 1,100 endurance sport events with over 855,000 participants in 2019 (Brüschweiler, 2020a). Another example for this movement can be observed by taking a look at the development of individual sport types (Brüschweiler, 2020a). The sport types street running, trail running, obstacle running, multi-sport types (e.g., Triathlon), ski touring and cross-country skiing experienced an actual boom, while inline skating fought with existential problems. In turn, street biking, mountain biking, swimming and orienteering experienced a more or less stable development (Brüschweiler, 2020a). New needs of participants can be observed in the race distances (Andersen, 2021). When a race distance becomes very popular, other niches within that sport may emerge. For instance, running a marathon was the goal for many athletes, with only a few reaching the finish line. With time passing by, a group of less experienced runners joined this group and finished a marathon as well. This trend went on and at some point, the marathon was not extreme anymore for the extreme athletes and they did not feel special any longer (Andersen, 2021). Due to that reason, for example the ultramarathon, trail running or the Ironman exploded in popularity (Andersen, 2021). Motivations and motives to participate in endurance sport events are also diverse and continuously evolving. As a matter of fact, average running times at running events all over the world have been decreasing over the past 30 years (Andersen, 2021). This might be due to the fact that sport is nowadays more accessible to the average athlete. Additionally, this finding may explain a movement from achievement motives more towards psychological motives (Andersen, 2021).

To successfully manage customer satisfaction and fulfil the needs of participants at events, race organisers need to know and understand any moderating variables and the antecedents (Matzler et al., 2008). So far, previous researchers (Aicher & Brenner, 2015; Funk et al., 2011; Hallmann & Wicker, 2012; McGehee et al., 2003; Teixeira et al., 2012; Theodorakis et al., 2015; Voltes-Dorta & Martín, 2021) have demonstrated various characteristics that determine participation in sport events. For example, people who are more involved in sports, attend running events more regularly (McGehee et al., 2003). Or, aspects of satisfaction during an event like a music band, the friendly crowd or the organisation itself in combination with the attendees own performance, could have an impact on the intention to re-participate in a marathon race (Hallmann & Wicker, 2012). Additionally, predictors like event location, attractiveness of the track and price-quality balance may influence on future participation (Aicher & Brenner, 2015; McGehee et al., 2003). These motivations all lead to event participation. However, the above have focused on perceptions and characteristics of the participant him/herself (Funk et al., 2011; Hallmann & Wicker, 2012; McGehee et al., 2003;

Teixeira et al., 2012; Theodorakis et al., 2015; Voltes-Dorta & Martín, 2021) or characteristics relating to the event (Aicher & Brenner, 2015; McGehee et al., 2003; Wicker et al., 2012). As a result, participants desired competition characteristics remain unknown. Given the fact that a preliminary and fundamental step to further improve an event is the identification of the effective components (Zhang, 2015), this master thesis seeks to examine the competition characteristics of an endurance sports event. Throughout this dissertation, the following components fall under the terms competition characteristics: (1) number of different sport types; (2) respective sport types; (3) event duration; (4) length of distance; (5) evaluation form; (6) social form and (7) event format.

To bridge this knowledge gap, this paper aims at investigating the characteristics that define the ideal endurance sports event from the Swiss participants point of view and clarifying their motivators for event attendance. Therefore, the purpose of this thesis is to provide event organisations in Switzerland with current expectations and perceptions of participants about their ideal event but also to provide recommendations for future endurance sport events. With possible reasons of the identified competition characteristics, the future potential of endurance sport events shall be presented. The actual sports and event behaviour, including motivation to participate in events, give further insight into participants behavioural intention. In particular, the following research questions will be answered to achieve the aim:

RQ 1: How do the ideal endurance sports competition characteristics of existing Swiss participants look like?

RQ 2: Which motivational reasons are decisive for Swiss individuals to participate in an endurance sports event?

RQ 3: What aspects are important to consider when organising an endurance sports event in Switzerland?

To answer these research questions, this master thesis leverages several research methods. The beginning is formed by a secondary research of a literature review on the topics sports, events and their respective trends. Following that, three primary research methods are used. To have a basic understanding of the current endurance sports event area, expert interviews with interviewees from various event organisations will be held. In a next step, an online survey completed by Swiss athletes who participated at least once in an endurance sports event in Switzerland, helps to gain new insights into their event behaviour and expectations of the ideal sports event. Finally, a focus group and expert talks with the existing experts, the third method applied, will allow to create understanding of the gained results as well as answer the research questions. The findings of the expert interviews and survey will be detailed in the subsequent results section, followed by the discussion of the evaluated results with the experts. A summary with managerial implications, limitations and further research as well as the conclusion complete this master thesis.

2. Literature overview

To gain insight into the theoretical background, the literature review starts with some definitions about sports as well as an elaboration of the exact focus of this paper, followed by sports behaviour of the Swiss population and an embedment of sports in the tourism sector. The subsequent chapter focuses on events, what their characteristics and dynamics are, the drivers and barriers to participate and re-participate in an event and how organisers can implement this knowledge and, at the end, the current standing of endurance sports events in Switzerland. An analysis of trends that may influence the endurance sports event scene such as demographics, health, and technology will form the concluding chapter of this literature review.

2.1 Sport

For a clear and aligned understanding of the used terms in this study, the terms sports, in general, and in particular endurance sports, will be defined. As the focus lies on the Swiss population, their sports habits will be highlighted. This chapter will be closed by placing sports events into the tourism sector.

2.1.1 Definition

There is not the one definition of sports available which defines the scope of sport activities and non-sport activities. Neither in sport politics nor in sport science, a common agreement is to be found (Lamprecht et al., 2020). People have an intuitive understanding of what sports is and what not. This shows a movement of the understanding of sports over time. Sports used to have a focus on performance and competition compared to today where it is more differentiated and multifaceted. What did not count as sports years ago may well be included today (Hoff et al., 2017).

Nonetheless, there are several characteristics available that characterise an activity as a sport. An activity needs to be institutionalised by social entities which set up regulating rules as a framework, have a wide following beyond local attraction and must include voluntary play (Dietrich & Heinemann, 1989; Guttmann, 1978; Jenny et al., 2017). Sports is competitive and underlies the achievement principle, is regulated through social norms and governed by rules, is physical movement that include and require certain physical skills (Dietrich & Heinemann, 1989; Guttmann, 1978; Jenny et al., 2017) and sports builds an own world (Dietrich & Heinemann, 1989).

Despite these characteristics, it is not clearly defined which sport types count as sports and which do not. This shows the actual debate around eSport. It has features that make a combination with sports possible, nevertheless most of the Swiss population does not count it as a sport (Lamprecht et al., 2020). With these diverse understandings of sports, it is important to set a clear focus and avoid confusion for this paper. Therefore, a detailed explanation of endurance sports is laid out below.

2.1.2 Endurance sports

This study makes a clear definition of which activities can be included in the term of endurance sports and hence be part of the expert interviews as well as the survey. Features to include sport types are the following: physical movement from A to B, performed outdoor in summer and / or winter, additional equipment can be used but is not a must, and it must be a sport, which is characterised as the ability to stand a certain intensity over a longer time period

(Sponser Sport Food®, n.d.). Table 1 shows the sport types included in this study according to the mentioned features.

Run	road run, trail run, mountain run, cross country run, orienteering, obstacle run, weapon run
Walk	Nordic walking, hiking
Bike	Road bike, mountain bike, cross bike, gravel bike, mountain bike orienteering
Water	swimming, stand up paddling, canoe, rowing
Snow	cross-country skiing, ski touring, snowshoe, ski orienteering
Rolls	inline skating, roll skiing
Multi sports	triathlon, duathlon, swimrun, biathlon, Gigathlon ¹

Table 1: Sport types included in this study

Next to the clarification of included sport types in this study, it is crucial to know how many Swiss sportsmen and sportswomen practice endurance sports, how often they practice sports, what their motives are and in which setting they practice. Therefore, Lamprecht, Bürgi and Stamm conducted a broad survey every four years about the sports behaviour of the Swiss population. Conclusions of the 2020 study (Lamprecht et al., 2020) will be demonstrated in the following.

2.1.3 Sports behaviour of the Swiss population

The «Sport Schweiz» studies of 2000, 2008, 2014, and 2020 (data has been collected before the Corona crisis) detected a continuous increase in sports activity (Lamprecht et al., 2020). Since 2014, the increase was even higher than in the previous years. The percentage of the Swiss population who is practicing sports several times a week in total at least three hours increased from 44% to 51%. In contrast, the percentage of people who declare themselves as non-sportive decreased significantly, from 26% to 16%. The decrease in the non-sportive lead to an increase in the occasionally-sportive. (Lamprecht et al., 2020) Summarized, 84% of the Swiss population is practicing sports at least now and then. These numbers indicate a high amount of people in Switzerland who are existing or potential future event participants, whereas it is crucial to know their perceptions of events.

According to the «Sport Schweiz» study 2020 (Lamprecht et al., 2020), the list with the different sport types is increasing with every «Sport Schweiz» study and contains now more than 300 sport types. In addition to the diversity, the polysportivity gained more importance, too. In the year 2000, people practiced on average 3,1 sport types, nowadays, they do 4,5 different sport types. Since the year 2000, the sport types with the most active participants remains the «Swiss Pentathlon» - hiking, cycling, swimming, skiing, and jogging. These popular sport types got even more popular in the last six years and hiking, for example, is practiced now by more than half of the population. The endurance sport types mountain bike, cross country skiing, Nordic walking, or inline skating are practiced by a fundamentally lower percentage of the population. All the other endurance sport types not mentioned yet were collected in «miscellaneous sport types». (Lamprecht et al., 2020) The «Swiss Pentathlon» states that endurance sport types are the number one for the Swiss population although they

¹ Gigathlon is a combination of five different sport types: road bike, mountain bike, swimming, road run and either inline skating or trail run with a duration of at least two days within Switzerland (Gigathlon, n.d.).

also do several other sport types. This proves that a focus on these types is reasonable and adding substantial value.

Based on the findings of Lamprecht et al. (2020) the majority of the sportsmen and sportswomen do sports for their health and to be fit. Pleasure about the movement, nature experience, relaxation, and reducing stress are also important reasons. Additionally, sociability and, for elderly people, keeping mobility in their daily life are vital drivers to do sports. Performance however, plays a secondary role, irrespectively of whether to achieve personal goals or to compete with others. Fact is the more time people spend doing sports the more they participate in sports events. Vice versa, the same applies: The more often people participate in sports events, the more sports they do. Additionally, competition and performance are higher ranked by men than women. From the number of competitive athletes, the same amount participates at club tournaments, like volleyball, as well as at other events with ranking, like running events. In the last six years, there was an increase of participation at events without ranking like a sea crossing. Gender distribution at these events is nearly equal. (Lamprecht et al., 2020) As people who do more sports participate more in sport events, the potential for returning participants at sport events lies in the occasional sportspeople. That shows the importance to know what kind of events they would participate in, to harness the full potential of sports events. Also, the increase in the number of participants at events without ranking highlights this importance.

42% of all the sportspeople of the «Sport Schweiz» study 2020 (Lamprecht et al., 2020) are weekly in nature, another 24% less frequently. Other settings, where people do sports weekly are at home, in gyms, or fitness and sports centres (Lamprecht et al., 2020). The high number of sportspeople practicing an outdoor sports type weekly indicates the potential for outdoor events. This potential has also been detected by the tourism industry with increasing numbers of events and tourism offers like signposted paths or luggage transport. What special and unique features sports tourism offers for destinations will be shown in the next paragraph.

2.1.4 Sports tourism

Sports tourism represents a special type of tourism as it provides tourists with either active (i.e., sports competitor) or passive (i.e., sports spectator) experiences (Perić et al., 2019). Independent of the type of participation, sports tourism involves the unique interaction of people, activity and place (Weed, 2009). Another definition is made by Schlemmer, Barth, and Schnitzer (2020) who propose a “Sport Tourism Cube”. This three-dimensional depiction classifies sport tourists based on three axes, spanning: event and non-event activity, active and passive participation and professional and recreational pursuits (Schlemmer et al., 2020).

Sports tourism is a fast-growing worldwide industry, wherein sport events can be seen as a driver for tourism-related growth in host destinations (Cheung et al., 2017). Sport events are leveraged by host destinations for a range of positive social, environmental, and economic outcomes (Preuss & Solberg, 2006). The latter can be divided into generated revenue from tourists and improved diversity of the local economy (Cheung et al., 2017). Further, sport events raise the number of visitors by attracting participants and spectators during the event and media reporting of the event provides exposure opportunities for the host destination (Chalip et al., 2003).

Hosting sport events can have an impact on the destination brand and be a driver of tourism marketing strategies (Arnegger & Herz, 2016; Cheung et al., 2017). Events are also used by destination marketers to change or improve perceptions of the destination brand (Mikkonen &

Lahovuo, 2020). Through co-branding, both the destination brand and the event brand can benefit (Chalip & Costa, 2005). Previous studies found strong brand image transfer effects between destinations and events (Deng & Li, 2014; Kim et al., 2014). Thus, co-branding can be of value if the features of one brand are accessed and applied by the other brand in a beneficial way (Rao & Ruekert, 1994). However, host destinations look above the immediate visitation-related impacts and focus on the long-term effects of hosting events, such as: improving overall perceptions of the destination brand (Mikkonen & Lahovuo, 2020); fostering business relationships and promoting investment (Hemmonsbey & Tichaawa, 2018); and driving repeat visitation (Egresi & Kara, 2014).

Key words in this paper are «endurance sports event». After having gained knowledge about the first two words «endurance sports», the literature review goes on with the last two words «sports event».

2.2 Event

Sport events have several characteristics and dynamics that characterise them. Therefore, this chapter presents the characteristics of sport events, as well as some effects that can arise at or through such an event. As this paper aims at investigating the characteristics that define the ideal endurance sports event from the Swiss participants point of view and clarifying their motivators for event attendance, it is crucial to acknowledge the currently known drivers and barriers to event (re-) participation. This chapter will end with some recommendations for the organisers about strengthening the drivers and overcoming the barriers as well as an analysis of the current endurance sports event situation in Switzerland.

2.2.1 Definition

Sport events have the characteristics that they happen quickly and are temporary (Chalip, 2006). Key facilities of sport events are various side-events, a spectators area and an event village (Grohs et al., 2020). These events can be seen as assemblages of heterogenous actor-networks taking on a variety of interdependent roles like athletes, spectators, sponsors or organisers around the core activity which is the sport event (Woratschek et al., 2014). Through the holistic event experience, participants are guided with milestones which build seminal events (Grohs et al., 2020). The most predominant milestones for all actor-networks are starting and finishing the event. A key moment of concluding the event represents the winners' ceremony, as well as the photos and movie clips which emotionally summarise the best runs of the event (Grohs et al., 2020). These milestones and their tangible reproductions remunerate participants with emotional and status value (Grohs et al., 2020).

Sport events can be divided into three categories: mega-events, hallmark events and small-scale events (Higham, 1999; Ritchie, 1984). Mega-events are defined as one-time events on an international level of a large scale, like FIFA World Cup or Olympic games. A hallmark event is associated with a specific location, happens frequently (i.e., annually) and is a large scale event. Small-scale events are regular seasonal or smaller one-off sporting events for amateurs. They require little public funding, use existing infrastructure (Higham, 1999; Ritchie, 1984) and rarely need upgraded or newly built facilities (Taks et al., 2014). Events referred to in this study are small-to-medium events which are more accessible to local athletes (Taks et al., 2014). These events are available in different sizes and shapes and the majority of these events are non-elite participants, although elite can take part (Helsen et al., 2021).

To segment sports participants in order to identify distinct groups of sports participants, different approaches are applied. Green (2005) for example suggested three levels of sport development in his Pyramid Model of Sport Development: (1) recruitment for mass participation through development of opportunities for everyone to participate; (2) retention of people taking part for fun and health reasons moving towards achievement of their potential in sport; and (3) transition to high performance where athletes are identified for their performance potential. Bryant (1987) on the other side, categorised adults into psychographic segments on the basis of motivations to participate in sports, lifestyles, and recreational values. The outcome of his analysis are six segments: (1) the excitement-seeking competitors; (2) the getaway actives; (3) the fitness driven; (4) the health-conscious sociables; (5) the unstressed; and (6) the unmotivated. The focus of these so called open-entry participatory sports events (Crofts, Schofield, et al., 2012) in this study lies more on level (1) and (2) participation and engagement (Green, 2005) instead of the sporting outcome (Coleman & Ramchandani, 2010). Participants in these events are distributed over all segments of Bryant (1987).

Additionally, to on site events there are virtual events whose concepts are quite broad. They range from tracking the sport activity at a location and time of everyone's preference with a followed uploading of the activity to create an online leader board, over being active on a specific time and date to be active at the same moment as others, to being active at a certain location linked to an online platform while seeing other participants virtually at the same time at other locations (Helsen et al., 2021).

Next to these various characteristics, events also have specific dynamics which might be considered by event organisers to be aware of what can happen at the event. These dynamics will be highlighted in more detail in the next chapter.

2.2.2 Event dynamics

Key role of event organisers is to provide and coordinate a platform which can be used from various actors, like organisations and individuals (Grohs et al., 2020), to co-create value (Vargo & Lusch, 2008) in presence of others (Lin et al., 2020; Temerak, 2019). By providing the platform, organisers also give others the possibility to use it as a medium to offer their own value proposition. For instance, athletes compete in a race and fans create a pulsating event atmosphere. Sponsors provide money and communicate the event in their advertising, meanwhile they use the event platform to show their own brand to athletes and spectators (Horbel et al., 2016). Unaware of each other, the activities of these different actors contribute to each other's wellbeing and make sports events jointly meaningful and individually valuable (Vargo & Lusch, 2016). Referred to Vargo and Lusch (2008), 'Value is always uniquely and phenomenologically determined by the beneficiary'. Thus, value is multidimensional (Kolyperas & Sparks, 2018) and potentially different for diverse actors within and across networks (Grohs et al., 2020).

Based on Cornwell et al. (2018) groups are able to produce emotional forces that are more extreme than emotional tendencies of individuals which is in a retail context referred to as 'positive contagion effect' (Argo et al., 2008). The attendance and behaviour of spectators serve as triggers for the creation and strengthening of emotions such as pride, excitement, and thrill during a sports event (Cordina et al., 2019). Behavioural engagement can also be stimulated by similar perceptions (Temerak & Winklhofer, 2021). If athletes socially engage with non-acquainted others, is dependent on their perceptions of similarity, their physical

appearance, and the behaviour of other participants. Therefore, the most important stimulus encouraging participant engagement is the perception of similarity with other participants (Temerak & Winklhofer, 2021). Temerak and Winklhofer (2021) demonstrated in their paper that the power of the social environment is a relatively cheap stimulus to engage participants more strongly, leading to more intense brand loyalty towards the event brand.

Additionally, sports events are based on shared traditions and rituals (Birrell, 1981) and they create feelings of closeness and *communitas* among participants (Jahn et al., 2018). *Communitas* are described as an alternative mode of social relatedness, different than that which regularly prevails (Turner, 1969). Theoretically, when a person is in the midst of a rite of passage that temporarily separates them from all that constrains and identifies them within their normative reality, then *communitas* develop (Rowe, 1998; Turner, 1969). A unique feature of event *communitas* is that it enables relationships to form across gender, age and social class categories that are normally not becoming friends outside the space of events (Handelman, 1990). *Communitas* most likely arise at small-scale events (Turner, 1969). If *communitas* are to arise, it might be lightened by a general identification with the kind of individuals that attend the event (Obst & White, 2005). Individuals attending events can be fairly different from each other, with regards to age, employment or educational background (Kozinets, 2002). However, they are not a random group of people like those waiting in a line at a bank, instead most of them share latent bonds like an interest in sports, but without previous connection with each other (Jahn et al., 2018). It is argued that bonding in these small groups will be easier if attendees relate themselves more strongly with the theme of the event, like sports, and the particular event community. *Communitas* then may emerge more easily and more strongly (Jahn et al., 2018). Besides the term *communitas*, there exists the term «temporary *communitas*» which highlights the non-durable nature of this phenomenon. Temporary *communitas* do not arise right away, they may develop over time, especially when events have a duration of multiple days, and enough interaction is possible (Arnould & Price, 1993). For event organisers it is also common to include social activities in lead-up to the event and thus create social mixers for attendees or participants, as well as enabling sociability in and around the venue and beyond the event site (Chalip, 2006).

Furthermore, sport events have the possibility to stimulate sports participation which is referred to as the demonstration (Weed et al., 2009, 2012) or trickle-down effect (Hindson et al., 1994). Strategies using these effects can have three outcomes: (1) individuals doing already a little bit of sports can be inspired to do more; (2) individuals having played sports before can be inspired to do so again; and (3) individuals may give up one sport to try another (Weed et al., 2009). Stimulating those who are already involved in sports can be reached by focussing on the successes of elite-level athletes, mega-sport or hallmark events where individuals could be inspired to become more active and get involved in sports (Taks et al., 2014). However, evidence to recruit new participants into sports with the demonstration effect are limited (Taks et al., 2014). Additional effects arising by a running event can be increased pre-event physical activity as the majority trains in preparation for such events which may be associated with specific health benefits (Funk et al., 2011). Physical activity within a social context may indirectly increase feelings of social inclusion and psychosocial wellbeing (Stevinson & Hickson, 2013).

Motivations to participate in sport events are individual and independent for every participant (Frederick & Ryan, 1993). Therefore, for event organisers it is crucial to be aware of who the participants are, and what general social and sport-specific features will attract them to

participate at first and then to return and become regulars (Hallmann & Wicker, 2012). In the next paragraph, several drivers and barriers for first participations and re-participation will be discussed.

2.2.3 Drivers and barriers to participate and re-participate in sport events

Drivers to participate and re-participate in sport events

Motivational aspects can play a significant role in determining participation in sport events (Aicher & Brenner, 2015). This can be explained with the self-determination theory (Deci & Ryan, 1985), declaring that the quality of motivation (autonomous versus controlled) is a crucial factor of human behaviour, including sports and physical activity. Teixeira and colleagues (2012) found coherent evidence that more autonomous forms of motivation (e.g., intrinsic motivation, identified regulation, integrated regulation, or a combination) are positively related with sports and / or physical activity. In relation to running events, studies found that people who are more involved in sports / physical activity, participate more regularly in running events (McGehee et al., 2003). Havitz and Dimanche (1990) came to the same conclusion that engagement with leisure activity can be connected positively to frequency of participation. Additionally, physically active people are more likely to participate in running events than inactive people (Funk et al., 2011). Other findings of Van Dyck et al. (2017) are that people who were more autonomously motivated towards physical activity had higher levels of moderate-to-vigorous physical activity, were more aware of running events and perceived more social support from their family.

Motivations to run a marathon can be affected by the challenge to complete the race, whereof different types of participants can be classified, such as «fun runners» and «serious runners». Serious running is an almost professional approach to the nature of the activity (Shipway & Jones, 2007; Yair, 1992). Whereas the interest of fun runners lies less on the running activity itself than some other aspects of participating in the event (Smith, 1998; Yair, 1992). Ogles and Masters (2003) found that motivation to run a marathon differs for younger and older participants. Younger runners were more oriented towards competition and personal achievement compared to older runners who are more enthusiastic about running itself.

Consumption is driven by the emotional and functional values that a specific product offers as well as by the symbolic meanings derived from that product (Holt & Cameron, 2010). These symbolic meanings serve as structured language to state consumers' self-image in the current society (Wattanasuwan, 2005). According to Swann (1983) three features are needed for effective symbols: being controllable by individuals, being observable by others and being able to raise specific reactions from others. One of the effective tools for self-expression in different social situations is sports participation which displays these features (Slutzky & Simpkins, 2009). Other event related predictors for future participation are location, atmosphere, attractiveness of the track and price-quality balance (Aicher & Brenner, 2015; McGehee et al., 2003). By offering several different race distances, events can capture more segments of participants which has been proven successful in both catching new and returning participants (Voltes-Dorta & Martín, 2021). Additional drivers of event loyalty are a developed psychological attachment to the event or the destination (Halpenny et al., 2016) as well as the picture of the event itself (Wicker et al., 2012).

Several aspects of satisfaction with an event, like the friendly crowd and music bands alongside the course or the organisation itself, in combination with participants own performance, for example feeling of accomplishment or run-time might explain a higher share

of variance. These variables could have an important influence on the intention to revisit a marathon race (Hallmann & Wicker, 2012). Service quality of a sport event contains three dimensions: staff interaction, physical environment and outcome quality (Brady & Cronin, 2001). Outcome quality was interpreted by Theodorakis et al. (2015) to some extent as an improvement of the runner's own performance as an outcome of event participation. Additionally to this finding, Voltes-Dorta and Martín (2021) detected a positive link between performance improvement and re-participation behaviour for running events. A transfer of these findings to trail runners seems straightforward, as self-improvement has been identified as a pivotal motivation to participate in the sport (Getz & McConnell, 2014). To the extent that self-improvement can also be obtained by repeat visits to the same event, the question arises whether performance improvement could be a driver of re-participation for trail runners (Voltes-Dorta & Martín, 2021). To further support this assumption, two other theories can be consulted. First, the achievement goal theory (Pintrich, 2000) which reveals that setting goals based on self-improvement can enhance individual interest in a given activity. Second, the expectancy-disconfirmation theory (Churchill & Surprenant, 1982) which indicates that a discrepancy between expected and perceived performance leads to disconfirmation with a negative disconfirmation (performance worse than expected) leading to dissatisfaction and a positive disconfirmation (performance better than expected) leading to satisfaction. The latter can generate satisfaction with a service or product, which is proven evidence of repeat patronage (Mittal & Kamakura, 2001). The main underlying condition is that individuals aspire to repeat pleasurable experiences and prevent those which are insufficiently fulfilling (Voltes-Dorta & Martín, 2021). This goes along with Russell & Levy (2012) who state that individuals actively seek to experience again consumption experiences as volitional re-consumption, such as listening to a particular song or visiting a favourite spot on the beach. According to a specific finding of Voltes-Dorta and Martín (2021) non-local participants who finish their race within the top-10 in their own category are more likely to return.

Besides achieving higher rankings in a given race to improve the individual performance, race progression states another existing type of achievement (Voltes-Dorta & Martín, 2021). Since many events offer several races, Voltes-Dorta and Martín (2021) questioned if progressing over different course distances offered by organisers can incentivise participants to develop a long-term commitment to a trail running event. To achieve progression at least two previous event participations are needed, whose results agree with the assumption that a positive link exists between past experience and re-participation purpose in sports tourism (Baker et al., 2018; Huang et al., 2015). Progression rates are highest for the shortest races. Among 15% to 17% of first-time participations in the category «promo/starter» choose a longer race in the next participation (Voltes-Dorta & Martín, 2021). However, these findings seem to influence only re-participation of local runners (Voltes-Dorta & Martín, 2021).

Previous research on the impact of past event experience on future event participation has found varied results (Voltes-Dorta & Martín, 2021). Hallmann and Breuer (2010) found in their study that participants' and spectators' strongest event predictors for repeat attendance was prior event attendance. In their study with marathoners, Baker et al. (2018) found that past experience in the same event increased the likelihood of re-participation with respect to the first-time participants. On the contrary, Kaplanidou and Gibson (2010) found past event participation as a nonsignificant predictor of repeat participation in their study of sport participants. Also research on tourist behaviour provides clear signs that past travel experience impacts aim to revisit, as the known destination becomes safer choice for upcoming journey (Sonmez & Graefe, 1998). Several researchers have shown that consumer

satisfaction leads to higher consumer loyalty, improved retention, increased positive and decreased negative word of mouth and increased patronage behaviour (Kwon et al., 2005; Van Leeuwen et al., 2002; Yoshida & James, 2010). Higher levels of event satisfaction was reported by individuals who completed their first half or full marathon and by male and less educated runners (Voltes-Dorta & Martín, 2021). Not significantly related to event satisfaction was age, material status, presence of children in the household, area of residence and event distance (Voltes-Dorta & Martín, 2021). Positive emotions generated on-site and individual-level factors like event satisfaction are commonly discussed drivers of willingness to return to an event (Lee et al., 2008; Moreno et al., 2015). A meta-analytic review of non-sport research done by Szymanski and Henard (2001) found that less than 25% of the variance in repeat purchase behaviour can be explained through satisfaction.

Research in psychology indicates that affiliation needs² motivate participation in activities holding the capacity to satisfy individuals (Sheldon et al., 2001). These affiliation needs can be satisfied more easily when being part of a group where community is sensed (Crawford & Salaman, 2012). Participants who experience temporary *communitas*³ and thus satisfy their affiliation needs may want to return (Jahn et al., 2018), as a desire for a sense of belonging was found to be an important participation driver (Chung, 2020). This perspective is also represented by Russell and Levy (2012) such that event participants for whom temporary *communitas* contributes to an exceptional consumption experience may actively aspire to re-consume this experience, manifested in returning to the event. In their studies Jahn et al. (2018) found that willingness to return is highest when temporary *communitas* is high and perceived crowding⁴ low; and it is lowest when temporary *communitas* is low and perceived crowding high. Higher levels of perceived crowding may steer attention to less pleasurable outcomes of events and run counter the positive effect of *communitas*. These results suggest that individual variables like personal satisfaction are not always more important than social variables (Jahn et al., 2018).

The social ecological theory suggests that an individual's (sport) behaviour is impacted by several environments that surround the individual (McLeroy et al., 1988). These environments that surround the different intrapersonal factors (demographics and attitudes), are the interpersonal (family and peers), the institutional (work, school and local organisations), the community (available infrastructure) and the political (policies) environments, each of them having a different impact on the individual (McLeroy et al., 1988). In regard to the interpersonal environment previous research reported the positive influence of parents' active sports behaviour on the behaviour of their children (Zecevic et al., 2010). Regarding the same environment, Van Dyck et al. (2017) found in their study that only social support from family and not from friends was related to participation in running events. In the community environment, the nature of the event in addition to the attractions of the actual sport is an important determinant of the formal and informal socialising possibilities available to participants (Hallmann & Wicker, 2012). What is not a significant driver of re-participation by itself is team participation. However, the team size gets significant with a minimum size of 30 team members in local and 49 in non-local samples. Thus, re-participation is boosted only by

² Affiliation or social needs include things like love, acceptance, and belonging (Maslow, 1981).

³ Temporary *communitas* are defined as a sense of closeness and camaraderie among participants during service experiences (Rihova et al., 2013).

⁴ Perceived crowding is depending on several determinants, like event density expectations, physical conditions (e.g., size of the area, heat, noise), individual tolerance of large gatherings and the behaviour of other visitors (e.g., friendly or hostile; Machleit et al., 2000).

very large teams (Voltes-Dorta & Martín, 2021). This result is supported by Shipley et al. (2012) who documented the significance that runners gain recognition and respect from other club members combined with the social identity provided by participation in distance running events.

Geographic proximity between a participant's place of residence and where an event takes place influences probability of first-time and repeat participation (Baker et al., 2018). Especially distance to the event is a significant predictor of repeat participation (Aicher & Brenner, 2015; Baker et al., 2018; McGehee et al., 2003). For instance, local runners who live close to an event are more capable to participate and to return in subsequent years as they face lower barriers than non-locals (Baker et al., 2018), particularly in terms of travel costs (Voltes-Dorta & Martín, 2021). Duglio and Beltramo (2017) figured out that in a rare contribution on trail runners, foreigners were more likely to revisit the destination after the event, although it does not necessarily mean participating in the event again.

Daily spending at an event has a relevant impact on the intention to return (Hallmann & Wicker, 2012). Possibility to return and take part in the next marathon increased the more a runner spends. This could be due to the fact that participants who spend a lot of money during an event are highly satisfied (Hallmann & Wicker, 2012).

The demographic characteristics gender and age can be predictors of re-participation behaviour according to Baker et al. (2018). They found that runners older than 45 have a significantly higher probability of re-participation than runners younger than 35. A higher level of event satisfaction is reported by male and less-educated runners (Baker et al., 2018). This result is accompanied by the result of previous studies who found higher satisfaction reported by women (Mittal & Kamakura, 2001). According to Griffin (2010) the running network of women is supportive, social, non-competitive, non-pressured, fun and empowering. The typical runner is however male, of medium age, wealthy and has a high educational level (Funk et al., 2007). Other studies show that male runners are more loyal (Hallmann & Wicker, 2012; Voltes-Dorta & Martín, 2021).

The demographic findings of Baker et al. (2018) could not be confirmed by Van Dyck et al. (2017) and Voltes-Dorta and Martín (2021). An exception builds the study of the latter whereas the age-related effect of the reduced loyalty of local Elite runners⁵ compared to those in the general category is consistent with the findings of Baker et al. (2018). Additionally, to the unequal influence of socio-demographic factors (age, gender and educational level) of runners on event participation, Van Dyck et al. (2017) found that also perceived social and physical benefits of physical activity, social support towards physical activity from friends and minutes per week of walking were not associated with participation in running events.

The mentioned predictors for participation and re-participation in sport events can partly be transferred to virtual sport events. The largest predictor for returning participants is a previous virtual event participation (Helsen et al., 2021). However, individuals with experience in real events before the Corona crisis could not be motivated to transfer their behaviour to a virtual context (Helsen et al., 2021). Significant individual determining factors are being motivated to participate in participatory sporting events due to risk and internal socialisation. In return, being experienced in sports and performing longer training sessions has a negative influence on virtual event participation (Helsen et al., 2021). Helsen et al. (2021) could show that nine

⁵ Local Elite runners are the youngest age category in ultra-marathon distances, which are between 20-29 years old (Baker et al., 2018).

percent of the virtual event participants have already been part of a virtual event before Corona and 23% gained interest since the Corona measures. Furthermore, 30% of the participants have been part of a virtual event as an alternative to the cancellation of their real event. Not a significant predictor of virtual sports event participation were socio-demographic factors when considering factors at multiple levels of the social ecological framework (Helsen et al., 2021).

For organisers, existing participants are less expensive to service than newly acquired participants, and the cost for retaining an existing participant is less than the cost of acquiring a new participant (Reichheld, 1996). Therefore, it is crucial to know the barriers of event participants in order to overcome them and gain and retain more participants. These barriers will be discussed in the next paragraphs.

Barriers to participate and re-participate in sport events

Barriers to participate in running events are very similar to barriers associated with physical activity in adults (De Geus et al., 2008). The top five of perceived barriers consist of lack of time, bad physical activity, lack of interest, financial barriers and lack of company / encouragement (Van Dyck et al., 2017). Unexpected within this finding was the fact, that the more general barriers (e.g., lack of interest to participate in a running event and lack of time) were more important than the event specific barriers (e.g., level of challenge, presence of spectators and distance to the event; Van Dyck et al., 2017). The distribution of the barriers is influenced by at least one previous participation in the past year. These participants have lack of time, distance to the event and financial barriers as the most important barriers. However, non-participants reported a bad physical condition, lack of interest and lack of time as their three main barriers towards participation (Van Dyck et al., 2017). These barriers are mostly similar across socio-demographic subgroups, with, however, some exceptions. Men perceived events as insufficiently challenging whereas women were inhibited by a bad physical condition. Moreover, for younger individuals a large distance to the event, lack of time, lack of company and financial barriers represented obstructions to participate while annoyance of spectators was more significant in higher-educated adults than in lower-educated adults (Van Dyck et al., 2017).

The barrier distance to event (Van Dyck et al., 2017) was also found by Hallmann and Wicker (2012). For marathon races they found a correlation between intention to take part and the two facts distance to the race and spending. The further away the individual lives from the marathon location, the higher the cost in terms of time and money which leads to negative intention to take part again in the same race (Hallmann & Wicker, 2012). Whereas travelling to events represents a constraint to participation, according to Shipway and Jones (2008) it can also be a driver as the travel element enhances the salience of the participants' sporting identity.

Another phenomenon caused by sport events is that marathon runners frequently collect races and experiences (Shipway & Jones, 2007) as a means of building social capital and to fulfil a career path (Shipway & Jones, 2008). As an outcome, participating in diverse marathons provides an attraction not available by returning to a previously completed marathon (Wicker et al., 2012) which reduces their intention to re-participate or revisit (Seo et al., 2018). This phenomenon can be categorised under novelty-seeking (Gandhi-Arora & Shaw, 2002; Weed & Bull, 2004) or variety-seeking behaviour (McAlister & Pessemier, 1982). Whereas the latter states that a participant switches among alternatives for the sake of variety, independent of satisfaction (McAlister & Pessemier, 1982). The strength of satisfaction-repurchase relationship is reduced with a high level of variety-seeking (Homburg & Giering, 2001).

Concomitant with the novelty-seeking argument, Kaplanidou and Gibson (2010) deduce that previous participation was not a significant predictor of re-participation. The novelty-seeking behaviour can be linked to the reduced loyalty of elite runners, consistent with the findings of Baker et al. (2018), as this behaviour guides their race choice (Voltes-Dorta & Martín, 2021). Distance runners tend to avoid experiences that are repetitive (Agrusa et al., 2007) and seek for more esteemed events (Getz & Andersson, 2010). A further phenomenon connected with completion of a marathon plays the role as a bucket list item as an activity to do once in a lifetime, rather than be repeated (Lough et al., 2014).

Crowding can be perceived unpleasant (Stokols, 1972), as densely populated environments may lead to stress (Hui & Bateson, 1991). Perceptions of crowding are linked to a motivational condition which is triggered by the fact that individuals sense available space as insufficient and this as a threat to their good health. To solve this uncomfortable situation the available space can be expanded through aggressive behaviour or leaving the situation completely (Stokols, 1972). If a visitor perceives crowding depends on several determinants (Machleit et al., 2000), such as individual tolerance of large assembly, event density expectations, physical conditions (e.g., heat, noise, size of the area) and the behaviour of other visitors (e.g., friendly or hostile). An affective prediction mechanism might result in individuals avoiding similar events in the future (Wilson & Gilbert, 2005). Essentially, there is existing evidence that perceived crowding has a negative effect on behavioural responses to encounters (Hui & Bateson, 1991). Therefore, the unpleasant situation of crowding may run counter the positive effect of temporary *communitas* on upcoming event attendance (Jahn et al., 2018).

Number of participations at participatory sporting events is linked to willingness to participate in virtual events. Therefore, less frequent participants with one to four participations in participatory sporting events were less likely to participate in a virtual event compared to frequent participants with thirteen and more participations (Helsen et al., 2021). Moreover, the event participants who are experienced in their sport and who complete longer training sessions before the Corona measures were less likely to participate in virtual events as well (Helsen et al., 2021). In regard to the type of sports event, Helsen et al. (2021) found that individuals training for a running event are more likely to participate in virtual events compared to those training for a triathlon or walking event. Additionally, it could be expected that virtual events attract different social groups due to the fact that the use of technology for older adults is indicated lower (Urbanova et al., 2019). A further result of the study of Helsen et al. (2021) was that there is no relation between the socio-demographic variables age, gender or education and virtual event participation which means that socio-demographics are not a barrier for individuals participating in virtual events.

To create successful sports participation outcomes, organisers need to create awareness and develop tactics and strategies for stimulating sports participation before the event, implementing these strategies during and after the event (Taks et al., 2014). Possible strategies are to promote participation; to strengthen the drivers; or to focus on overcoming specific barriers. Some strategies will be explored in more detail in the next section.

2.2.4 Organisers

Research emphasized that event organisers should be clear on the fact that their type of event and promotional strategy will attract specific participant profiles (Lera-Lopez & Rapun-Garate, 2011). With tailored promotional campaigns, specific population subgroups can be attracted (Van Dyck et al., 2017). For instance, by focusing on the level of challenge (Van Dyck et al.,

2017) and the competitive aspect, more men and younger participants (Lera-Lopez & Rapun-Garate, 2011) could be reached; by promoting student or group discounts, younger participants can be attracted (Van Dyck et al., 2017); or older adults and women will be attracted when the focus is set on physical attractiveness and health benefits as well as with shorter race distances offered (Lera-Lopez & Rapun-Garate, 2011). Through creating enough difference between the varied tracks in terms of reputation and overall experience, Voltes-Dorta and Martín (2021) supposed that participants could be stimulated to develop a long-term commitment to an event in order to progress over the different distances offered by the event.

According to Voltes-Dorta and Martín (2021) another approach to incentivise loyalty to the race can be done through rewarding performance and progression. In case that organisers plan to keep the same variety and number of races in the future, they could for example offer discounts in registration fees that reward race progression or discount vouchers for the recommended equipment to undertake the longer race (if an Expo is available, it could be redeemed there; Voltes-Dorta & Martín, 2021). A ranking system could also be introduced in which participants performing in different tiers, such as to best 1%, 5%, 10%, receive a corresponding status, like gold, silver, bronze, which brings diverse privileges for future event participation in areas like equipment, transfer, or accommodation (Voltes-Dorta & Martín, 2021). Non-locals can be motivated to re-participate by their own performance and they are also more likely to return if they finish within the top-10 of their own category. Thus, event organisers could release country-specific rankings additionally to the existing ones in order to make international participants perceive their performance as more satisfactory and to boost re-participation (Voltes-Dorta & Martín, 2021). To boost re-participation through team growth, organisers for instance could introduce team registration discounts or a system of friend referrals (Voltes-Dorta & Martín, 2021). Like that they can tackle possible financial barriers and encourage participation together with family and friends (Van Dyck et al., 2017). To keep loyalty of virtual event participants, it is important to offer low threshold first virtual experiences in order to improve the odds of a sustainable virtual participation as past virtual experiences are strong predictors for re-participation (Helsen et al., 2021).

Melnick (1993) was the first to indicate that event organisers can support sociability. To foster social interaction at the event organisers could create places where people can interact (Nordvall et al., 2014). Such a place could be tables around food stalls combined with TV sets where the event can be seen from the food service area which have been shown to foster social interaction (Chalip, 2006). Outside the venue, sociability is enabled when individuals are encouraged to arrive early or to stay late in order to picnic or tailgate (i.e., share drink, food, and camaraderie in the parking area before the event). Therefore, event organisers can prompt and facilitate sociability outside the venue by facilities they provide and policies they choose (Chalip, 2006). Also mobile apps and social media are strong ways that can bring people together (Munar & Steen Jacobsen, 2014). To develop *communitas*, symbolic merchandise items like t-shirts that signal group membership to others who are able to decode this signal can be used (Cornwell, 1990). These examples show that event providers can develop strategies that help create communal environments and at the same time emphasise new elements of their service scape (Carlson et al., 2008).

A third potential approach could be by persuading individuals that barriers can be handled easily (Van Dyck et al., 2017). To overcome the barrier “lack of time”, the event could be promoted to participants living close to the event. It could also be pointed out that training

preparation for an event does not essentially take much time and that it can be easily integrated into daily life (Van Dyck et al., 2017). Organisers can foster this while offering training programs to prepare participants for their event. By highlighting the health benefits of a participation in running events or emphasis on the fun and cultural aspects of their event, organisers can tackle the “lack of interest” (Van Dyck et al., 2017).

The mentioned strategies are possible ways for event organisers to reach their goal of participants either through attraction of new participants or returning ones. Furthermore, organisers are responsible for the grade of social interaction at their event. Therefore, it is important for organisers that the overall event package should be designed to appeal their particular subculture (Getz & Andersson, 2010). How these overall event packages look like in Switzerland and how endurance sport events in Switzerland developed over the years, will be presented in the next chapter.

2.2.5 Status quo sport events Switzerland

Switzerland is a sports nation with 75% of the population practicing sports regularly. Together with the Scandinavian countries, Switzerland counts as one of the most sporty countries in Europe (Lamprecht et al., 2020). In the year 2019, around 1,100 endurance sport events took place in Switzerland with more than 855,000 elite and amateur sportspeople. This is more than 20 events per week in the various endurance disciplines. Thereof, 13 events had more than 10,000, 23 more than 5,000 and 151 had more than 1,000 finishers (Brüschweiler, 2020a). These findings have been gathered by Brüschweiler (2020a) who investigated the origin, development and possible future of endurance sport events in Switzerland. His evaluation is based on a survey which was filled out by 218 endurance sport event organisers in Switzerland distributed over 13 sport types (Brüschweiler, 2020a). In the following, the crucial developments referring to the current study from the first holding of the event until the year 2019 including features and details around the holding in 2019, will be highlighted.

Since the first holdings, event organisations got more professional with regards to the organisational structures and to the resources which got more and better in personal and financial aspects. Also, commercialisation found its way into organisations as more events want to make profit out of the event. (Brüschweiler, 2020a)

Events in Switzerland are mostly recurring events, many times up to 90 holdings. Most of them celebrated the 31st until 40th holding, followed by 6th to 30th and 51st to 60th in 2019. The most offered race distances are between one to 15 kilometres, whereas the most important distances are between five to 21 kilometres. Races with more than 500 kilometres over all sub disciplines are the longest races. Categories offered at nearly 90% of the events are men and women, which increased slightly since the first holdings. An increase from 35% to 60% was visible in the offering of kids category. All available forms of teams and family categories approximately doubled in the past years. (Brüschweiler, 2020b)

The number of participants grew over the last years. Whereas there were more than 50% of the events with up to 250 participants at the first event, in 2019 there were only 20% with this number. On the contrary, the number of events with 251 to 2,000 participants increased from 40% up to 60%. Events with 2,001 to over 30,000 participants even quadruplicated from 5% to 20% over the years. Most events are having between 251 and 1,000 participants nowadays. Age category with the most participants in 2019 were the ones between 40- 49 years, followed by the under 20 and 30-39 years old. The average age stayed the same over the years for 45% of the events. One fifth of the events noticed an increase in the age and 10% a decrease.

Regarding gender distribution, an increase of women contribution was noticed at 60% of the events. Concerning re-participation, 60% of the events have a re-participation rate between 25-75%. Approximately 5% of the events have less than 25% respectively more than 75% of returning participants. Re-participants get rewarded with a free start, food, special t-shirts, special treatment for start number deposit, and events for people celebrating a jubilee. Reasons to re-participate are according to the event organisers the sportive challenge, the good spirit / atmosphere, the nice landscape, the good price – performance rate, the whole family can participate, tradition, preparation for other events, good situated regarding place and time and others like health. (Brüschweiler, 2020b)

Changes due to digitalisation have occurred regarding the registration, time tracking, individual information for competition, start number, online OL-cards or virtual competitions. Compared to the first holding where social media was completely unimportant for 60% of the events, nowadays, social media is really important for nearly half of the events as well as quite important and quite unimportant for equally 20%. Mostly used is Facebook, Instagram, and Twitter, in this order. The topic of sustainability has made a huge jump from 15% to 66% in terms of importance nowadays, compared to previous events. (Brüschweiler, 2020b)

The timing of participants registration is moved closer to the event for 55% of the events and one fifth enrolled themselves earlier over the last couple of years. At the same time, enrolling on the day of event has increased for 40% of the events and decreased for 20%. (Brüschweiler, 2020b)

Regarding the alternative programs, event organisers offer catering, events with sponsors, music entertainment, kids programs, conquest or gala evenings, which are important for more than half of the events and got even more important over the past years. 60% of the events also offer a product exhibition with mostly around 1-10 companies. Additionally, there is a trend emerging around the shift from absolute competition towards holistic event for more than 50% of the events. (Brüschweiler, 2020b)

In advance to the race, 42% of the events offer preparation trainings or course viewing which is three times more than in the first holding. The availability of a speaker has nearly doubled over the years. Around 60% of the events have a speaker at the start and finish area, approximately 10% have one along the course. Nearly half of all organisers offer music or another show along the course. 16% is streaming their event on small or big screens and 36% offer live tracking. 99% of the events offered nutrition in 2019, which is an increase of 19% compared to the first holding. Over the years, for nearly 40% of the events, nutrition got more complex. Finisher medals are handled differently amongst the events. Most events give medals only to kids or to every finisher. A lot of events give medals to the top three, followed by no medals at all. Some give a medal to all participants and the fewest give medals against paying. Finisher gifts by decreasing order are t-shirts, regional nutrition, towel, cap / beany, honey, sport bag, bidon, buff and a lot more which are given at 80% of the events. (Brüschweiler, 2020b)

Several event features changed over the years – got more important, less important or stayed the same. These various changes, adaptations, new implementations, eliminations of event details seen in the study of Brüschweiler (2020a), demonstrated that events go with the particular trends in order to attract participants and to satisfy their needs. In the following chapter, three global trends affecting sport events will be presented in more detail.

2.3 Trends

Participants at endurance sport events are distributed over different age categories, gender, origins, educational level, and income. The ongoing demographic trend in relation to sports habits and event participation will be summed up. As endurance sport events have the possibility to encourage people to physical activity and therefore enhance their health status, this chapter highlights the health benefits of sport events. With technologies pioneering into the event industry, social media, and its area of application in the sports industry, as well as features of virtual events are examined further and will conclude this chapter.

2.3.1 Demographic trends

The population in Switzerland has grown increasingly older (Britannica, n.d.). For instance, the percentage of the population under age 20 fell from around two-fifths at the beginning of the 20th century (Britannica, n.d.) to 19.9% in the year 2020 (Bundesamt für Statistik, n.d.). On the contrary, the proportion of the population older than age 65 tripled from roughly 6% (Britannica, n.d.) to 18.8% in the same time period (Bundesamt für Statistik, n.d.). People between age 20-39 represent 26.3% and people between age 40-64 35% of the whole population in 2020 (Bundesamt für Statistik, n.d.). Referred to participants profile at running events, some evidence exists that there has been a democratization between 1969 and now (Borgers et al., 2015). At a running event in Flanders, the average age has increased and the majority of runners corresponds to the 30-50 year old group (Van Dyck et al., 2017). These numbers can partly be confirmed by endurance sport event organisers in Switzerland where most participants belong to the age category 40-49 years, followed by the under age 20 and 30-39 years (Brüschweiler, 2020b). For half of these events, mean age stayed the same over the years, for one fifth it increased and for 10% a decrease was visible (Brüschweiler, 2020b). A trend into the same direction can be noticed for the sports behaviour of the Swiss population (Lamprecht et al., 2020). Sports activity is not continuously going back with the age anymore but there is a decrease of very active people between 20-40 years, afterwards it raises again and reaches the top at age 65-74. In this age category, the number of active people is as high as by the 15-24 years old (Lamprecht et al., 2020).

In Switzerland, men are slightly overrepresented with 50.4% compared to 49.6% women in 2020 (Bundesamt für Statistik, n.d.). At the running event in Flanders, participation by women increased strongly up to 43% even though men are still overrepresented with 57% (Borgers et al., 2015). 60% of the event organisers in Switzerland also observed an increase of women's' participation (Brüschweiler, 2020b). Sports activity amongst Swiss women is higher than amongst men at age 45-74. Men however, are more active in the youngest age group 15-24, middle age 35-44 and the oldest over 75 years old (Lamprecht et al., 2020).

Throughout the 20th century, Switzerland experienced significant immigration. While in 1900 about one in eight Swiss residents were foreigners, this number increased to about 5% during World War II and reached around 20% at the turn of the 21st century (Britannica, n.d.). In 2020, 25.5% of the Swiss population were foreigners or people with immigration background (Bundesamt für Statistik, n.d.). Comparing sports behaviour of the Swiss and in Switzerland living foreigners, it turns out that 53% respectively 46% are active and 14% respectively 24% are inactive. Dual citizen are situated in between with 49% active and 19% inactive (Lamprecht et al., 2020).

In respect of the socio-economic status of participants, several studies propose the existence of a relationship between socio-economic status and regular practice of physical activity

(Meyer et al., 2005). A popular road running race in Switzerland showed that among physically active people there is higher income than non-active (Studer et al., 2011). This finding is supported by Lamprecht et al. (2020) who stated that the number of sportspeople with high activity increases the higher the educational achievement and the higher the household income. Socio-economic status in Switzerland additionally relates negatively with mortality and morbidity but positively with health and fitness status (Duetz et al., 2003). This fitness status might be influenced by endurance sport events and has then a positive impact on the health status of participants, which will be discussed within the ongoing health trends.

2.3.2 Health trends

Since the 1960s, the running sport has been raising internationally as part of a specific trend defined as deinstitutionalisation and desportification of the sport sector (Borgers et al., 2016). This trend states that adults no longer engage in sports because of the competitive aspect, but especially because sports are pleasant, adventurous, relaxing and healthy (Scheerder et al., 2015). Therefore, physical activity is an important element of healthy living and the benefits of regular physical activity on the health of all age groups, especially on the middle aged and elderly individuals, are well documented (Garber et al., 2011; World Health Organization, 2020). Physical activity includes any force exerted by skeletal muscles that leads to energy expenditure above resting level (Caspersen et al., 1985). Referring to the WHO (World Health Organization, 2020), this means that almost all types of physical activity are of interest, including gardening, housework, walking or cycling for transport, dance, as well as sport or deliberate exercise, with a curved dose response correlation (Garber et al., 2011). Thus, participatory sporting events which require individuals to engage in moderate to high levels of energy expenditure (Crofts, Dickson, et al., 2012) such as cycling or running events, are progressively viewed by governments across the globe as lifestyle medicine (Filo & Coghlan, 2016). Participation is encouraged to reduce health problems associated with physical inactivity (Ma & Kaplanidou, 2018) and the fact that regular physical activity brings many benefits to improve one's quality of life (Chatton & Kayser, 2013). For example, physical activity has a preventable role against older individuals risk of hip fractures and falls (Gillespie et al., 2009), helps to keep flexibility and strength, and allows elderly to continue performing their daily activities and stay autonomous (Brill et al., 2000). Additionally, there is good evidence that physical activity enhances outcomes for people at risk of metabolic related diseases (Ramachandran et al., 2006) like diabetes (Ma & Kaplanidou, 2018), for those who have had cardiovascular events (Taylor et al., 2006), like heart diseases (Ma & Kaplanidou, 2018) and it is also a useful supplement to clinical treatment for some cancers, especially breast cancer (Pierce et al., 2007). In this respect, promoting physical activity is viewed as the best buy in public health (Morris, 1994), yet many clinicians still prefer the treatment of other risk factors, such as clinical therapies for addressing tobacco addiction, cholesterol, hypertension or obesity (Bauman et al., 2008). Disease and lifestyle are related and can be influenced by behavioural change in order to live longer, maintain high fitness level, age better (Sanchis-Gomar et al., 2011), suffer less depression and become less obese (Studer et al., 2011). An active lifestyle implicates improved quality of life and maybe even a survival advantage (Pierce et al., 2007).

In health research, there has been a continuous discussion about the potential of running events to boost overall physical activity among adults and sports participation (Bauman et al., 2008). Event organisers as well as the recreation and sports industry claim there is an exercise-enhancing effect of participating in such events, but empirical proof supporting this

claim, is not very congruent (Funk et al., 2011). Several researchers (Bauman et al., 2009; Crofts, Dickson, et al., 2012; Crofts, Schofield, et al., 2012; Funk et al., 2011; Stevinson & Hickson, 2013) confirmed the potential of participatory sport events to make a positive health impact, as evidence showed that athletes increased their physical activity and sports behaviour during event preparation and accordingly, some maintained sufficiently active in the post-event period. Long term effects, however, have rarely been examined (Lane et al., 2012). Besides, potential positive effects seem to be dependent on prior physical activity levels, motivation, and social-demographic factors (Funk et al., 2011). Post-event commitment to physical activity and sports has been more intense among those who were more satisfied with their event experience and had finished fewer prior organised events, leastwise in the short term (Funk et al., 2011; Willem et al., 2017). Self-centred motivators to stick to physical activity include possibilities for gaining respect and recognition, possibilities to increase social ties and opportunities to augment one's self-esteem (Baym, 2010). These possibilities are given through social media, one of the technological trends discussed in the following chapter.

2.3.3 Technological trends

Social media

One of the most significant drivers of change in this digital age in the tourism sector was the proliferation of social media (Morgan et al., 2021). Pushing factors are digital technology advancements, which give rise to the countless networking channels and social media platforms available to the 3,8 billion active social media users worldwide (Koetsier, 2020). Enabled by their digital devices, these users are empowered to share information and network with their online contacts (Islam et al., 2018). Social media adopt diverse forms. Popular types are social network sites (e.g., Facebook), media sharing sites (e.g., YouTube), review sites (e.g., TripAdvisor), blogs (e.g., Travelblog) and microblogs (e.g., Twitter), and wikis⁶ (e.g., Wikitravel). These types differ in temporal structure and reach of communication, levels of enabled social interactivity, number of social cues and context richness, as well as levels of hierarchy and control established by site administrators (Baym, 2010; Munar & Jacobsen, 2013).

Social media provides new channels for tourists to share knowledge, imaginations and experiences (Munar & Steen Jacobsen, 2014). The sharing of experiences includes communicating imaginations, emotions, and fantasies about features of a holiday, for instance through emoticons, photographs, and other linguistic markers in online communication (Baym, 2010). Also relevant in online reviews of tourism attractions are advice on practical matters and expressed feelings of comfort and discomfort (Munar & Ooi, 2012) to help others and prevent them from using bad products (Munar & Steen Jacobsen, 2014). Munar and Steen Jacobsen (2014) found a clear preference for visual content sharing compared to narrative content sharing on Scandinavian holiday makers in Mallorca. Social cues provided on social network sites are usually richer than those found in other types of platforms, like review or media sharing sites. On the contrary, review sites offer a large amount of available content, a global reach and numerous contributions based on non-commercial motivations (Munar & Steen Jacobsen, 2014). Electronic word-of-mouth has been given substantial attention in recent years as it has become the most critical form of social media marketing (Nusair et al., 2019).

⁶ Wikis are dynamic, open websites with jointly constructed information, knowledge, and resources, which are freely disposable to any Internet user (Zhang & DeLoose, 2009).

In relation to sport, visibility is often seen as an extension of the physical experience (Ehrlén & Villi, 2020), which has become increasingly popular on social media in recent years (Thorpe, 2017). Research shows that leisure sports practitioners use photo sharing practices to assert their place as part of the sports community (Olive, 2015), curate their athletic self-presentation (Gray et al., 2018) and to engage in the collective reproduction of style (Woermann, 2012). Not only leisure, but also professional athletes share photographs and videos of themselves practicing sports to create entertaining, educational and experiential visual content for others with similar interests and their own consumption (Ehrlén & Villi, 2020).

The photographs shared on social media can be divided into two main groups: the motivational, which can be seen as the driving force, and the inspirational, seen as the pulling force (Ehrlén & Villi, 2020). The main reason why participants share photographs and follow others on social media is *inspiration*: to inspire other practitioners and be inspired by them. Inspiration is stimulated through photographs that illustrate either nature or athletic performance. Through *nature description*, practitioners inspire each other to explore new surroundings and get inspiration or concrete ideas for locations for their practice. *Athletic performance* allows practitioners to visually demonstrate what they are competent of and share remarkable practices. (Ehrlén & Villi, 2020) Besides inspiration, practitioners engage in photo sharing for the reason of *motivation*: to motivate themselves and each other to undertake physical activity. Motivation is provoked through photographs that present either overcoming challenges or togetherness. *Overcoming challenges* present tangible proof of accomplishments, such as a display that quantifies a successful performance or a marked route. Other photographs in this category feature weather conditions in which practitioners perform. By sharing photographs of challenges and accomplishments, practitioners demonstrate the outcome of hard work and motivate each other to stick to the training in order to reach practice-related goals. (Ehrlén & Villi, 2020) The value of an athletic accomplishment is approved by other practitioners' reactions, such as comments and likes on the shared photographs (Seo et al., 2016). *Togetherness*, posted by group photographs, communicates that practice is more fun with others (Ehrlén & Villi, 2020). At the same time, practitioners both demonstrate the solidarity that is present at a given moment and mediate their presence (Hinch & Kono, 2018). Photos can not just be shared from real-world performance but also from the virtual world where performance is measured through the use of multiple sensors and transferred to an avatar within a virtual world, which allows to virtually compete in regularly held races or exercise with friends (Delaney, 2020). The features of these technologies will be displayed in more detail in the next chapter.

Virtual sport

Digital technologies in the reality-virtuality continuum (Milgram & Kishino, 1994) of professionalised sports are predominantly applied to broadcast, measure, analyse, or improve athletes' performances in relation to real-world sports (Davenport, 2014; Xiao et al., 2017). Furthermore, mixed-reality applications can build immersive virtual worlds and help contribute to more effective and individual types of training, like the training of uncommon, specific, and hard-to-replicate scenarios (Vignais et al., 2015; Xiao et al., 2017). Through innovative interaction, input and output design (Speicher et al., 2019) Westmattmann et al. (2020) propose a transfer of a traditional, real-world sport into a virtual environment in the most realistic way possible with the help of the mixed-reality. Thus, enables serious competitions that fill the gap between eSport and «traditional» sports (Westmattmann et al., 2020).

While digital solutions already exist and have been studied for different parts of private life and for work (Carillo et al., 2020; Waizenegger et al., 2020), the Corona pandemic shows that there is fundamental lack of digital sporting alternatives (Hacker et al., 2020). Some organisers reacted on the pandemic and were able to provide virtual alternatives of their participatory sporting event to support individuals' training efforts (Helsen et al., 2021). The concepts of virtual sport events are quite broad. They range from being active on a specific time and date to being active at the same moment as others (with live leader boards, direct feedback of the speaker and information about surroundings like a real participating at the event, e.g., MyTrace app), over tracking the sport activity at a location and time of everyone's preference with a followed uploading of the activity to create an online leader board (e.g., Strava challenge; Helsen et al., 2021), to being active at a certain location embedded in a virtual world while seeing other participants virtually at the same time at other locations (e.g., ZWIFT events; Helsen et al., 2021; Westmattmann et al., 2020).

Platforms like ZWIFT and those of similar providers have the potential to sustainably change the sports industry (Westmattmann et al., 2020). To be able to systematically evaluate these possible changes, Xiao et al. (2017) highlighted possible impacts of digitalisation along four components, originally proposed by Loy (1968), in the context of traditional sports. The first aspect represents the *organisational component*, whereas digitalisation considers changing roles and responsibilities of involved stakeholders (athletes, staff, coaches, sponsors, or governing bodies; Loy, 1968; Xiao et al., 2017). Besides, the digitalisation might attract new stakeholders such as broadcasters or data service providers, who see novel customer touch points (Hoye, 2015). In this relation, it becomes clear that the digitalisation transforms existing processes and interactions and in addition creates new ones (Westmattmann et al., 2020). The *technological component* presents the second aspect which relates to physical skills, (physical) equipment, and knowledge that stakeholders possess, whereat digitalisation here is mainly in relation to continuous improvement of the equipment through novel technological possibilities (Loy, 1968; Xiao et al., 2017). Moreover, digitalisation raises the amount of available (performance) data and their visibility, which enables a more detailed analysis and more data-driven scouting (Davenport, 2014; Xiao et al., 2017). The *symbolic component*, the third aspect, relates to the "secrecy, display, and rituals" of sports (Loy, 1968). Secrecy – resembling the concealment of individual skills and tactics (Xiao et al., 2017) – might be narrowed due to data availability and visibility (Westmattmann et al., 2020). Public display, defined as the degree of public attention created, could be transformed through novel digital communication channels, as they might allow for innovative forms of including the essential stakeholder group of sports consumers (Goffman, 1981; Xiao et al., 2017). Besides, rituals – well-established routines and gestures, which contribute to the character of a sport – can be transferred into the virtual sphere (Serazio, 2013; Xiao et al., 2017). However, the virtualisation reduces the importance and even eliminates many rituals. On the contrary, the public display as well as the interaction with consumers are estimated to be increasingly important (Westmattmann et al., 2020). The fourth and last aspect is the *educational component* of sports digitalisation which concerns how it enables and requires the acquisition of specific skills for various stakeholders, such as learning and training (Loy, 1968). Digital technologies allow for innovative training methods, which might enhance training possibilities and effectiveness (Davenport, 2014; Xiao et al., 2017). Nevertheless, the virtual transformation of sports apparently carries new potential for manipulation in the type of incorrect body weight data, which would raise the relative power output on whose bases the speed for the avatar is calculated (Westmattmann et al., 2020).

To conclude, it can be said that virtual activities, as they are executed on platforms like ZWIFT, can be considered as sports, since all criteria needed to be defined as sports are fulfilled (Guttmann, 1978; Jenny et al., 2017) and that the major counter-argument in the eSports debate concerning physicality does not apply here (Cunningham et al., 2018).

With the theoretical background of this literature review, the next chapter presents the detailed explanation of this study as well as the different research methods to answer the research questions.

3. Methodology

In the sports event industry, there is a lack of knowledge about event participant expectations on the ideal sports event. To close this gap, three research questions have been derived to address this problem, which will be shown next. The questions will be answered with the help of three research methods. Starting from expert interviews with experts of event organisations, continuing with a survey for event participants and closing with an expert focus group to discuss the results of the survey. Definition, data collection, analysis and sample of each method will be explained in more detail in the second part of this chapter.

3.1 Research questions and aim

The aim of this master thesis is to investigate the characteristics that define the ideal endurance sports event from the Swiss participants point of view and clarifying their motivators for event attendance. Therefore, the purpose of this thesis is to provide event organisations in Switzerland with current expectations and perceptions of participants about their ideal event but also to provide recommendations for future endurance sport events. With possible reasons of the identified competition characteristics, the future potential of endurance sport events shall be presented. The actual sports and event behaviour, including motivation to participate in events, give further insight into participants behavioural intention

Therefore, the following research questions will be addressed to fulfil this aim.

RQ 1: How do the ideal endurance sports competition characteristics of existing Swiss participants look like?

RQ 2: Which motivational reasons are decisive for Swiss individuals to participate in an endurance sports event?

RQ 3: What aspects are important to consider when organising an endurance sports event in Switzerland?

These questions will be addressed with the three research methods, stated, in more depth, in the following research design chapter.

3.2 Research design

To achieve the aim of this research and to answer the research questions, data collection and analysis procedures followed the concept of case study research. Whereat three data collection methods will be combined to come to detailed empirical descriptions of a particular appearance of a phenomenon (Eisenhardt, 1989). To gain first impressions and get familiar with the past and current sports event environment, a qualitative approach is applied. Expert interviews with specifically selected event organisers will be used for that. The gathered findings help identifying potential lack of knowledge on the organisers side and provide

thoughts for the survey. With the gained knowledge, a quantitative questionnaire for the Swiss population who already participated in at least one endurance sports event, will be elaborated, sent, and evaluated. The goal is to find out more about participants event behaviour and perception of their ideal sports event. The newly gained outcomes may help to close the knowledge gap of organisers on what participants expect of sport events. These outcomes will in the third step be presented in a selected qualitative focus group to identify possible reasons for these results and provide recommendations for event organisers.

3.2.1 Expert interviews

To gather information first hand, gain insights, and get an idea, how organisations think, what they do, and why they do it like that, a qualitative approach will be applied. Words will be collected through close interaction with the investigated person to find out what is on their mind and understand their reasons (Bryman & Bell, 2015). It is for the researcher to decide what the focus lies on and what will be observed and heard (Bryman & Bell, 2007).

To achieve accurate, contemporary and practical information as a basis for further development of this study, data will be collected via the interview method, expert interviews, as primary source of case evidence. The aim of expert interviews is to collect and explore data about a specific field of interest (Döringer, 2021) focusing on expert knowledge (Meuser & Nagel, 2009). These interviews will be semi-structured with some outlined issues that will then be explored. According to the context of the answers, the interviews can be adapted to dive deeper and search for more information (Bryman & Bell, 2007). The semi-structured method is preferred as there is some literature available that could function as a basis and to have more homogeneous results for the evaluation of the interviews. The interview guide will be available in German.

Geographical dispersion, time and financial constraints, as well as physical mobility boundaries, can present some problems in face-to-face interviews (Cater, 2011). Therefore, the interviews will be held online via the program Webex, which encourages interviewees with the above mentioned limitations to participate in this study (Janghorban et al., 2014). However, the choice of a disruptive environment could affect interviewee concentration and data gathering (Deakin & Wakefield, 2013). By using the web camera, the interaction will be comparable to face-to-face equivalent for the presence of social cues and nonverbal (Sullivan, 2012). Online interviews offer the possibility of computer-based recording which allows detailed transcription afterwards (Cater, 2011) and a clear focus on the interviewee. Additionally, to keep the interview time as low as possible, the questions will be sent in advance.

The method used to analyse the expert interviews is thematic coding. Coding is a form of thinking about the meaning of the data and at the same time reducing it (Huberman & Miles, 1994). Therefore, data will be read and notes about significant observations and remarks are taken and categorised into different themes. The same data and the notes will then be reviewed and adapted. Like that, an index of terms from different themes will be generated that will help to interpret data for the following questionnaire and theorize the data for the study (Bryman & Bell, 2015).

The sample for the interviews will consist of at least ten experts. The exact number depends on the experts time availability and willingness to participate. This number is needed to collect broad meanings, but also commonalities among the experts. To ensure a diversity of views and opinions, different endurance sports events will be selected. Namely different sport types,

competition forms, time measurement, different race distances at the event, race duration, race length, number of sport types in one race, social form of the races, event form and number of participants at the event. The focus lies on sport events in Switzerland, as the author and the advisors are living in Switzerland and understand the Swiss event industry. Sports events in Switzerland all have more or less the same regulations and processes they need to go through, compared to other countries, where it might be different. This allows good transferability of meanings and results of the expert interviews for the whole of Switzerland. The experts will be of events located in the German speaking part of Switzerland, as interviews can be done in native language and providing more precise answers. Out of the chosen events in Switzerland, the interview partners will be selected purposefully to assure topical evaluation of the current and past event situation. Therefore, the experts need to be included in the organisation of an event, with existing experience with hosting an event before the Corona crisis and during the Corona crisis. Like that, they are able to compare the past event situation with the new one and can draw conclusions.

The gained insights into the current event situation will be used to develop a questionnaire for a Switzerland wide survey. The theoretical background of this method will be highlighted in more detail in the next paragraph.

3.2.2 Survey

To generalize findings and make predictions for the sports event population, a quantitative research approach will be applied in the second part of this case study research (Bryman & Bell, 2015). This enables an investigation of the behaviour of a larger sample with structured concepts. The focus is more on measurement of numbers (Bryman & Bell, 2007).

To find out about the competition characteristics of future sports events, a questionnaire will be developed, executed, and evaluated. A questionnaire is a method to collect primary data through structured questions, which have been chosen according to the results of the expert interviews and literature (Collis & Hussey, 2009). This method facilitates data collection from a huge and varying group of individuals in a short period of time (Helsen et al., 2021). Questions will be mainly closed, to be able to summarise replies and produce a picture of the population. The questions represent a mixture of single and multiple response questions (Burgess, 2001). All questions will be available in German.

It will be an online web-based cross-sectional survey collected once at the same time (Creswell, 2009) via the survey portal LimeSurvey (LimeSurvey, n.d.). Online questionnaires are cheaper and less time-consuming than interviews, and have a rapid turnaround (Collis & Hussey, 2009). The distribution potential is large but there is the possibility that not all of the sent questionnaires will be answered (Bell et al., 2019). Through the absence of an interviewer, only simple and not too many questions should be posed as no one is available to help the participants if they have questions. Also, data might be missing with no direct contact with the interviewer (Bell et al., 2019).

The gained answers of the questionnaire will be exported from LimeSurvey into an excel file to analyse them. Questions allowing multiple answers require a separate variable for each possible response which will be displayed in separate columns. For each variable coding will be «yes» for selected and «no» for not selected variables. Answers to single response questions will be coded as one variable with every response represented with the specific name. Analysis of the answers will also be done in excel while using the filter function to count

all selected answers or all «yes». The summed up numbers will be presented with diagrams built directly in excel.

The sample for the questionnaire will be the Swiss population who took already part in at least one endurance sports event in Switzerland, according to the criteria in [2.1.2 Endurance sports](#). The focal point on the Swiss population is chosen due to two reasons. First, most participants of the expert's events are from Switzerland and therefore the behaviour at the event is driven mostly by Swiss people. Second, the experts will be Swiss and hence having similar perceptions of events and attitudes at events and can put themselves in the position of the participants. These two reasons allow a discussion of the results with the experts and to provide event organisers in Switzerland with accurate findings. As the events of the experts are located in the German speaking part of Switzerland, participants will also mainly be German speaking. Therefore, the questionnaire will be available in German. The focus on people with existing experience in endurance sports events is chosen in order to be sure that all the survey participants know, how such an event unfolds, and what they need to understand under an endurance sports event. As the questionnaire will be in German, only German speaking participants are included. To generalize the findings from a random sample to the population, an absolute sample size of 384 is needed (Krejcie & Morgan, 1970). This has been defined according to the number of participants at endurance sports events, as that will be more than 75'000 people per year. If the sample size increases to higher than 384, the sampling error decreases (Bryman & Bell, 2015). The sample will be chosen randomly with the objective to reach participants from different types of events. Therefore, the goal is to reach communities of different endurance sport events via email, WhatsApp, social media, and the event websites. Additionally, the questionnaire will be distributed via WhatsApp in the surrounding of the researcher. Like that, the probability to exclude people because of missing social media accounts can be reduced and as many people as possible can be addressed.

The newly gathered insights of the survey will help to understand participants event expectations, which an expert focus group will get to the bottom of, as seen in the next chapter.

3.2.3 Focus group

Part three of this research follows again a qualitative approach. Whereas the focus lies on collecting words through cooperation and interrelation with the researched to understand their meanings and perspectives (Bryman & Bell, 2015). The researcher pulls the strings to lead the focus in the desired direction in order to hear and observe the right content (Bryman & Bell, 2007).

To reveal possible explanations for the results of the survey, a focus group will be conducted. A focus group is a process of bringing several purposive experts together for a spontaneous and interactive discussion on a particular topic or concept (Bryman & Bell, 2007). Participants will discuss the presented topics upon each other's position and criticism (Bryman & Bell, 2007) to provide their ideas, feelings, experiences and opinions they have about certain issues (Thomas et al., 1995). The group dynamics, hence the range and type of data generated through the social interaction of the group, are often richer and deeper than those gained from one-to-one interviews (Thomas et al., 1995). Presented topics in the focus group will be specific answers of one question as well as cross references and cross relations among specific answers to different questions of the survey.

The focus group will be held again online via the program Webex, due to the same reasons mentioned in [3.2.1 Expert interview](#).

The data analysis process will be executed according to the stages described by Ritchie and Spencer (1994), overlapping each other. First step is to get familiarised with the data by listening to the recording, reading the observational notes taken during the interview and summary notes written directly after the focus group (Ritchie & Spencer, 1994). The aim is to dive into the details and get a meaning of the interview as a whole before breaking it into parts. The major themes begin to emerge during this process (Ritchie & Spencer, 1994). The next step will be the identification of thematic frameworks by writing down ideas, short phrases, and concepts arising from the text. Quotes will then be highlighted and compared with each other and re-arranged in order to build a new context and crystallise explanations for the specific topics (Ritchie & Spencer, 1994).

The sample for the expert focus group will be made up of four to six experts, depending on willingness to participate and time availability. For reasons of simplicity and existing knowledge about the topic of this paper and the survey, the experts will be out of the experts of the interviews.

Having the knowledge about all the methods used in this paper, the results of the expert interviews, the survey and the focus group will be displayed in the next section.

4. Results

According to the work flow of this paper, the results are guided. In a first step, expert interviews have been consulted. The exact data set and the consequential results will be explained in more detail. Step two builds the survey, which is constitutive on the results of the interviews and the literature review. Again, data set and the results out of the questionnaires will be highlighted and displayed. For a better understanding of these results, a focus group will be executed. The detailed data set will be presented.

4.1 Expert interviews

This chapter is divided into two parts. The first part will be the data set of the interviews with the sample design, interview guide and data analysis process. Followed by a compression of the results within the codebook (see Appendix [Codebook](#)) on each question.

4.1.1 Data set

For the interviews, 24 experts of events with different sport types, competition forms, time measurement, different race distances at the event, race duration, race length, number of sport types in one race, social form of the races, event form and number of participants at the event (see Appendix [Experts](#) for the detailed event profiles) were contacted via email. All experts are included in the organisation of an event, with existing experience in hosting an event before the Corona crisis and during the Corona crisis. Thirteen experts responded positively on the request within time, one responded positively after the interviews have been hold, two experts refused the interview due to a bad moment and nine did not respond at all.

Expert name, events of the relative expert, canton of event location and sports type of the events are presented in Table 2. All experts are Swiss, thereof eight participants were male, five were female. The events are located all over Switzerland with a hotspot in the canton Grisons with eleven events, followed by the region Berne with six events and five events in and around Zurich. Two events are hosed in the canton St Gallen, individual events take place in the canton Appenzell Inner Rhoden and Schwyz. Sport types of the events are diverse with twelve events in the running sector, namely road run, trail run, orienteering and obstacle run.

Accrued, some running events offer Nordic walking. Bike events are represented five times as road and mountain bike. Additionally, five winter sport events in ski touring, snowshoe and cross-country skiing are included. In the multi-sport area two triathlons and a swimrun are represented. One swim event completes the sample for the interviews.

Expert	Event	Canton	Sports type
Walter Burk	On Trails Trailrunning Festival	GR	Trail run, Nordic walking
Hampi Gredig	Ebenalp Trophy	AI	Ski touring, snowshoe
Deborah Gröble	Ötillö	GR	Swimrun
	Bike Giro	GR	Mountain bike
Thomas Häusermann	Transviamala	GR	Trail run, Nordic walking
	Transruinalta	GR	Trail run, Nordic walking
Menduri Kasper	Engadin Skimarathon	GR	Cross-country skiing
Chantal Mayor	Bike Marathon	GR	Mountain bike
Franz Philipp	Rothenthurmer Volksskillauf	SZ	Cross-country skiing
Florence Pillet	Bieler Lauftage	BE	Road run
Véronique Ruppenthal	OL für Alle	GR	Orienteering
Flavio Seeberger	Züricher Seeüberquerung	ZH	Swim
Simona Spichtig	IRONMAN 70.3	SG	Triathlon
	IRONMAN	BE	Triathlon
Mathias Thierstein	Survivalrun	BE	Obstacle run
	Greifenseelauf	ZH	Road run
	Santarun	BE	Road run
	Frauenlauf	BE	Road run
Tobias Walser	Les Cols de Berne	BE	Road bike
	Les Cols de Zurich	ZH	Road bike
	#Runningstar	GR	Trail run
	La Traverseda Engiadina	GR	Trail run
	#Nordic Star	GR	Cross-country skiing
	Tour d'Uetli	ZH	Trail run, Orienteering
	Tour Skimo	SG	Ski touring
Cycle Hero	ZH	Road bike, mountain bike	

Table 2: Overview of the experts

A semi-structured interview guide with thirteen questions was developed (see Appendix [Questions](#)). The questions were separated in four general themes related to sport events and development: event organisation; competition characteristics; social and participants; and virtualisation and digitalisation. The conversations started with open questions about success factors and challenges at sports events, movement in the last months as well as trends within the society and in the event organisation. Followed by competition specific questions to performance, the possibility of individual events and the potential of challenges at the event. Questions on trends towards family and group events, approach of individual needs, and an open question of what the experts would like to know from the participants, built the third section. To complete the interview, chances with the virtual possibilities and additional value of social media were asked. The interviews were held online via the program Webex and recorded after gaining permission from the interview partners. As all the experts were German speaking, the interviews were prepared and held in German. Prior to the interviews, the questions have been sent to the experts in order to be prepared and keep the interview time to a minimum. The interviews lasted between 22 and 57 minutes. The thirteen interviews took place in November 2021.

During the interviews, all relevant statements of the experts were noted down with pen and paper, or in case of scarce time, a note for further checking the context was made. This guaranteed a selection of the statements based on the first passage. As the interviews were held in German, also the taken notes were in German. In a next step, the notes were translated into English and transcribed directly into a word document for each interview. Missing content was gathered from the recordings. All interview contents were then filled into the codebook (see Appendix [Codebook](#)) and looked for similarities and differences within each question. By rereading the codebook, data could be reduced through either elimination of unimportant statements or grouping similar statements together. After grouped statements, a number in brackets indicates, how many times a specific statement was mentioned. These groups were then sorted into emerging categories. With every revision, data got more coherent.

A summarised version of the codebook with the most mentioned statements and arguments against these statements will now be presented.

4.1.2 Main findings

What are success factors for an event? (Appendix [Codebook](#), pp. 82-83)

Success factors for a sports event are diverse. Most important and mentioned by every interviewee in one way or the other, is a good and professional organisation. Where processes are clear, participants are informed well and just need to focus on themselves. The whole journey from enrolment until award ceremony should be in a smooth flow and everything around the event tells a story. This goes in line with the unique selling point, which states that every event should have its own mission, vision, values and philosophy in order to differentiate themselves from others. The event should also be exclusive in the region it is held. Another point referred to by half of the experts is the match with the needs and requests of the participants: the availability of the courses for the mass and the right target group, to make sure, that the offer is in demand. Also generating new needs is essential. On the event days, a good feeling, created through the whole atmosphere, is indispensable. Also, satisfied participants who have collected good experiences and fulfilled their expectations are an important factor. This goes along with the experienced emotions of challenges, group experiences or unsportsmanlike finishing an event outside of their comfort zone. Communication should be informative, on point, personalised and speak to the emotions in order to make people curious. Therefore, it is crucial to deliver at least what was promised, more positive emotion is fine but not less. Further, good weather, enough sponsors and volunteers, as well as a good evaluation of participants impression after the event contribute to a successful event.

What challenges do you face when organising your event(s)? (Appendix [Codebook](#), pp. 83-84)

The most present challenge for event organisations at the moment are the circumstances resulting out of Corona. Namely the insecurity, the budget management, the challenges around the date and protection concepts but also different regulations and restrictions causing less foreigners to participate. Managing the budget represented already a challenge before Corona as event organisations are dependent on sponsors, which are hard to find, especially with sponsors focusing more and more on digital events. The same applies for the date. Finding a date that suits everyone involved, does not coincide other events, fits in the weather circumstances, and still having enough volunteers, which is another important factor mentioned by more than half of the experts, is quite difficult. As endurance sport events take place outside, the environmental influence, including the weather that cannot be controlled,

represents another huge challenge. Exactly in current times, several experts mentioned the importance of implementing new ideas in order to stay attractive for participants. Whereby it is important to have the courage to dare something as organisers, communicate new formats clearly and simply and include participants as fast as possible. One expert mentioned that they try to participate in events themselves, speak with the participants directly and react fast on inquiries. Further factors that could describe a challenge are logistics of participants to and at the event, permissions of communities, cities, and residents, but also the individualism of participants.

What was going on in the event management sector in the last 15 months? (Appendix [Codebook](#), pp. 84-85)

A lot was going on in the last 15 months in the event management sector. The Corona crisis has brought along major disruption such as causing delivery difficulties, more spontaneous planning including scenario planning, date collisions due to pushing events backwards but also a heavy emotional situation for the organisers. The whole situation also elicits new participants behaviour, that is more difficult to anticipate than before. What exactly do they want? Closeness or distance? What size? And thus, how many athletes will take part? Participants decide more spontaneously and last minute if they want to participate in an event. Also, togetherness needs to be learned afresh. However, some experts could see the positive in this situation. Corona forced everyone to go one step back and now people look forward to simply participate in an event. The trend with overtrumping each other got back lately and a trend back to simplicity is visible. Also, the focus is more on the sports itself than everything around and the appreciation got bigger than before. For event organisers these times offered the chance and opportunity to checking out and trying new ideas, for which there has been no time before. Further, the digitalisation with social media, which is more intensive and more in demand, as well as virtual races that allow picking up other participants, played an important role in the last months. From a financial point of view, organisations have seen how they saved in the last years, but they also started thinking of new ways to attract sponsors and they try to set new cost models with limited number of participants, which helps directly with the budgeting.

What influences the society currently most, aside from Corona? (Appendix [Codebook](#), pp. 85-86)

Aside from Corona, the society is influenced by a healthy and fitness lifestyle and by the phenomenon influence. People influence each other while showing what they do, get influenced and compare themselves with others. Further surplus supply on leisure possibilities, exaggerated mobility with a flight to London and back over the weekend, black life matters, mode and material progresses and new opportunities by working from home, are trends influencing the society at the moment. Through the whole Corona situation, popularity of outdoor sports increased, as people want to move and do sports and also poly sportivity grew. Sport behaviour of individuals got more informal. People want to do sports place and time independent and just pay when they use, which leads to lost importance of sports clubs. Additionally, some experts perceived the trend towards sustainability, financial awareness, and digitalisation.

What higher-ranked trends influence the organisation of events in the future? (Appendix [Codebook](#), pp. 86-87)

The trend influencing the organisation of sport events in the future is mostly digitalisation. Paper should be reduced as much as possible in processes and digital information and media

should be included. Through new media channels, a lot of data is available which allows to break down complex sports and bring it to the broad public and people of diverse skill levels. Digital services offer faster information processes with, for example, life tracking for all parties involved. The virtual possibilities offer training and event opportunities and the new field, e-sports, needs to be included in one way or the other. Another trend emerging according to an expert, is the individualisation. Whereas another expert saw and heard that with Corona, people want more common experiences and they appreciate the effort of organisers to provide such experiences at their events. This can be seen as a countermovement of the individualisation. Also, direct and personal contact will get more important in the future. Event behaviour will change in the future, according to some experts, but it is not clear where to exactly. One expert finds that some events will cease to exist, but others get bigger, another thinks that events need to get bigger to set themselves apart from the mass and a third believes that the number of events will multiply. Less mentioned trends are the health and fitness trend, sustainability, and the changed participants behaviour.

Does absolute thinking of accomplishment has a future? (Appendix [Codebook](#), pp. 87-88)

On the question, if absolute thinking of accomplishment has a future, the answers were not explicit. Some experts are of the opinion, that performance stays important for the majority, that competitions live from performance, and fun is rare. It is also important not to underestimate performance, as our innermost driver is measurability. In the future, performance will become more and more important. Other experts go into the opposite direction, saying that performance does not have the same significance anymore but is still important for the future. According to them, competition character will always have its entitlement, but a small percentage takes part for performance. A third group of experts sees it as a mixture. Performance is needed for events, otherwise everyone could go for themselves. For future sports formats it will be the challenge to combine personal performance with personal experience. The last group of experts sees the potential in fun and experience oriented events for common experiences which are less performance oriented. Races without time measuring have no future. Additionally, experts mentioned different drivers to participate in events which are also forms of accomplishment and performance. For instance, reach the finish line and be part of the event is something that is measurable. A lot of athletes aim to get better every year and therefore need something to compare their performance with. Seeing the development of its own performance is an important driver for training.

How realistic are individual competitions where each participant can put together their own competition out of several options (sports type, length, time measuring)? (Appendix [Codebook](#), pp. 88-89)

The question on how realistic individual competitions, where each participant puts their own competition together, divided the opinions of the experts. Four experts see potential at some events which are performance oriented, two see the potential at events without performance focus. Depending always on sports type and locality. On the contrary, there are three experts saying it is not possible due to the aspect of security and because of the events brand, which is known by the participants and would lose its power, if everyone could just do the preferred event framework. Two experts see rather Strava⁷ for individual measuring and comparing, also outside of events. Individual events would mean a huge effort and difficulty to realise.

⁷ Strava is a social network portal for sportspeople. After recording an activity with any GPS device, it will get uploaded to the personal Strava-Feed. Competition and training activities can be followed and compared by and with friends and followers. Activities can be commented and giving Kudos for good performances (STRAVA, n.d.).

Also, if time measuring would be left away, people could not be tracked anymore, and it cannot be controlled if someone is lost. According, to some experts, virtual events, time and place independent are possible and will come more in the future, but do not offer the same experience as on site events. Comparison, however, is only possible when the course is the same for everyone. Organisers need to be open on the why people come to their event and to attract as many people as possible, they need to be positioned with broad offers, but still the main course is the most important one. Events should follow the acronym KISS: keep it simple and stupid to keep clarity within their races.

How big is the potential of challenges (tasks to overcome or course sections before, during or after the race with bonus system)? (Appendix [Codebook](#), pp. 89-90)

The question about the potential of challenges during the event has brought up several different opinions and perceptions among the experts. For three experts there is no potential at their event for a challenge. More than half of the experts, however, see some potential, also at events where challenges can be a great alternative and at fun events where time is less important. Challenges are attractive when a lot of participants are able to overcome them and if they have an arc of suspense. Important is, that the challenge is linked to the main idea and character of the event. Some advantages of challenges are the possibility to compare uneven conditions (e.g., different motors of e-bikes), to let parents accompany their kids, flatten the full ambition driver of kids while winning something at a challenge instead of reaching the finish as fast as possible, to motivate participants with small highlights and giving everyone the chance to win. Challenges can also be used as interesting places for spectators which are good to communicate. The biggest disadvantage is the clarity and simplicity of the challenge. It needs to be transparent, simple, and fun at the same time so that everyone understands what they need to do. Some ideas for challenges could be who has the fastest last kilometre; a sprint after a few kilometres to extend the field and present an attraction for spectators; enduro format where just a few segments of the whole course will be measured and the rest can be enjoyed in comfortable pace; and the use of strengths and weaknesses, for example one segment uphill and one downhill, that there is something for everyone.

How does the trend to family / team / group event look like? (Appendix [Codebook](#), pp. 90-91)

The trend to participate together in an event is increasing, as the need for being together is more important. However, the focus is still on the main offer and classical team events are leading compared to events that focus on single athletes and offer team participation next to it. Challenge is the combination of performance and experience oriented participants in order that the performance oriented do not destroy the experience of the others. An idea is the trend of a multi-sport festival where something for kids is offered, as well as a short distance and the main event. This, however, involves the risk of participants losing focus on their main event. Specifically, team events are increasing, which is perceived by five experts, namely couple, team / group, and relay works really well. In relation to the family event, the opinions diverge. Three experts believe that the target group "whole family" is too small, it is rather that the whole family is at the event, but everyone participates as a single athlete. On the other side, five experts see an existing need for family events, which has been increasing over the past few years and will go on like that. Kids events can be seen as lighthouses where families make sport together. Additionally, the community and the social aspect around the event are important. For instance, the competition is done as a single athlete but attending the event is done in groups, as a club or with friends and family.

How do you approach different goals and needs of your participants? (Appendix [Codebook](#), p. 91)

Different needs are mainly ignored and not taken care by nine experts. This is due to the fact that events have their philosophy and need to know what they stand for and implement that consistently. Key is not to make everyone happy, and it is not possible to pick up everyone. That is the reason why there are different events for different needs and with different foci, for example first timers, women, life style or elderly. One third of the events offer formats that are open for everyone and feasible for the majority of the society. Sports for everyone is the goal there. Organisers have several strategies to overcome the different needs. For example, they start to tidy up not until the last participant passed, offer categories with time measuring but no ranking or provide various offers (e.g., categories, distances, altitudes, paths, difficulties).

What do you want to learn from your participants what you do not know yet? (Appendix [Codebook](#), pp. 91-92)

Unknown facts and interesting topics to know from the participants have been mentioned in various instances. The ignorance of the recipe for success was mentioned five times. Organisers want to know what they need to offer; which key characteristics, like surrounding or emotionality, lead to participation; what key factors are needed that participants try out new sports event formats and what participants expect. Another interesting fact in this direction is the desire for endurance sport events in the future. How are the needs after Corona, do people still need events or did they realise it is fine without, why do people participate and why not? The fun and experience factor also raises questions about the importance of fun events, the changing motivations to participate and how organisers can approach this phenomenon. Along with this topic goes the question about the importance of time measuring and why less people want events without time measuring. Additionally, all experts had questions on the event characteristics: side events, distances, infrastructure, medals and finisher gifts, sustainability, nutrition, crowd or individually, and starting window. The time point to communicate information like start point or time would also be interesting to know, as well as how much the added value for host cities actually is. Prior event details like preparation, personal goals, maximum driving journey or at which other events they participate, are further questions. Lastly, they want to know what participants they have and who comes to their event.

What chances do the virtual possibilities offer you before, during and after the event? (Appendix [Codebook](#), pp. 92-93)

Virtual possibilities offer a lot of potential for event organisers. As a marketing tool they can make the race known via website or social media, photos of the event can be shared by all involved parties, but also stories and explanations for and around the event can be presented in a multifaceted way. Communication can be done simple and fast, and communication can be held up among participants and between organisation and participants. At the event, live tracking offers possibilities for more than half of the events. Athletes can compare themselves with other athletes during the race, but also afterwards in case of interim times or chosen path. Also for spectators, live tracking can be used to see where their specific athletes are or for the organiser to present the race progression on a screen. Personal and general photos and videos of the event build a possibility for organisers to show emotions that have been felt at the event. Time measuring is used for the net time and ranking of participants. Further features are virtual events which are having limited potential or just for a short duration, according to five experts. But they offer also new possibilities with time measuring and new apps or virtual challenges that need to be overcome to achieve something. Another thought are virtual briefing or award ceremonies, whereby it remains unclear what it would lose on personality.

Virtuality can also be applied in training, as mentioned by six experts. The whole race courses are available online to train, but also challenges for instance on Strava, are used to train specific segments in order to compare and measure with others and themselves.

What additional value does social media generate for you and the participants? What additional expenses does it have, on the other side? (Appendix [Codebook](#), pp. 93-94)

Social media is used most for marketing purposes, as mentioned by eleven experts. It makes it possible to give insight from behind the scenes, post pictures of the event area to make people curious, communicate the actual point of the organisation progress, growing organically through pictures, but the most important reason is selling. Social media gets more importance with every year, and it is not possible to think it away. However, through the posts of the participants on their own social media account, organisers get less feedback on their guest book. For participants, posting pictures of them at the event showing what they have done and achieved is important. Additionally, social media is used as a communication tool. Communication is fast, directly and it needs to be authentic. Organisations interact with athletes, event details can be communicated and keeping participants connected with the event is possible. But social media is not used during all events. One expert stated that there is no need for social media for their event as they have enough participants and even more inappropriate questions could arise. The effort of organisations is variable. Four experts mentioned a huge effort is required to react to a dialogue, but also answering messages on every platform in real time is time-consuming. Social media also needs a professional organisation in some organisations for posting actual videos and photos of spectators and athletes at the event, especially for bilingual content. For one organisation, the effort is little because they can save time and money for other expenses within the organisation instead. Examples to implement social media could be a selfie station on the course in shape of a sponsoring board where photos will be sent directly to the phone number; short videos or a series of videos in advance; or live videos on site of participants to generate a positive vibe of the event.

These gained results of the expert interviews acted as a basis for the survey about event behaviour and perceptions of experienced participants, visible in more detail in the next section.

4.2 Survey

The structure of this paragraph is split into two parts. Details about the exact sample, what the questionnaire looked like and how the analysis process was carried out, build the first one. In the second part, the results of the survey will be displayed and explained.

4.2.1 Data set

The link for the questionnaire was distributed online through multiple channels: WhatsApp, social media (LinkedIn, Instagram, Facebook), email, newsletter and Website by the experts, universities, sport clubs, students, friends and family. A total of 492 people took part in the survey, whereof 399 questionnaires were filled out completely. Of these participants, 14 have never participated in an endurance sports event and therefore were sorted out after the first question. In total, 385 valid responses of people living in Switzerland who have participated in at least one endurance sports event in Switzerland were obtained and taken into consideration for the evaluation of the survey.

Overall, 44,2% of the sample was female, 55,3% male and 0,5% others. Age group distribution of all participants can be seen in Figure 1. The chosen interval are five years, based on the year of birth until the current year 2022. This categorisation has been selected due to comparison reasons. Lamprecht et al. (2020) used in their study ten year categorisation from 15-24, Brüscheiler (2020) used ten year categorisation as well, but ranging from 20-29 and most events have either five or ten year categorisation starting at the full numbers like 20. Therefore, the five year interval can be summarised in different ways to be comparable with other studies. The peak in this study represents the age group 25-29 with 17,4%. Followed by 12,7% elderlies between 50-54, by 11,2% in the category 30-34 and nearly 10% in the age 20-24. The smallest representations are the under 20 with around three percent and the over 70 years old with less than two percent.

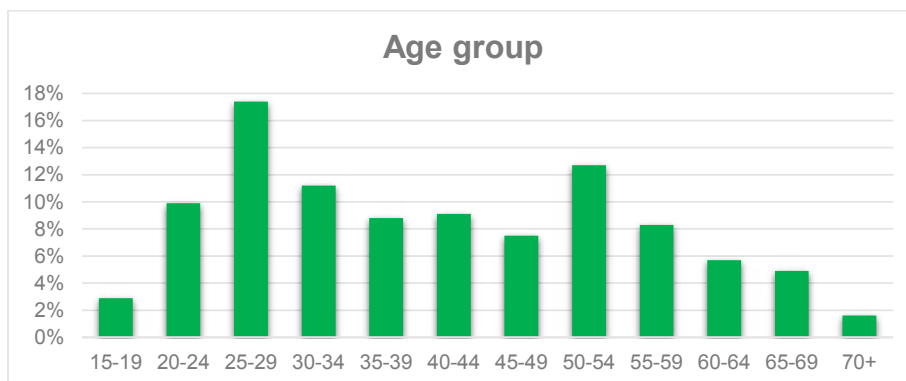


Figure 1: Age group distribution of survey participants

In which canton participants live can be seen in Figure 2. They are distributed over 22 of 26 cantons in Switzerland. The three cantons Zurich, St Gallen and the Grisons illustrate the highest number in descending order. Zurich represents one fifth of the sample, the Grisons and St Gallen slightly less with each around 18,5%. Followed by Berne with half as many, Aargau and Appenzell Inner Rhoden with approximately 5,5% and with around two to four percent each Lucerne, Thurgau, Schwyz, Appenzell Ausser Rhoden and Basel-Stadt. All the other cantons are represented with one or less percent.

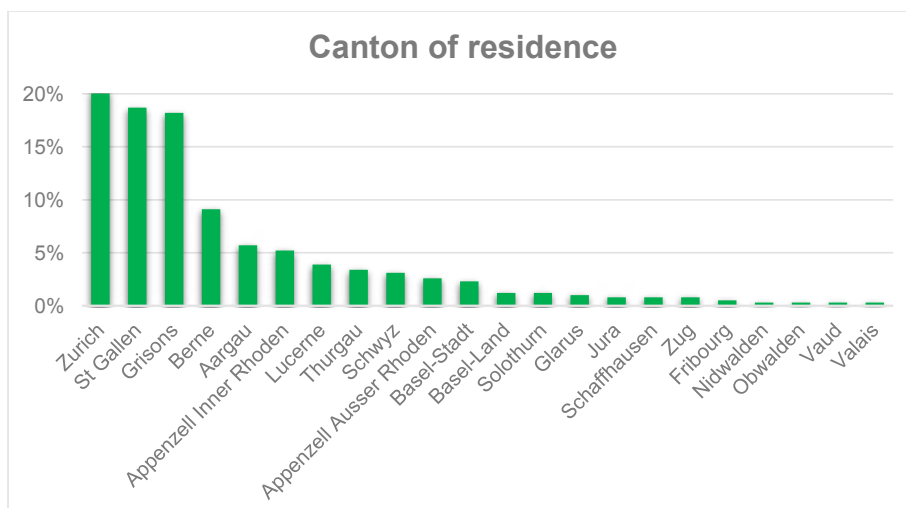


Figure 2: Canton of residence of survey participants

A questionnaire with nineteen questions was elaborated (see Appendix [Questionnaire](#)). The questions were divided into four subgroups for simpler guiding of the participants and better understanding of the process from the participants point of view. Subgroup one served only the purpose to eliminate individuals that did not read the instruction properly and therefore have never participated in an endurance sports event in Switzerland before. The question is a simple «yes» or «no» question, whereas a no «no» directly ended the questionnaire. Subgroup two had its focus on the present and past, trying to find out event behaviour and sport habits of the participants. Participants were asked in which sport types they have participated in an event and what sport types they are practicing actively in training. Then participants needed to think about two preferred sport events they have participated in and what the corresponding motivation to participate in each event was. People having participated just in one event could select «only one event» at the second round. In total, six questions have been included in this subgroup. The third subgroup focused more on the future, trying to identify how the ideal sports event of experienced event participants would look like. In total, the meanings of seven competition characteristics have been requested. This subgroup started with the preferred number of sport types between one and five. In the subsequent question, participants had to select the corresponding number of different sport types they would like to have included. In a next step, they needed to decide how long the event should be and which distance the race should have. Then participants had to think about the time measuring and evaluation method, which social form suits best for them and what race format they would like to have. For additional comments on the ideal sports event, this subgroup was closed with an open text field. To complete the questionnaire and gaining an idea about who the participants are, the socio-demographics gender, age and canton of living built the last subgroup. Among all participants there was a free start for either the Transviamala or Transruinalta trail run event to win. Interested participants could leave their email to take part in the drawing. The questionnaire was created in German in the online survey tool LimeSurvey, accessible via an online link. To gain as much responses as possible, the questionnaire was kept as short as possible. At the end, mean time duration of a questionnaire was 6:08 minutes. The link for participation was open between 30 November 2021 and 24 January 2022.

After closing the questionnaire, all results have been exported from LimeSurvey into an excel file. Every single response question was displayed as one variable in one column, with every response represented with the specific name. Questions allowing multiple answers needed a separate variable for each possible response, illustrated in separate columns. For every variable coding will be «yes» for selected, and «no» for not selected variables in the questionnaire. Additionally, the date when the survey was filled out, the time duration for every subgroup and the total time duration as well as the last page for every person was displayed in a column. The latter showed, if participants finished the questionnaire until the fourth and last page or where they got lost on the way. For correct results, the filter on the first question was put on «yes» in order to see just the participants that have ever participated in an event. To eliminate all data of participants that got lost on the way, the blank answers on the last question on the canton of residence was deselected. Like that, only the valid data was visible. In next steps, for all single response questions, each variable was selected individually, counted with excel and noted in a separate sheet. The multiple answer questions were evaluated column by column selecting the «yes», counted in excel and noted in the separate sheet as well. In the end, all data was transformed into suitable diagrams (see [4.2.2 Main findings](#) and Appendix [Results](#)) in order to read them easily and understand the content. To

look more into the results, dive deeper into the topic and understand correlations, the various variables were compared in different ways. The numbers were again counted in excel and noted in a separate sheet. For better understanding and visibility of the correlations, the data was converted into percentages and formatted into tables (see [5. Discussion](#)). As the whole questionnaire was in German, all results were written and evaluated in German. For the translation process into diagrams and tables, language has been changed into English.

The gathered results, displayed with diagrams will be presented and explained in the next chapter.

4.2.2 Main findings

Event behaviour

In which sport types have you participated in an event? (Multiple answers)

Sport types, in which participants have already taken part at events, are diverse, which can be seen in Figure 3. In total, 1217 mentions have been made which means in average, every participant has participated in 3,16 events. Most popular events are road running events, in which 82,1% of all participants have already participated in. The sport types with the second and third most event participations are trail running and cross-country skiing events with around 35% each. Around a quarter of all participants have participated in a triathlon, a mountain bike and a road bike event. Gigathlon, ski touring, orienteering, swimming and duathlon events have been less attended but still more than 10% of all participants ever attended these events. Less frequently visited are inline skating, obstacle running, Nordic walking, snowshoe and swimrun events with under 10% each. In the open section «others», hiking was mentioned twice and roll skiing, rowing, cross-country running and mountain running, once each.

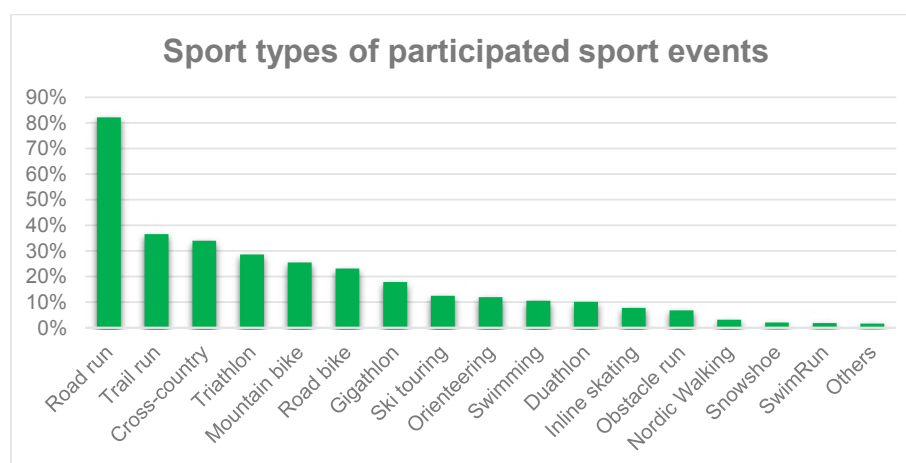


Figure 3: Sport types of participated sport events

Which sport types do you practice actively in training? (Multiple answers)

To find out the sport types practiced in training, multi-sport events have been divided into their separate sport types. Therefore, every sports type needed to be selected separately. In total, 1262 mentions were made, which is equal to 3,27 sport types per participant. The sports type trained the most with over 80% is again road running, as seen in Figure 4. Different than in the event participation ranking, road bike follows on the second place with 45,5%. Third place is again occupied by cross-country skiing with 43,4%. Mountain bike and trail run are used for training purposes by one third of the participants each. Swimming and ski touring follow with

a quarter each. The further sport types are trained by less than 10%. Additional sport types that are mentioned three times are hiking, roll skiing and gravel bike; rowing and stand-up paddling are mentioned twice; and mountain run got mentioned once.

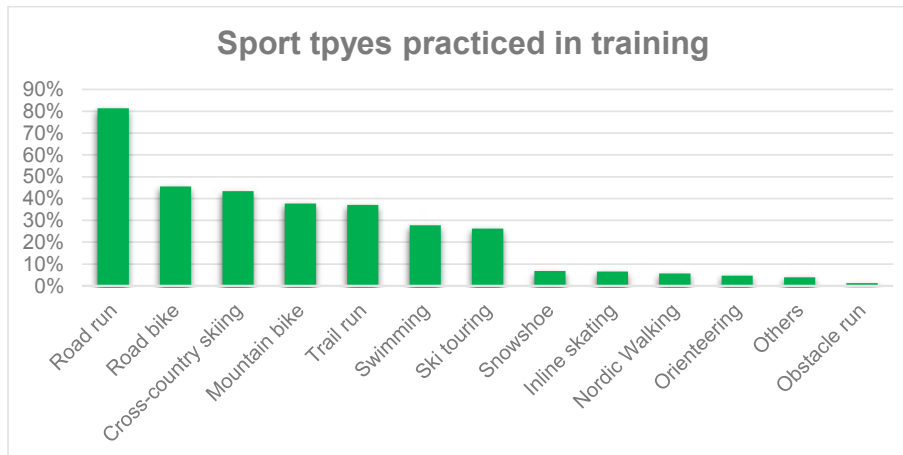


Figure 4: Sport types practiced in training

Think of your favourite event that you have participated in: in which sports type was this event? (Single answer)

The most favourite event of one third of the participants is a running event, visible in Figure 5. Followed by a trail run, cross-country skiing and triathlon event with slightly over 10% respectively. On the fifth place stands mountain bike with 6,2%. This ranking of the top five doubles the ratio of the results of all sport types in which participants have participated in events (see Figure 3). Ski touring, road bike, Gigathlon, swimming, obstacle run and orienteering followed next with mentions under five percent. Even less frequently mentioned, the favourite event of participants are sport types inline skating, Nordic walking, duathlon, snowshoe and swimrun. In addition, a hiking and rowing event were named as favourites.

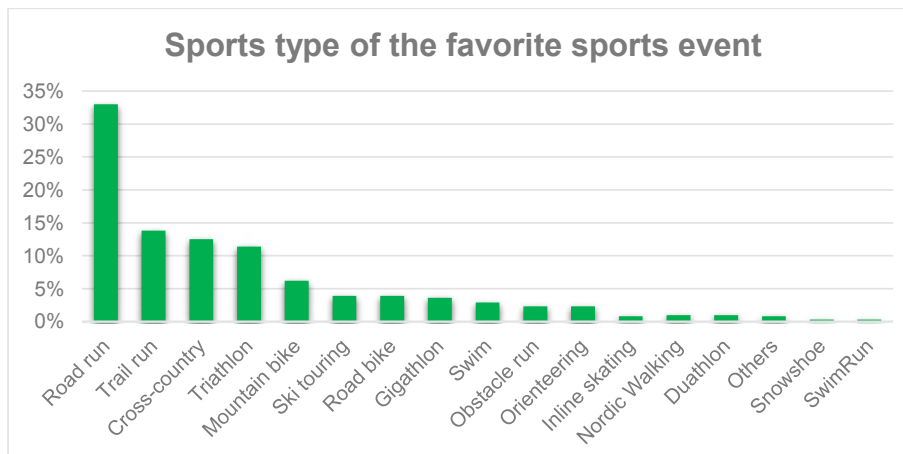


Figure 5: Sports type of the favourite sports event

*Think of the above mentioned event: what motivated you to participate in this event?
(Multiple answers)*

Figure 6 shows the diverse participant's motivations to participate in their favourite sports event. 1678 mentions have been given, which means in average, participants are motivated by 4,36 motives. The most motivating motive is challenge, which motivates 61,8% of all participants to attend their favourite event. More than half of the participants are powered by experiencing something and having fun. Comparison with themselves is rated important by nearly every second participant. For around one third, an event participation means the possibility to compare themselves with others, to have a motivation for training, feel the community with likeminded people at the event, the event itself and the surroundings in which the event is held. Less important motivation drivers are friends, family and group, spectators, affiliation, victory and the alternative program. A nice medal and the goody bag were motivators for two other participants.

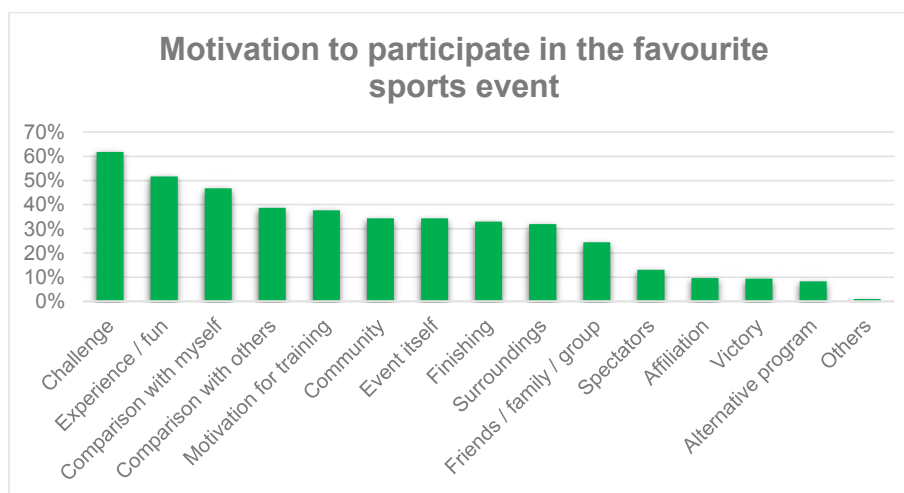


Figure 6: Motivation to participate in the favourite sports event

*Think of an event participation in another sports type: in which sports type was this event?
(If you have participated just in one event so far, chose «only one event») (Single answer)*

The chart in Figure 7 presents a second sports event, this time in another sports type. One big majority with just above 25% mentioned as the second event, a running event. Next to it, with just 10,9% follows cross-country skiing and with 8,3% trail running. Mountain bike, ski touring and triathlon tightly reach the five percent mark each. All other sport types are chosen less frequently by under five percent. Compared to the first ranking of the favourite event, the number of participants in every sports type is lower. This is due to the reason that 16,6% of the participants in this survey have participated only once in an endurance sports event and could not rate this question. Other events mentioned were in the sport types roll skiing, hiking and mountain run.

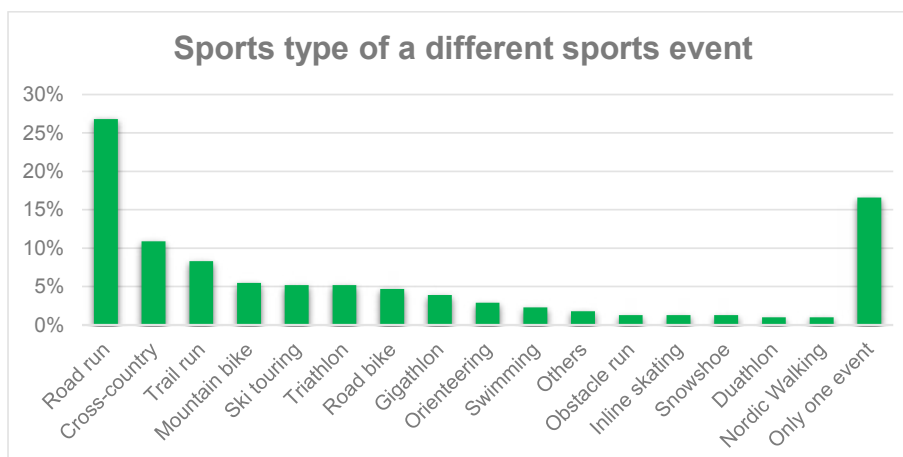


Figure 7: Sports type of a different sports event

Think of the above mentioned event: what motivated you to participate in this event?

(If you have chosen «only one event», select once more «only one event») (Multiple answers)

The representation of the motivators to participate in the second event, depicted in Figure 8, looks like a stair. On the first step is challenge, motivating half of the participants. Followed by experience / fun and comparison with themselves with 45% each. Joining the top five are the motivation for training and comparison with others with around 40%. Located after a 10% gap on the second step are friends / family / group, event itself, environment, community with likeminded people and finishing which motivate around 26%. The last group on the lowest step build the spectators, alternative program, affiliation and victory with more or less 10%. Trying new things, support local events and having pros as pacemaker are further motivations to participate in this event. In total, 1263 mentions have been given which equals 3,93 motivations per participant, in average.

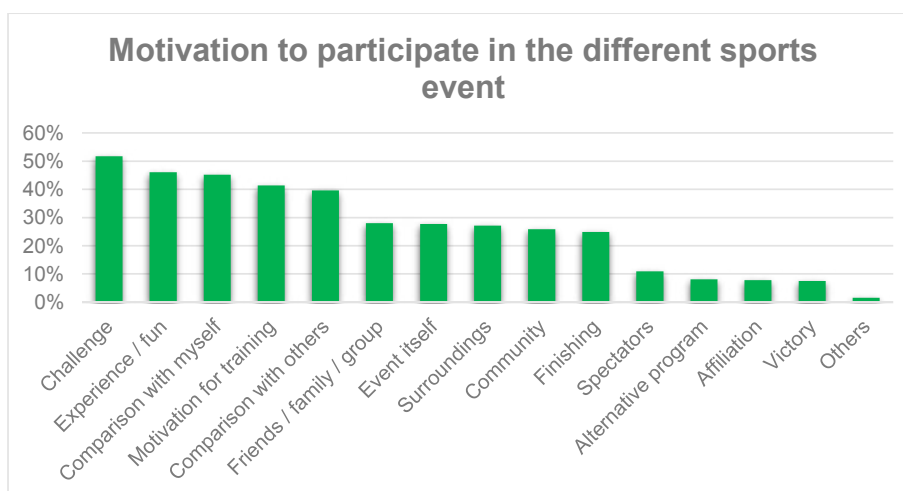


Figure 8: Motivation to participate in the different sports event

Ideal sports event

How many different sport types should the event combine? (Multiple answers)

The ideal number of sport types combined in one race are shown in Figure 9. Most popular are races with one sports type, namely preferred by 48,1% of all participants. With the

increasing number of sport types, the favourability decreases. Therefore, after a big gap, two sport types are favoured by 28,6%, followed by a quarter who want three different sport types combined. With only around seven percent each, four and five diverse sport types complete this ranking.

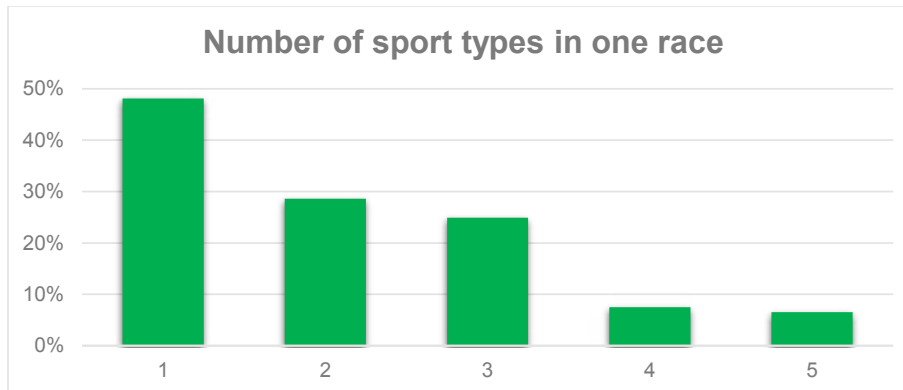


Figure 9: Number of sport types in one race

Which sport types would that be? (Multiple answers)

Figure 10 details the sport types participants want to have in their ideal sports event. Leading are the running sports. Every second participant wants to have road running included, every third trail running. On the running follows the cycling. For 30,6%, mountain bike is an attractive sport to practice, followed by road bike with a few percentage points less. Swimming completes the top five while being liked by every fifth participant. After the summer sports, the winter sports follow. Cross-country skiing belongs to the ideal sports event of 15,8% and ski touring of around nine percent. Obstacle running, orienteering, inline skating, Nordic walking and snowshoe are less popular but still chosen between two and eight percent. Further sport types, that participants want to have included are hiking, mountain run, gravel bike, rowing and stand-up paddling.

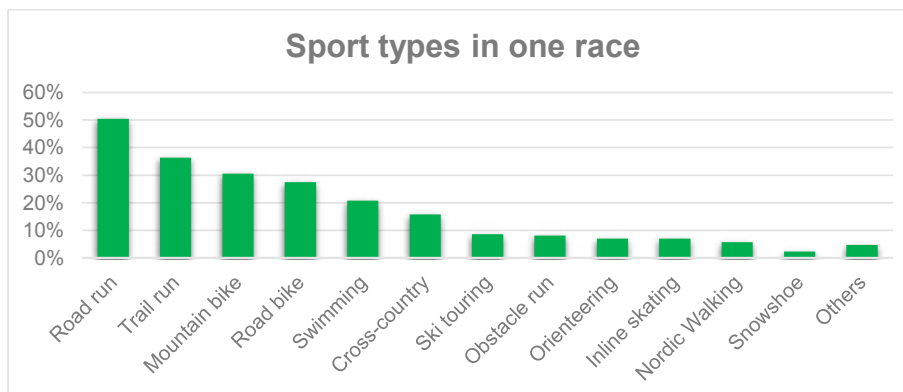


Figure 10: Sport types in one race

How long should the event duration be? (Single answer)

As seen in Figure 11, the preferred event duration of participants is subdivided into two. A tight lead take events lasting one day with 36,4%, compared to half day events with 33,2%. The event duration 1-2 hours and two days are chosen similarly often with a bit more than 10%

each. Three days events are favoured rarely, by less than five percent. Five times was additionally noted an event duration of one week would be preferred.



Figure 11: Event duration

How long should the distance be? (Single answer)

(Evidence from running: sprint=5km, short=10km, medium=21km, long=42km, ultra>42km)

The question on the race distance was answered with a clear tendency to medium distance, visible in Figure 12. Nearly half of the participants favour the distance which corresponds to a 21km running event. Arranged behind is the long distance that is wanted by slightly over 20% and can be contextualised as the double of the medium distance. Less often asked are the short distance with 13,2% and ultra-distance with 10,9%. Rarely in demand with 2,6% is the shortest distance. Around one percent added, that they would like to have different distances counting into one race.

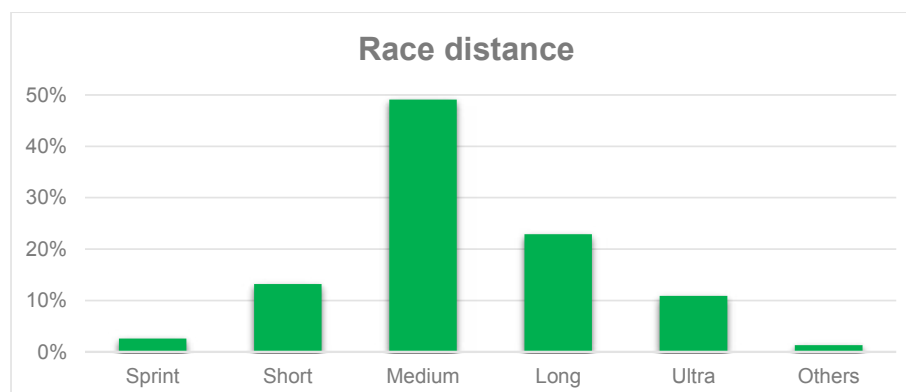


Figure 12: Race distance

How does the evaluation look like? (Single answer)

On the question of the evaluation form, the participants agreed nearly unanimously, as seen in Figure 13. 85,5% of all participants want a ranking list according to time. Only a few participants want a ranking list in alphabetic order, thereof six percent with ranking and four percent without. An event without time measuring was favoured by 3,6%. Additional evaluation systems mentioned are point system or single ranking per stages and total ranking according to accumulated time. Another idea mentioned is a fun group whereas the winner is the participant who is closest at the average time.

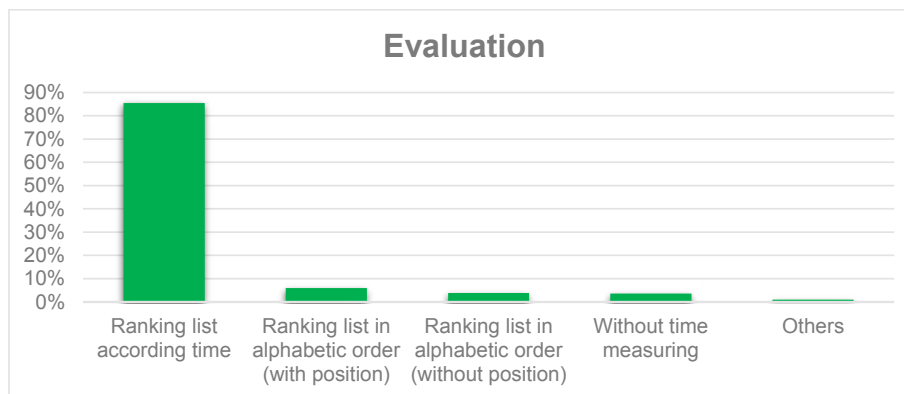


Figure 13: Evaluation form

In which social form would you like to complete the event? (Single answer)

The preferred social forms to participate in a sports event are depicted in Figure 14. With 49,9%, half of all participants want to compete the event as a single athlete. Completing events together, whether as a couple or team, is favoured by around 15% each. 11,4% want to experience the event also in a team but alternating. Half as many participants want alternating as well, but in form of a couple. Participating as a whole family in a race was not that popular with less than one percent. One comment mentioned that the arrival should be done as a group and the race itself as a single athlete.

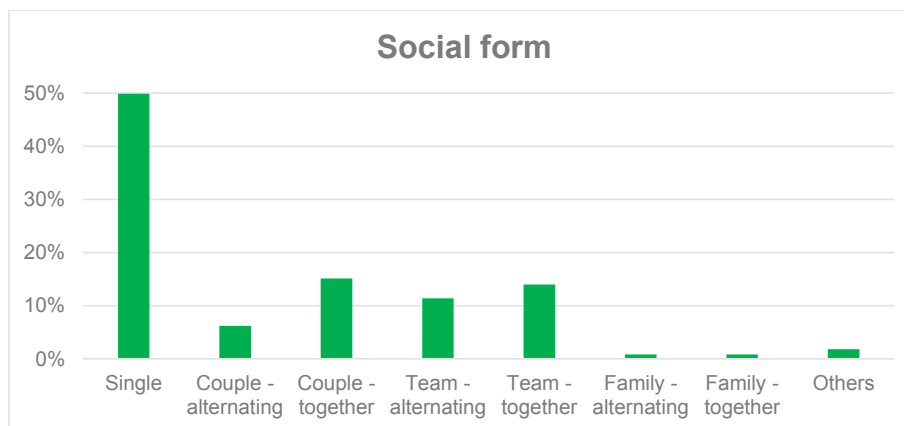


Figure 14: Social form

How should the event format look like? (Multiple answers)

Which race format suits best for the participants can be seen in Figure 15. 56,1% like the classical race format best. The fun event, whereas performance is in the back ground and having fun is the goal, is ranked next with around 25%. The race format challenge has more or less the same number of mentions. Challenges are additional exercises to overcome during the race. Every fifth participant would like to have a competition series of the same sports type in the region with minimal infrastructure and low entry fee. Slightly less participants are interested in a competition series of events in different sport types in the region. Rarely any participant is fond of the individual race format where a defined course can be completed independent of time and date and uploaded results. Two other participants mentioned a series of the same sports type but with good infrastructure and a high costpoint.

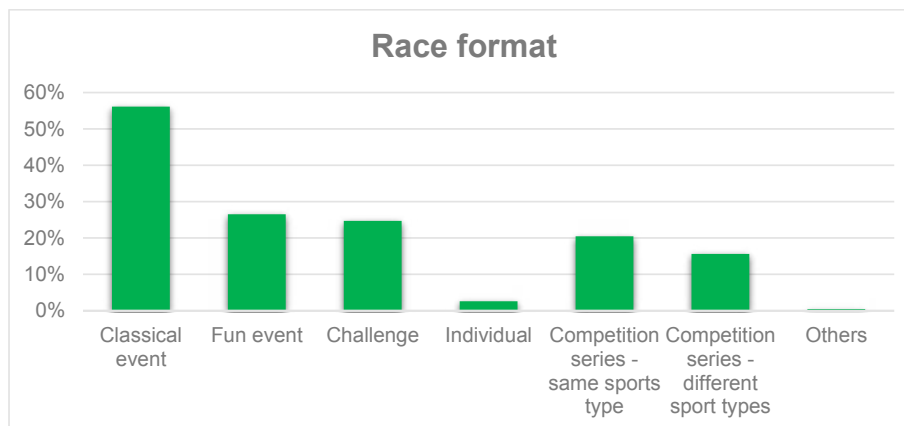


Figure 15: Race format

Do you have any comments regarding your ideal sports event?

Concluding on the ideal sports event, 42 participants added a comment. Thereof, some were ideas for new events, comments regarding the organisation and the fun factor, but also personal statements, not related to this paper. Regarding new ideas, one participant mentioned that changing landscape scenery, whereby, for instance, athletes run next to the sea, in the mountains there will be a trail run, an orienteering event in the city and an obstacle run in the country side, would be interesting. Further was mentioned a Gigathlon but in smaller size, which means a multi sports event with five different sport types of shorter distances and duration. Additionally, the idea of a competition series was emphasised by several participants. They mentioned, that with a series, more stories will be written and more emotional experiences created. Referring to the organisation, they mention a good organisation, with an attractive course and landscape, plus music during or after the race, like a concert for the party feeling would be great. Further, student discount, free public transport to the race and back, attractive public transport accessibility inclusive bicycle transport, free catering after the race, a high security and a focus on sustainability were some concerns of the participants. What is important for two individuals, is the fact that whatever event it is, it needs to be different than the others and every event needs to be individual, allowing every participant to have a favourite event. Related to fun, people added that being part means everything, fun and group experiences should be in the foreground, the health factor should be important and participants should care about each other.

To better understand these results and detect reasons and meanings of the specific numbers, they were presented to experts in a focus group and expert talk, whose data set will be detailed in the next section.

4.3 Focus group

Within this section, the focus lies on the accurate sample, the explanation of the various cross comparisons presented to the experts, as well as the analysis method of the gained data.

4.3.1 Data set

To bring together several experts into a focus group, all experts from the expert interviews have been contacted via email. Additionally, Thomas Wyssmüller, working at Datasport was contacted. Datasport is responsible for everything related to time measuring at around 260 sport events in Switzerland. With his broad view Thomas had a different look at the numbers

and could contribute well to the focus group. Therefore, 14 emails containing a doodle survey with several dates, where every expert could select the available dates, were sent. Three experts found a common date to hold the focus group. Three other experts were willing to participate, however they did not have time on the specific date and no alternative date for a second focus group could be found. Hence, the findings were presented to these experts in an expert talk one by one. Participating experts in the focus group were Thomas Häusermann, Tobias Walser and Thomas Wyssmüller. The expert talks took place with Deborah Gröble, Florence Pillet and Flavio Seeberger (see Appendix [Experts](#) for the detailed event profiles).

Thirteen cross comparisons of various questions out of the survey were evaluated and presented in form of tables (see [5. Discussion](#)). The tables were structured according to the question order in the survey. Thereof, two tables were related to the event behaviour of the participants and eleven on the ideal sports event. The order was according to the order of the questions in the questionnaire. In the first table were the events the participants have attended, opposed to the sport types practiced in training. Followed by the motivation motives to participate in the favourite event, as well as in the second sports type. These two tables were related to the event behaviour. Relation three was between the desired number of sport types and the respective sport types that would make up that event. Ensuring a presentation of the diverse sport type combinations participants would like to have in their ideal event. The event duration was once displayed with the social form and once with the race distance. Depiction seven and eight were related to the distance of the race. Thereof one table presented the distance compared to gender and the other compared to age. For the evaluation question, a simple presentation of the results without correlation was used. The social form and the race format were looked at in the same type as the distance. One table each displayed with gender and one with age. The focus group as well as the expert talk were held online via the program Webex and recorded after gaining permission from the interview partners. As all the experts were German speaking, the interviews were prepared and held in German. The discussions and conversations lasted between 39 and 79 minutes and took place in February 2022.

During the talks, some notes about the most important statements have been written down on a piece of paper. All notes have been in German due to the German language during the interview. Afterwards, all recordings have been reheard to double check the taken notes and gather all important information. During this process, all findings have been translated from German into English. All statements have then been attributed to the appropriate tables and numbers. For each table, all statements were summarised (see [5. Discussion](#)) and noted in text form.

The tables with the cross relations and the corresponding summarised results of the expert talks will be presented in the next chapter.

5. Discussion

The structure of the 13 tables in this chapter is as follows: directly after the title, which states the content of the table, follows the table itself. To understand the table's content, each table is followed by an explanation with some examples. Finally, the various statements of the experts are illustrated in a summarised format.

Event behaviour

Sport types of participated sport events and sport types practiced in training

Sports type	Event participation	Training practice
Road run	82,1	81,3
Trail run	36,6	37,1
Cross-country skiing	34,0	43,4
Triathlon	28,6	--
Mountain bike	25,5	37,7
Road bike	23,1	45,5
Gigathlon	17,9	--
Ski touring	12,5	26,2
Orienteering	11,9	4,7
Swim	10,6	27,8
Duathlon	10,1	--
Inline skating	7,8	6,5
Obstacle run	6,8	1,3
Nordic walking	3,1	5,7
Snowshoe	2,1	6,8
SwimRun	1,8	--
Others	1,6	3,9
Total mentions	1217	1262
Average per participant	Ø 3,16	Ø 3,28

Table 3: Sport types of participated sport events and sport types practiced in training

Table 3 displays the sport types of participated events, as well as the sport types practiced in training. On the left side, the most popular endurance sport types are noted. The middle column presents the percentage of all 385 participants that participated in an event of the respective sports type visible, the right column the same for the trained sport types. As multiple sport types, like triathlon, have been separated for the training sport types, dashes have been used as indicators. This question allowed participants to select multiple answers, therefore the total percentages exceed 100%. The last row shows the total of all mentions the participants have submitted and the average per person. As an example, 82,1% of all participants have ever participated in a road running event and 81,3% of all participants are practicing road running in their free time. In total, 1217 mentions for the event participation have been made, which means 3,16 event participations per person.

Endurance sport types can be distinguished between competitive sport types and sport types that are practiced for pleasure. Orienteering, for example, can be seen as a competitive sports type, whereby individuals that train orienteering also participate in an orienteering event. On the contrary, swimming can be seen as pleasure sports type for example, as it is trained more often than performed during an event.

The ranking displays accurately that road run, trail run, cross-country skiing, triathlon, mountain bike and road bike are the most popular events. Also, the fact that swimming gains more significance in training correlates to the reality. This shows that these sport types can be seen as main sport types and swimrun, Nordic walking, snowshoe and inline skating rather as fringe sports. A look at the numbers however indicates that the correlation of the road runners with 82,1% does not correspond with the correlation in the society. The objectivity is not absolutely balanced even though there is a high share of runners in our society. This can be

seen on Datasport whereby the sports type with the highest event density is road running. However, the 82,1% are too high to be representative for the society. Therefore, the results can be seen to some extent from the view of runners, who have alternative sport types that can be seen in the table. Such alternative sport types are for example swimming which is trained in winter. In these sport types are per se fewer event participations than in the main sport types.

Referring to the awareness that there are sport types practiced for pleasure, road bike, mountain bike and swimming are example thereof. They are practiced more often in training but without event participation. This can be explained through a smaller offer of sport events in these sport types compared to all individuals that train these sport types. For amateur sports, plenty running events exist, where the entry is low-threshold – no big knowhow is needed to participate and short distances are offered. Therefore, it is easier to participate in a running event than an event in a pleasure sports type.

Surprising in this table was the relative high share of obstacle runners with 6,8%, but also the 2,1% who took part at snowshoe events, because the latter was known just as training sports before. The fact, that orienteering is rarely trained with 4,7% compared to the event participation of 11,9%, additionally caught attention.

Motivation to participate in the favourite sports event and in the different sports event

Motivation motives	Favourite event	Another event
Challenge	61,8	51,7
Experience / fun	51,7	46,1
Comparison with myself	46,8	45,2
Comparison with others	38,7	41,4
Motivation for training	37,7	39,6
Event itself	34,3	28,0
Community	34,3	27,7
Finishing	33,0	27,1
Surroundings	31,9	25,9
Friends / family / group	24,4	24,9
Spectators	13,0	10,9
Affiliation	9,6	8,1
Victory	9,4	7,8
Alternative program	8,3	7,5
Others	1,0	1,6
Only one event	--	16,6
Total mentions	1678	1263
Average per participant	Ø 4,36	Ø 3,93

Table 4: Motivation to participate in the favourite sports event and in the different sports event

The motivational reasons for individuals to participate in an endurance sports event are depicted in Table 4. The given motivation motives are listed on the left hand side. In the middle column, the percentages for each motivation to participate in the favourite event are presented, on the right column the ones for another event in a different sports type. As multiple answers have been possible, every row shows the percentage of participants who are motivated by this motive and in total, more than 100% were selected. On the favourite event, the total of 385 participants is considered, in the second event the total is 321 as 64

participants have only had one single event participation. The total of all mentions and the average per participant can be seen in the last row. For example, to participate in the favourite event, 61,8% of all participants were motivated by the motive challenge. In the second event, 51,7% are motivated because of this motive. In total, 1678 mentions have been made for the first event, which means 4,36 motivations per participant, on average.

Experts mentioned that the differences between the favourite event and the second event in another sports type are too small for a deep interpretation. But this shows on the other side, that the motivation motives of the participants are higher ranked goals, regardless of sport types. Other than that, from an organisers view, the results are pictured realistically. These are the motivations they see at their events and it corresponds with the spirit of the time.

Personal challenge and experience / fun are taking center stage. The high ranking and importance of fun is linked to the fact that the survey was for the broad population of amateur sports. To see these two motivations in the top positions has a lot to commend for events without time measuring. 15-20 years ago, comparison with others would have been ranked higher. Nowadays for example, running events offer at the same time a challenge with adaptive distances, as well as having fun and comparison with others. An interesting number are the 34,3% respectively 28,0%, who are motivated by the event itself. One third of all individuals participate in an event because it is this event and two third because of other reasons. This means for event organisers, that their event is interchangeable with all events and participants would also participate, if the event were somewhere else. To find the motivator victory that far at the back is on the one side a surprise, but on the other not, because the whole sample is representative of amateur sports. Additionally, the alternative program stood out on the last position. This raises questions along the lines of what is considered alternative program from a participants point of view.

Comparing the favourite event, which is probably the main sports type of the participants, with an event in a different sports type, several motivations attracted attention. For example, in the main sports type challenge and experience / fun are higher, compared to the second sports type. In contrast, motivation for training and comparison with others are more important drivers in the second event than the favourite. It was surprising that the motivation for training in the second event is not even higher. This, because the second sports type is often used as reason for training. But it is visible that challenge and experience / fun are the most important motivations also for the second sports type.

The motive challenge has different meanings for participants. A challenge is something that athletes do for themselves to find out where the own limits for body and mind are, but also to plumb and overcome these limits. With different distances, challenges for everyone can be created. As an example, for leisure runners, the goal is to run 10km or a half marathon under two hours. For a regular runner, challenge might be to run a 50km race. With time passing by and more experience, the challenges shift continuously. Nowadays, less and less athletes want to run 10km under 35 minutes, but they want to accomplish the distance as kind of a reward for the executed training. The challenge then is for instance the running of a marathon, whereas athletes need to train that they can have fun during the race instead of suffering. Also, participants who do an event for the reason of challenge are not there for affiliation but to prove themselves that they can do it, no matter how long it takes. Experience and fun can be experienced when a lot is provided next to the race. For example, something that happens on the course like a street transition with a special design or the start area lined with trees.

Additionally, position four in the ranking, comparison with others, brought up several reasons how to contextualise this finding. For participants, it is a basic need and important point to know, what they have achieved at the end of the day, but it is not the main motivation to participate. Generally, the reason to participate is the challenge, but if the race is going well, they want to know where they are placed in the field. In addition, a ranking list functions as an evidence and memory for the mastered challenge, whereas it can also be used for comparison reasons with themselves and others. The ranking list reflects the achievement. If the ranking list would be the main motivation, the motivation for the victory would also be higher. Possibility to measure themselves among each other is also offered during the race itself. If all athletes are starting at the same time, it allows to measuring themselves with others, as they see where they stand. Athletes can run after each other, overtake others and run together which can also be seen as measuring with each other, but without a time limit. However, this is not possible in every event as it is more difficult, for example, in longer races or at races with a lot of participants. There, a ranking list helps. Additionally, many participants do not want to have the pressure of direct measurement with each other but want to have a ranking at the end of the race. To conclude it can be said that a ranking list is a must have, but it does not have the same meaning anymore.

Ideal sports event

Sport types and number of sport types included in the ideal sports event

	1	2	3	4	5	Total
Road bike	7,5	6,7	11,4	5,2	5,7	27,5
Mountain bike	7,5	9,1	10,9	4,7	4,9	30,6
Road run	20,0	15,6	16,4	5,2	5,2	50,4
Trail run	15,1	12,5	10,4	3,9	3,1	36,4
Nordic walking	1,0	2,3	1,8	0,8	0,5	5,7
Orienteering	2,3	1,6	2,3	1,6	0,5	7,0
Obstacle run	1,3	1,8	4,9	2,0	0,3	8,1
Inline skates	0,8	2,0	2,9	1,3	2,3	7,0
Swim	3,9	4,4	13,5	3,4	3,1	20,8
Cross-country skiing	8,6	3,4	3,1	1,3	1,8	15,8
Ski touring	3,4	3,6	2,1	0,3	0,3	8,6
Snowshoe	1,6	0,8	0,8	0,0	0,0	2,3
Others	4,0	7,0	1,0	3,0	3,0	4,7
Total	48,1	28,6	24,9	7,5	6,5	

Table 5: Correlation of sport types and number of sport types included in the ideal sports event

Table 5 shows which sports type is preferred in combination with how many other sport types. Therefore, the different sport types are displayed in the first column and the number of sport types in the first row. The column on the right shows the total of participants that want to have the respective sports type in their ideal event. In the last row, the number of athletes favouring which number of disciplines is shown. For the participants it was possible to select several answers, therefore the total is higher than 100%. The fields in the middle represent how many participants request the particular sports type in the given combination. For instance, road bike is desired by 7,5% of all participants as a single sports event. In combination with two other events, road bike is chosen by 11,4%. In total, road bike should be included in the ideal endurance sports event of 27,5% participants. A one sports type event is preferred by 48,1% of all participants.

A look at this table demonstrates that the existing event offers are in a good place. Sport types that are already combined nowadays are desired like that in the future and the same applies for sport types that are practiced separately. For example, triathlon as a traditional multi-sport is clearly visible as a combination of swim, road bike and run. Cross-country skiing on the other side, which is rather a single sports type in current events, is desired mostly like that. The sport types combined most currently are road bike, mountain bike, road run, trail run and swim. Anyway, the value of single discipline sport events is the highest compared to combinations. For some experts it was a surprise that so many participants want to have more than one sport types included in one event. Based on the currently offered events, it was expected that the combination of three sport types is significantly higher than two sport types.

The evaluation shows some top down sport types like road run or trail run, where the highest number of participants want to have these sport types separately and the more disciplines, the less desired it is. The inverse trend can be seen with the sport types road bike, mountain bike and especially swimming, whereby the combination of three sport types is the most popular and only one discipline is less demanded and nearly unimaginable. Focusing on swimming and road bike, the high numbers in a combination of three indicate the triathlon. With a closer look on swimming, an explanation for the three turn combination is that firstly, there are not so many possibilities (pool, lake, river) to host a swim event for the broad mass. Secondly, the attractiveness of a swim event in a pool is not that high as pool swimming cannot cover many of the above mentioned motivations. Therefore, swimming is interesting in combination as a triathlon or Gigathlon.

This table also shows some exciting ideas for new combinations that might have potential. For example, mountain bike is emerging now and participants wish to have it as a combination. The same applies for trail run where the trend is generally big, even though normally separately and not in combination. A small peak can be noticed in obstacle run. Only few participants wish to have it included but if so, then in a combination of three. Resultant of these trends are mountain bike and trail run in form of a duathlon or even in combination with swimming as a triathlon in the mountains where the course might be more challenging from a topographic point of view. Trail run with obstacle run and swim might be something new. The combination road run, mountain bike and inline skates is an existing combination that works. With adding road bike and swim, the multisport event Gigathlon can be seen in the statistics as still having potential. Generally, it can be said the basis of the ideal sports event is mostly running in combination with another sports type that participants perceive as interesting.

Combinations of sport types in the ideal sports event

	Road bike	Mountain bike	Road run	Trail run	Nordic walking	Orienteering	Obstacle run	Inline skates	Swim	Cross-country skiing	Ski touring	Snowshoe	Others	Total
Road bike	x	10,4	16,4	9,9	1,0	2,1	1,6	4,2	13,0	4,7	1,3	0,5	0,5	27,5
Mountain bike	10,4	x	12,5	13,2	0,8	1,6	2,3	4,2	6,8	4,4	3,1	0,5	1,0	30,6
Road run	16,4	12,5	x	14,3	4,9	3,9	4,9	4,4	14,5	4,7	2,6	1,6	1,6	50,4
Trail run	9,9	13,2	14,3	x	1,3	2,9	3,9	2,3	5,5	3,4	2,1	0,5	0,3	36,4
Nordic walking	1,0	0,8	4,9	1,3	x	0,8	0,5	0,8	0,8	0,3	0,3	0,3	0,3	5,7
Orienteering	2,1	1,6	3,9	2,9	0,8	x	1,6	0,8	1,6	0,8	0,5	0,5	0,3	7,0
Obstacle run	1,6	2,3	4,9	3,9	0,5	1,6	x	0,5	2,3	1,8	0,3	0,8	0,3	8,1
Inline skates	4,2	4,2	4,4	2,3	0,8	0,8	0,5	x	3,1	1,6	0,5	0,3	0,0	7,0
Swim	13,0	6,8	14,5	5,5	0,8	1,6	2,3	3,1	x	2,3	0,3	1,0	1,0	20,8
Cross-country skiing	4,7	4,4	4,7	3,4	0,3	0,8	1,8	1,6	2,3	x	1,8	0,3	0,8	15,8
Ski touring	1,3	3,1	2,6	2,1	0,3	0,5	0,3	0,5	0,3	1,8	x	0,5	0,5	8,6
Snowshoe	0,5	0,5	1,6	0,5	0,3	0,5	0,8	0,3	1,0	0,3	0,5	x	0,3	2,3
Others	0,5	1,0	1,6	0,3	0,3	0,3	0,3	0,0	1,0	0,8	0,5	0,3	x	4,7

Table 6: Combinations of sport types in the ideal sports event

The percentages of the various sport type combinations are presented in Table 6. In the first column and first row all sport types are noted in the same order. Like that it is visible how many participants want to have which sports type combination. The column on the right shows the total of participants who want to have the respective sports type in their ideal event. The total numbers are higher than 100%, as participants could select multiple answers. For instance, a combination of road bike and mountain bike is desired by 10,4% of all participants, 16,4% requested a combination of road bike and road run. In total, road bike should be included in the ideal endurance sports event of 27,5%.

This view confirms that the current event offers are not so wrong. Sport types that are already combined with each other have the highest numbers. The classic road bike, mountain bike, road run, trail run and swim prevail them and the triathlon combination stands out with its popularity. What is fascinating in this table is the fact that nothing is unthinkable, every combination was selected by at least one participant.

The attractiveness of the sports type swimming surprised the experts. As for multisport events like the Gigathlon it is always the hardest to find a swimmer. A lot of people swim but the ones who swim do not want to participate in events. Potential combinations with swimming mentioned a few times, are winter sports. These would match with the current trend of swimming in the cold lakes. Other creative combinations could absolutely have potential, although just a small percentage. For example, cross-country skiing and road bike / trail run, ski touring and mountain bike / road bike, road bike and obstacle run or mountain bike with at least one running part and maybe swimming. Yet, Datasport offers an event with mountain bike, running and ski touring and the demand is small. Some participants selected combinations of road run with trail run or obstacle run with trail and/or road run whereas no idea could be found as to what the underlying intention could be. Again, it is likely that one of the main sport types run or bike needs to be chosen and complemented with another sports type.

Event duration and social form of the ideal sports event

Duration	Single	Team	Couple	Family	Others	Total
1-2 hours	7,0	2,9	2,6	0,3	0,5	13,3
Half a day	15,8	9,9	6,5	0,8	0,3	33,2
Whole day	19,2	8,6	7,5	0,5	0,5	36,4
2 days	4,6	2,9	3,6	0,0	0,5	11,7
3 days	1,8	1,0	0,8	0,0	0,0	3,6
Others	1,3	0,3	0,3	0,0	0,0	1,8
Total	49,9	25,4	21,3	1,6	1,8	100,0

Table 7: Correlation of event duration and social form of the ideal sports event

The correlations between the event duration and the social form are depicted in Table 7. In the left column are the event durations and in the first row the social forms. For both questions single answers were required, therefore the whole table sums up to 100%. The total on the right side shows how many participants want which duration. In the bottom line are the respective totals of the different social forms. In between are the correlations of these two characteristics in percentage of all 385 participants. For example, 7,0% of the participants would like to absolve the event as a single athlete and it should last around 1-2 hours. A 1-2 hours event duration in a team was demanded by 2,9%. In total, 13,3% of all participants prefer an event of 1-2 hours, 49,9% of all participants prefer to complete the event as a single athlete. The interpretation to the question of the duration was rather difficult. Not every

participant understood the same under 1-2 hours. For some participants this meant the race duration from the start until the finish line and for others the event duration from the arrival until departure. Therefore, this needs to be taken into consideration while looking at the data.

The table presents a clear picture. Generally, participants want to complete the event as a single athlete during a half or entire day. This could be because if individuals do something, then they want to do it right and not just for 1-2 hours. An entire day might also be an increased challenge and therefore a higher motivation. The same might apply for instance for a family father. He does not have many event participations per year, but if he participates in an event, then it needs to be at least half a day, up to one entire day, no matter which distance. A full event day during a weekend can also best be planned and scheduled for. There is a program from A to Z: arrival in the morning and departure in the evening. It is important, that the second day of the weekend can be used to relax. Additionally, in the table it becomes apparent that half a day is almost desired as much as a whole day which shows that not everyone wants to invest an entire day of the weekend. Half day events in the evening are also quite attractive. For example, short mountain runs on a Friday evening often have a lot of participants. A reason is that no entire weekend day needs to be sacrificed.

Between one day and two days is a big gap. Individuals are willing to invest one day of the weekend but not more. Three days are not really demanded at all. If people participate in a two day event, then they prefer to do it as a single athlete instead of as a team, even though it is a small difference. Doing a two day event as a single athlete might represent a considerable challenge to achieve. Events with overnight stays are attended willingly with someone they know. Therefore, a team event over several days might be interesting.

Participating in an event as a family is not in demand. Such events are difficult to execute with the different possibilities and characteristics every family member has. Doing an event as a family might also be hard to arrange with the motivational reasons, they have mentioned in Table 4. This stays in contrast to the fact, that families attend an event together, but every member participates in a separate race. Completing an event as a team or couple is more important than family. Although, these categories can be generation-overarching whereby a father participates with his son. The most demanded social form however, is as a single athlete.

Event duration and race distance of the ideal sports event

Duration	Sprint	Short	Medium	Long	Ultra	Others	Total
1-2 hours	0,8	3,6	8,0	0,5	0,0	0,3	13,3
Half a day	0,8	3,9	21,3	6,5	0,8	0,0	33,2
Whole day	1,0	4,1	14,3	10,9	5,7	0,3	36,4
2 days	0,0	1,6	4,1	3,4	2,3	0,3	11,7
3 days	0,0	0,0	1,3	1,6	0,8	0,0	3,6
Others	0,0	0,0	0,0	0,0	1,3	0,5	1,8
Total	2,6	13,2	49,1	22,9	10,9	1,3	100,0

Table 8: Correlation of event duration and race distance of the ideal sports event

In Table 8, the event duration is displayed once more, this time however with the race distance. The different race distances can be seen in the top row, the total of the particular distance in the bottom row. The total on the right side shows how many participants prefer which duration. For both questions single answers were required, therefore the whole table sums up to 100%. The correlations can be gathered from the middle fields. For example, a sprint in 1-2 hours is

preferred by 0,8% of the participants, a short distance in 1-2 hours by 3,6%. In total, the sprint distance is in demand for 2,6% of all participants and 13,3% of all participants prefer an event of 1-2 hours. The interpretation of the question of the duration was difficult. Not every participant understood the same under 1-2 hours. For some participants this meant the race duration from the start until the finish line and for others the event duration from the arrival until departure. Therefore, this needs to be taken into consideration while looking at the data.

What is visible in this table is absolutely correct and representative. Medium distance has a clear majority, the rest is distributed to short or long, which are rarer. More and more people prefer medium distance instead of long distance as these distances are manageable. This distance is feasible in one day and the preparation for the distance is shorter than for long distance and the event is also possible with less training. According to an empirical value, the longest event distance has the most participants, before short and sprint. Therefore, sprint is the beginners and inexperienced distance, whereby with more experience and longer contact with the sports type, bigger challenges are being sought out. For example, the evolution to longer distances can be seen as an increased challenge. Ultra-races are desired nearly as much as short distance.

According to the actual spirit of time, doing something quickly and having the rest of the day free, short events would suit better. However, this is not the case. Individuals would like to invest time, at least half a day. A whole day during the weekend is the most interesting duration. While looking at the high number of 21,3%, which want to do a medium event in half a day, there might be different understandings. It is more likely that people want the race itself during half a day but the whole journey from leaving home until the return back home is taking one entire day.

Race distance of the ideal sports event and gender

Gender	Sprint	Short	Medium	Long	Ultra	Others	Total
Male	1,9	8,9	44,1	30,0	14,6	0,5	55,3
Female	3,5	18,2	55,9	14,1	5,9	2,4	44,2
Others	0,0	50,0	0,0	0,0	50,0	0,0	0,5
Total	2,6	13,2	49,1	22,9	10,9	1,3	100,0

Table 9: Correlation of race distance of the ideal sports event and gender

The correlation between gender and race distance can be seen in Table 9. Amongst all participants of the survey were 55,3% male individuals and 44,2% female. To make a comparison between the gender possible, every gender is summed up to 100%. In the bottom line are the totals of each distance, representing the cumulative of male and female. In the right column is the total of male, female and others from the total 385 participants. The question for the distance was a single answer question. The numbers in between show the correlations. As an example, 1,9% of all male participants would like to have the sprint distance. Compared to that, 3,5% of all females wish to have a sprint distance. In total, 2,6% of all participants wish the sprint distance.

Medium distance is the most popular for men and women. Women prefer short ahead of ultra and men the opposite. Obviously, men are looking for more challenge and the extreme, trying to push their limits, needing to show what they are capable of and tendentially, overestimating themselves with what they sign up for. They are also more frequently looking for the dogged comparison with themselves and others. This stands in comparison to women, who are more reasonable and rather want to have the experience. But women are catching up with men in

all distances and in the medium distance, women even overtook men. That is also visible in the participant statistic of events over the past five years.

Race distance of the ideal sports event and age

Age	M / F	Sprint	Short	Medium	Long	Ultra	Others	Total
15-19	18,2 / 81,8	27,3	45,4	27,3	0,0	0,0	0,0	2,9
20-24	39,5 / 57,9	2,6	36,9	52,6	5,3	0,0	2,6	9,9
25-29	52,2 / 47,8	1,5	22,4	38,8	20,9	13,4	3,0	17,4
30-34	44,2 / 55,8	7,0	7,0	60,5	20,9	4,6	0,0	11,2
35-39	76,5 / 23,5	0,0	8,8	50,0	29,4	11,8	0,0	8,8
40-44	45,7 / 51,4	0,0	0,0	48,6	37,1	11,4	2,9	9,1
45-49	62,1 / 37,9	0,0	10,4	44,8	24,1	17,2	3,5	7,5
50-54	59,2 / 40,8	2,0	4,1	49,0	34,7	10,2	0,0	12,7
55-59	59,4 / 40,6	0,0	6,2	56,3	25,0	12,5	0,0	8,3
60-64	63,6 / 36,4	4,6	13,6	59,1	9,1	13,6	0,0	5,7
65-69	78,9 / 21,1	0,0	5,3	47,4	26,3	21,0	0,0	4,9
70+	83,3 / 16,7	0,0	0,0	50,0	16,7	33,3	0,0	1,6
Total	55,3 / 44,2	2,6	13,2	49,1	22,9	10,9	1,3	100,0

Table 10: Correlation of race distance of the ideal sports event and age

A comparison of the race distances over all age categories can be seen in Table 10. The age categories on the left side are the actual age of the participants in the year 2022. Next to the age, the distribution of the gender in each age category can be seen. The total in the right column states the percentage that this age category represents from the total of all 385 participants. In the bottom line, the total of each race distance is shown. For the question for the race distance only one answer could be selected. To make a comparison between the age categories possible, each age category represents 100%. In the middle, the percentage of the particular age group's preferred race distance can be seen. For instance, the age category 15-19 represents 2,9% of all participants. Of these 2,9%, 18,2% are male and 81,8% female. 27,3% of these 2,9% prefer the sprint distance, 45,4% the short distance. 2,6% of all participants prefer a sprint event.

For the 15-19-year-olds, shorter distances are the most popular. This goes together with the fact that short distances act as an entry into the sports and event industry. Additionally, the high share of women might explain the preference of shorter distances. In all other categories, the focus lies more on medium distance. Therefore, from 20 up to 70, half marathon distances can be offered without difficulty and resonate well. 25-29-year-olds have a relatively high number of participants that prefer ultra, although physiologically it is better to do longer distances at a later moment in life. This trend can be seen in the highest number of long distances with 40-44 and high numbers in the following years. An explanation is that with progressive age, participants have more experience and are looking for new challenges, which results in longer distances. Another reason perceived for the peaks in long distance in the age categories 40-44 and 50-54 are a life crisis, that individuals necessarily need to finish a marathon before 40 or 50, as a life goal. 50-54-year-olds have the second highest share of participants and long distance as the second most popular distance. And even in the 70+ category two participants would like to do an ultra-event.

Evaluation form of the ideal sports event

Ranking list according time	85,5
Ranking list in alphabetic order (with position)	6,0
Ranking list in alphabetic order (without position)	3,9
Without time measuring	3,6
Others	1,0
Total	100,0

Table 11: Evaluation form of the ideal sports event

The preferred evaluation form is represented in Table 11. The numbers display the percentages of all 385 participants that want to have the particular evaluation form. Participants could select only one evaluation form, therefore the total is 100%. For example, 85,5% of the participants want a ranking list according to time. Due to the high representation for the ranking list according to time, no correlation was made.

A ranking list according to time is available at almost every event, therefore participants are used to it. Even though the motivation or goal to participate in an event is fun, participants want to know the time they have needed to complete the distance. The ranking list also serves as a kind of evidence for the participants. When crossing the finish line, they know what they achieved, but they need evidence that proves their performance. Additionally, also comparison with others and themselves is as such enabled. If they come back in another year, they want to know how long it took them. They also want to know how their self-perception has been. Have they been as good as they felt during the race?

Social form of the ideal sports event and gender

Gender	Single	Team	Couple	Family	Others	Total
Male	59,2	21,6	16,9	1,4	0,9	55,3
Female	38,8	30,6	25,9	1,8	2,9	44,2
Others	0,0	0,0	100,0	0,0	0,0	0,5
Total	49,9	25,4	21,3	1,6	1,8	100,0

Table 12: Correlation of social form of the ideal sports event and gender

The differences between men and women related to the social form are detailed in Table 12. Amongst all participants of the survey were 55,3% male individuals and 44,2% female. As only one social form could be selected, the total over all categories is 100%. The answer possibilities team/alternating and team/together, were combined into the social form team in this table. The same applies for couple and family. For comparison reasons between the genders, each row, male, female and others are summed up to 100% as well. The bottom line shows the total of the respective social form, seen in the top line. In between are the various correlations. For example, 59,2% of all male participants, prefer to complete the event as a single athlete. Compared to that, 38,8% of all women want to participate in an event as a single athlete. In total, 49,9% of all participants prefer to attend an event as a single athlete.

To address the mass, a single event needs to be offered. This fact corresponds with the distances before. Shorter events can be done easier in a group or as a couple, in contrast to longer distances, which are simpler to complete as a single athlete. Men need to demonstrate that they are strong and able to reach something, therefore, they want to do the event as a single athlete. Also, the fact that they want longer periods of time and more extreme distances categorises them more as single athletes. Additionally, this makes it difficult for them to focus on the surrounding and everything around the event, which is more in the focus for women.

For them, the social aspect and the adventure is in the foreground, which leads to participation as a team or couple. Like that, they can also get extrinsic motivation of teammates and be motivated to participate in the event. In total, a quarter of all participants would like to participate as a couple, which indicates that a market would be available for these kinds of events. Family is not really attractive, but maybe nice to have.

Social form of the ideal sports event and age

Age	M / F	Single	Team	Couple	Family	Others	Total
15-19	18,2 / 81,8	54,5	27,3	18,2	0,0	0,0	2,9
20-24	39,5 / 57,9	34,2	47,4	13,2	2,6	2,6	9,9
25-29	52,2 / 47,8	40,3	22,4	34,3	1,5	1,5	17,4
30-34	44,2 / 55,8	39,5	23,3	37,2	0,0	0,0	11,2
35-39	76,5 / 23,5	70,6	14,7	8,8	0,0	5,9	8,8
40-44	45,7 / 51,4	57,1	14,2	22,9	2,9	2,9	9,1
45-49	62,1 / 37,9	55,2	13,8	20,7	6,9	3,4	7,5
50-54	59,2 / 40,8	55,1	30,6	12,3	2,0	0,0	12,7
55-59	59,4 / 40,6	50,0	34,4	15,6	0,0	0,0	8,3
60-64	63,6 / 36,4	45,5	31,8	18,2	0,0	4,5	5,7
65-69	78,9 / 21,1	57,8	21,1	21,1	0,0	0,0	4,9
70+	83,3 / 16,7	83,3	16,7	0,0	0,0	0,0	1,6
Total	55,3 / 44,2	49,9	25,4	21,3	1,6	1,8	100,0

Table 13: Correlation of social form of the ideal sports event and age

A detailed evaluation of the social forms, divided into the different age categories, can be seen in Table 13. The age categories on the left side are the actual age of the participants in the year 2022. Next to the age, the distribution of the gender in each age category can be seen. The total on the right column states the percentage that this age category represents from the total of all 385 participants. In the bottom line the total of the respective social form, seen in the top line, is shown. For the social form, only one option could be selected. The answer possibilities team/alternating and team/together, were combined into the social form team in this table. The same applies for couple and family. For comparison reasons between the age groups, each age category represents 100%. In the middle one can see how many percent of the particular age group prefer which social form. As an example, 2,9% of all participants are between 15-19 years old. Of these 2,9%, 18,2% are male and 81,8% female. Of these 2,9%, 54,5% prefer to complete the event as a single athlete, 27,3% as a team. In total, 49,9% of all participants prefer to participate as a single athlete.

The request for group events is distributed over all age categories. However, the group dynamic is higher in younger age, as the personal environment is bigger. The older people get, the more diverse their social environment gets. Between 20-29, individuals are often on the move in groups, as this can be called the storm and impulse stage. 25-34 is also a good age to complete an event as a couple, where the numbers are highest. The social aspect is important and the age to venture something with a colleague is good. The share of women is high in these younger ages. They start to do sports, motivate each other and participate together.

From 35 until 50 years, the density of powerful athletes is high. These are rather ambitious athletes who have been practicing their sport for a longer time and still want to deliver good performances. They prefer to participate as a single athlete, as it might be difficult to find a

partner who has the same ambitions and power to achieve a good event result. Another reason for participating as a single athlete is the family dynamic. If they participate in an event, then as a single athlete, because the social part is covered through family time. It is also easier to combine job, family and event participation if they need to focus just on themselves. For families with smaller kids, one parent needs to take care of the kids. The high numbers for single participation amongst 35-39 year olds, point out that it might be a good age to look for new challenges. Another indication is the 70% share of male participants in this category. Between 40-50, the share of participants interested in a family category is highest, which might be explained through the fact that the kids are in a good age.

From the age of 50 onwards, the interest in team participation increases significantly, which is surprising to the experts. Two reasons for that might be the end of the family time, where kids are older and parents have time for themselves or the shrinking social environment. The focus of older people lies more on community which they find as a group, whereas younger people often prefer the social form couple with a specific partner. Such a group can, for example, be a Nordic walking group where these people walk together regularly and then participate in the event. 70+ will complete the event as a single athlete as the chance to find someone in the same age to participate in a race might be low.

Race format of the ideal sports event and gender

	Classical	Fun	Challenge	Individual	Competition series – same sports type	Competition series – different sport types	Others	Total
Male	63,4	18,8	17,4	3,3	22,5	15,5	0,0	55,3
Female	47,1	35,9	34,1	1,8	18,2	15,9	1,2	44,2
Others	50,0	50,0	0,0	0,0	0,0	0,0	0,0	0,5
Total	56,1	26,5	24,7	2,6	20,5	15,6	0,5	100,0

Table 14: Correlation of race format of the ideal sports event and gender

In Table 14, the race format demands of the different gender are displayed. Amongst all participants of the survey were 55,3% male individuals and 44,2% female. The bottom line shows the total of the respective race format, seen in the top line. For comparison reasons between the genders, each row, male, female and others got their own percentages from the total of respective number of participants. As this question allowed multiple answers, the total sum of every gender, as well all categories together outgo 100%. In average, nearly every second man has chosen two formats, with a total of 140,9% and women slightly more with 154,2%. The numbers in the middle present the various correlations. For example, 63,4% of all male participants, prefer a classical event. Compared to that, 47,1% of all women want a classical event. In total, 56,1% of all participants would like to have their event in the classical format.

It is visible, that the majority of men prefers classical before fun and challenge. Keeping in mind, that they have often chosen long distance above, the fun factor might be lower when running a marathon, for example. Therefore, men rather want classical events. Women on the contrary are more balanced with smaller differences between classical, fun and challenge.

The high fun factor compared to men might be due to the lesser performance orientation of women. While looking at the numbers of fun and challenge, the social forms team and couple of Table 12 are reflected.

The society is quite stereotyped and not so modern with regards to the race format. Interesting is that although the motivation motive challenge is high, the race format challenge is low. This is linked to the fact that for most individuals a classical race is already a challenge. Regarding the motivational motives, it is visible that the event itself, community and surrounding is important for participants, which speaks against the individual race format. This can also be seen in the low numbers. Competition series are an interaction of several different organisations, whereas the question arises if there is concurrence between each other. For niche sport types, competition series help to attract participants, make the event even possible and ensure the survival for future events. This might also make sense for other sport types. Participants can compare them among each other several times – once participant one is faster, once participant two. This could be an additional value for the organisation and participants.

Race format of the ideal sports event and age

	M / F	Classical	Fun	Challenge	Individual	Competition series – same sports type	Competition series – different sport types	Others	Total
15-19	18,2 / 81,8	54,5	36,4	36,4	0,0	9,1	0,0	0,0	2,9
20-24	39,5 / 57,9	42,1	47,4	36,8	0,0	10,5	13,2	0,0	9,9
25-29	52,2 / 47,8	56,7	32,8	28,4	3,0	29,9	20,9	0,0	17,4
30-34	44,2 / 55,8	53,5	16,3	34,9	2,3	23,3	18,6	2,3	11,2
35-39	76,5 / 23,5	61,8	20,6	14,7	2,9	23,5	20,6	0,0	8,8
40-44	45,7 / 51,4	65,7	22,9	22,9	2,9	20,0	11,4	0,0	9,1
45-49	62,1 / 37,9	51,7	24,1	13,8	6,9	27,6	27,6	3,4	7,5
50-54	59,2 / 40,8	55,1	22,4	26,5	0,0	18,4	12,2	0,0	12,7
55-59	59,4 / 40,6	53,1	28,1	28,1	6,3	18,8	12,5	0,0	8,3
60-64	63,6 / 36,4	63,6	18,2	13,6	4,5	13,6	4,5	0,0	5,7
65-69	78,9 / 21,1	52,6	26,3	5,3	0,0	15,8	15,8	0,0	4,9
70+	83,3 / 16,7	100,0	0,0	0,0	0,0	0,0	0,0	0,0	1,6
Total	55,3 / 44,2	56,1	26,5	24,7	2,6	20,5	15,6	0,5	100,0

Table 15: Correlation of race format of the ideal sports event and age

Table 15 depicts the race formats divided into the different age categories. The age categories on the left side are the actual age of the participants in the year 2022. Next to the age the distribution of the gender in each age category can be seen. The total on the right column states the percentage that this age category represents from the total of all 385 participants. In the bottom line the total of each race format is shown. On the question for the race format, several answers could be selected. To make a comparison between the age categories possible, the percentages are calculated separately for each age group. Therefore, the total sum of every age group, as well all categories together, outgo 100%. In the middle one can

see how many percent of the particular age group prefer which race format. For example, 2,9% of all participants are between 15-19 years old. Of these 2,9%, 18,2% are male and 81,8% female. Furthermore, 54,5% prefer to complete the event in the classical race format. In total, 56,1% of all participants favour a classical event.

The demand for the classical race format is fairly stable with little differences over all age categories. Mostly it is between 50-65%, except 20-24 and 70+. Younger people are also interested in other race formats than classical. The younger the more important the fun element is. This goes along with the approach to the sport with the preferred short distances, team participation and need for social interaction instead of starting directly with the extreme. The peak for fun and challenge in younger age groups indicates that they are more open to try new things and have an open horizon. From 30 years onwards, the request for fun formats fades out. Is the fun of life over at that stage? With 55-59 and 65-69 the demand for fun events is coming back again. Surprising are the high percentages of fun and challenge in the age category 50-55, as this is a generation that is used to classical events. The inverse can be seen in the 70+ category, where all participants want just a classical event. Over all categories, individual race formats are not in great demand.

To conclude the study, the following and last chapter recapitulates a summary of this master thesis.

6. Summary

The summary starts with the managerial implications, whereby the three research questions will be answered. This will be followed by some limitations to this paper and corresponding further research opportunities.

6.1 Managerial implications

To fulfil the aim of this master thesis, which is the investigation of the characteristics that define the ideal endurance sports event from the Swiss participants point of view and clarifying their motivators for event attendance, three research questions were posed. In the following, these questions will be answered with recommendations for event organisers. First the requests for the ideal competition characteristics will be highlighted in detail. Second, diverse motivational reasons to participate in an event will be demonstrated. Third, additional aspects, useful for event organisers in the future, will be summarised.

RQ 1: How do the ideal endurance sports competition characteristics of Swiss participants look like?

Number of sport types in one race

The value of single discipline sport events is highest compared to multisport events, which are losing popularity the more disciplines are included. 48,1% of all participants favour a single discipline event, whereas the most preferred sport types are road run, trail run and cross-country skiing. Combinations of two are desired by 28,6%. Most popular sport types in form of a duathlon are again road run and trail run, as well as mountain bike. The typical triathlon combination is requested by 24,9% of all participants. Sport types for a combination of three are road run, swimming, road bike, mountain bike and trail run. This ranking shows that the sport types that are already practiced separately nowadays are desired like that in the future, the same applies for sport types in combinations.

Sport types in one race

In total, the sports type most people would like to have included in their event is road run with 50,4%. Sports type with second most mentions is trail run with 36,4%. Followed by mountain bike with 30,6%, road bike with 27,5% and swimming with 20,8%. Combinations of several sport types are also most often between these sport types. With 15,8%, cross-country skiing exhibits quite a high share. However, as seen in the competition characteristic before, cross-country skiing is mostly preferred as single discipline. These numbers confirm the trueness of current event offers.

Event duration

The most desired event duration among the participants is an entire day event with 36,4%. This duration is best to be planned for and enables participants to engage with the event completely. Within this 36,4%, most participants want to complete a medium distance (14,3%) or a long distance (10,9%). The favoured social form to compete is as a single athlete with 19,2%. Almost appreciated as much as a whole day is the half a day event with 33,2%, which indicates that not all participants want to invest an entire day of the weekend. Within half day events are comprised also evening events which are quite attractive, as participants do not lose time on the weekend. The medium distance which is the most chosen for a half day event with 21,3% is also desired to be completed as a single athlete by 15,8%. Only 4,6% are willing to invest the entire weekend. Individuals are favourable to invest one day of the weekend and need the second day to recover and relax. If a two day event, then the distance is long or ultra and completed again as a single athlete or maybe in a couple. These findings are showing a tendency which moves away from the actual spirit of doing something quickly and having the rest of the day off.

Race distance

In total, medium distance is the most popular race distance with 49,1%, followed by long distance with 22,9% and short with 18,2%. The medium distance is feasible in one day, preparation is manageable, and event participation is also possible with less training. When separating men and women, the preference is still on medium distance for both genders. 44,1% of all men prefer medium. With one third less, long distance is favoured and another third less, ultra-distance. For women, medium distance is favoured by a higher share than men with 55,9%. Afterwards follows the short distance with 18,2%, followed by long distance with 14,1%. Generally, it can be said, that men are attracted to longer distances, while women prefer tendentially shorter distances. Men are probably looking for more challenge with these longer distances, while women rather want to have the experience.

Looking at age, younger people up to 29 are the only ones who prefer short distance, as this might be the starting distance for beginners and/or inexperienced sportspeople. Thereof, the sprint distance is desired solely by individuals under the age of 20. For all categories between 20 up to 70+, the focus lies on medium distance. Passed the age of 25, athletes start preferring long and ultra-distances, whereby long have a higher share than ultra. The numbers in these two distances increase with the increasing age which might correlate with race progression over the years.

Evaluation

The evaluation form clearly chosen by 85,5% of all participants is a ranking list according time, which is offered at most events nowadays.

Social form

To complete an event as a single athlete, is most chosen by 49,9%. 25,4% of all respondents desire to participate in their ideal event in a team and 21,3% with a partner, as a couple. The demand to participate as a family is tiny. Looking for differences in the gender, a high share of men, namely 59,2% prefer to do the event as a single athlete. Team and couple participation are chosen with relatively lower percentages of 21,6% and 16,9%. Women however, are more balanced among these three social forms. 38,8% favouring to complete the event as a single athlete, 30,6% in a team and 25,9% as a couple. Men more often need to demonstrate what they are capable of, which is easier as a single athlete. Whereas for women, the social aspect and experience is the priority and can be reached as a team and/or couple. Additionally, it enables women to be motivated extrinsically to participate in the event.

Distributing these social forms according to age categories, with exception of the 20-24-year-olds, all age categories prefer an event completion as a single athlete. The 20-24 age group show the highest interest in the team participation, which is at the same time the highest interest for team participation across all age categories. Group dynamics are highest in younger age groups up to 34, and then again after 50. In between, athletes are taking part as single athletes as the physical condition is strong in this age group and athletes want to deliver good performances. Participating as a couple is highest between 25-34-year-olds as these individuals might already have a partner to complete the event with.

Race format

For 56,1%, the ideal endurance sports event is held in the classical race format. Fun events are preferred by 26,5%, followed by races with challenges (24,7%). Competition series of the same sports type are preferred by 20,5% and of different sport types by 15,6%. Individual race formats are rarely in demand. Considering gender, the difference is visible in the top three. A big majority of men with 63,4% prefer the classical event, whereas the distribution is more balanced for women. 47,1% of women favour the classical format, 35,9% fun events and 34,1% challenge formats. These numbers are cut in half for men. Competition series are distributed equally. The percentages for men go along with the previous competition characteristics, where longer distances and participation as a single athlete have been chosen, which might offer less fun. For women on the other side, the higher desire for fun and challenge events indicates the lower performance orientation and higher importance of the social factor.

Across all age categories, the preference of the classical race format is mostly stable between 45-65%, except the few 70+ participants who want the classical format without exception. Fun and challenge formats are preferred mostly by younger individuals between 15-34, as they are more open to try new things. An exception builds the age group 30-34 who do not like fun events. For all other age categories, a fun or challenge event is preferred with 20-25% each. The exception to this are the categories 35-39, 45-49 and 60-69, who are less fond of the idea of a challenge format.

RQ 2: Which motivational reasons are decisive for Swiss individuals to participate in an endurance sports event?

Motivational reasons to participate in an endurance sports event are not related to a specific event or sports type, but are higher ranked goals, valid for diverse participations. The most important driving motive for more than 50% of the individuals to participate in an event, is the challenge they face at the event. Challenge therefore is something unique, which every athlete needs to define for themselves and cannot be generalised. This may also be adapted over

time. Experience and fun come in second position with around 50%. Partly, this number can be explained through the fact that the survey was distributed among amateur sports people. This motivation can be fed, for example, through special details alongside the race. Third motive to participate is the comparison with the self, for around 45%. For around 40% of the participants, the event is motivation for training and they let themselves be motivated through the possible comparison with each other. About 20 years ago, the latter would have been a more important motivation to complete an event. Nowadays, comparison can be done through various possibilities and does not necessarily need to be linked to the ranking list. Therefore, even if it is not a motivational driver, at the end of the day, most participants compare their performance in one way or the other. Further motivations for one third of all individuals to take part in an event is the event itself, the community and surroundings. Also, one third is motivated by the thought of crossing the finish line. A quarter gets motivated by friends, family and other groups to participate. Weak motivation drivers for just around ten percent of all participants are the spectators, affiliation, victory and alternative program.

RQ 3: What aspects are important to consider when organising an endurance sports event in Switzerland?

While organising an endurance sports event, one of the most important factors to consider is the uniqueness of the event. Every event should have its own philosophy behind the organisation with a mission, vision and values to set themselves apart. Key of an event is not to make everyone happy as this is not possible, but to implement consistently what they stand for. Additionally, the event itself should tell a story and be exclusive in the region it is held. Survey participants even mentioned that the events need to be differentiated and no same events should exist, so to allow every participant to have a favourite event.

Furthermore, it is crucial to generate new needs, have the courage to dare something as organisers and also implement new ideas to stay attractive for the participants. During this process it is important to communicate new formats and events in a simple and clear way and involve participants as fast as possible for direct feedback. For the event itself it is relevant as an organiser, to deliver at least what they promised.

When implementing new ideas or organising a new event it is critical to know if a target audience would be available for the new idea. Through the examination of the competition characteristics, several new ideas and trends could be crystallised, which may have potential. Mountain bike and trail run can be indicated as emerging sport types, which could be included in the ideal event. Trail run already proved its power as single discipline event, but the evaluation showed, it would also have its success in combinations of two or three. As a result of these trends, trail run and mountain bike could be combined in form of a duathlon or with adding swimming as a triathlon, in the mountains. Another sports type that brought up interesting combinations is swimming, even though the numbers were really small. It was mentioned together with winter sports. Considering the current trend of swimming in the cold lakes, this combination would fit into this trend. Generally, it can be said that the basis of new sport event combinations is mostly running or cycling in combination with another sports type. Additionally, the race format couple indicates an available market for such kind of events.

Although a lot of new combinations and ideas for the ideal endurance sports event have been created, the evaluation of the race format showed the stereotyped and not so modern participants. 56,1% of all participants prefer the existing, classic event format. New formats like individual events did not have a chance in the voting. However, this can be explained with the motivational reasons. The event itself, community and surrounding are important drivers

for participants to attend an event. Therefore, when implementing something new, event organisers need to consider all competition characteristics and motivational reasons to understand the participants behaviour.

For an unforgettable experience at the event and an emotional memory to the event, some milestones should be included. Such milestones could be the start and finish of the event, a movie clip, photos or the winners' ceremony (Grohs et al., 2020). On the course, interesting places for spectators in form of challenges could be attractive and good to communicate. These milestones can create emotional connections for all parties involved and lead to re-participation.

Whilst elaborating this paper until reaching these final answers, there have been a few areas of challenge. The main limitations will be presented in the following.

6.2 Limitations and further research

It is important to acknowledge that the study includes certain limitations. First, the use of an online survey for data collection implies that specific segments of the population, which are known to have less access to the Internet (e.g., older adults, lower-educated adults) are less likely to participate. This may have biased the results. Closely aligned to this, only quantitative measures have been used to gather this data. Future research may consider the use of quantitative and qualitative forms (e.g., interviews at events) of data collection to further triangulate findings. Second, the sample was distributed irregularly over the age categories. They varied from six participants in one category up to 67 in another category. Different age categories have often different perceptions of events and motivations to participate in events which might have spoiled the results. Therefore, replication with equal distribution over age categories with a minimum number of participants in each age group, could be beneficial. Third, most of the sample were runners, which presented the results from a runner's view. To provide more general findings, future researchers are encouraged to have a more diverse distribution, that corresponds to the share of society who is practicing this sport in training. Fourth, the sample size, while sufficient for the purpose of the present study, did not enable moderation along variables that would offer additional theoretical and practical insights. For example, future research can determine whether there are any differences between the competition characteristics and motivations of participants who live in different cantons. A larger sample size would also enable better generalisation among different age categories and gender, as the respective numbers are often quite small.

Furthermore, the actual number of past event participations was not collected. This may have helped to better classify the competition characteristics, particularly race distance and event duration, which may increase with more race experience and the desire to look for new challenges. Regarding the motivational reasons to participate in an event, more options to choose from could have been listed such as health reasons or event reputation. Additionally, more competition characteristics could have been retrieved, like starting time or nutrition. Future research could investigate these possibilities to identify more motivational reasons and a more detailed presentation of the ideal event.

In addition, the survey itself had some constraints. First, the introduction to the subgroup of the ideal endurance sports event was chosen in a suboptimal way. For participants it was unclear what exactly they need to imagine, what kind of questions they can expect and where the questions lead to. Second, the order of the questions in this subgroup could have been elected in a more optimal way. For example, starting with the event format as well as the event

duration and closing with the number of sport types in one race and the respective sport types. Thus, answers often did not correspond with each other, as participants did not know what kind of questions are following and that the questions relate to each other. Third, some of these questions (number of sport types in one race, race format) were inconsistently coded. Instead of single answers, multiple answers were possible. Some participants selected more than one possibility, others only one as mentioned in the question. Thereby, the results of these questions might have been impacted. Future research on this topic is required to determine whether participants should select all possibilities that suit them or decide which one is most appropriate. Fourth, clear explanations on each answer possibility (motivation motives, event duration) were missing. Every participant had his/her own understanding of the answers. For instance, under half a day event duration, some understood this as arrival, event and departure and in contrast, for some this meant only the race duration, arrival as well as departure excluded. Therefore, the answers might be biased. With clear explanations of all answers, this bias can be prevented.

With full awareness and understanding of the above limitations and their respective suggestions for future research, this master thesis ends with the conclusion in the following chapter.

7. Conclusion

This study identified motivations to participate in endurance sport events of existing participants. Thereby, the individual motives are not meant to be seen as stand alone, but they are interconnected with each other – for participants and events. Participants do not just have the one motivation to attend an event, but several different motives. Events on the other side are able to cover several motivation motives of their participants in one event. Therefore, the offer of events and needs of participants are going hand in hand. Through the diversity of the motives, participants have a big choice of events and events a huge number of participants to attract. Furthermore, this paper examined the competition characteristics of endurance sport events in Switzerland. According to the results, the ideal endurance sports event is a classical running event of 21km during an entire day. It is completed as a single athlete with a ranking list according to time. However, it is not that simple. There have been tendencies in every question towards one or two answers, but all the other answers have been selected as well. This demonstrates a diversity of the answers and the fascinating fact that nothing is unthinkable. Every answer option was selected at least once. To concluding it can be said that there is not the one answer for these competition characteristics and therefore, no uniform recommendations can be made. There is not the one event that suits everyone, but everyone will find their suitable event. Every event has its own target group and unique selling point, which makes them special. The gained results of this study should give an insight into the exceptions and perceptions of participants. For event organisers, they may use the new gained knowledge as stimulation to rethink their concept in order to confirm their strategy or adapt some existing details with new ideas.

References

- Agrusa, J., Maples, G., Kitterlin, M., & Tanner, J. (2007). Sensation seeking, culture, and the valuation of experiential services. *Event Management*, 11(3), 121–128.
- Aicher, T. J., & Brenner, J. (2015). Individuals' motivation to participate in sport tourism: A self-determination theory perspective. *International Journal of Sport Management, Recreation & Tourism*, 12, 167–190.
- Andersen, J. J. (2021). *The State of Running 2019*. RunTepeat. <https://runrepeat.com/state-of-running>
- Argo, J. J., Dahl, D. W., & Morales, A. C. (2008). Positive consumer contagion: Responses to attractive others in a retail context. *Journal of Marketing Research*, 45(6), 690–701. <https://doi.org/10.1509/jmkr.45.6.690>
- Arnegger, J., & Herz, M. (2016). Economic and destination image impacts of mega-events in emerging tourist destinations. *Journal of Destination Marketing & Management*, 5(2), 76–85.
- Arnould, E. J., & Price, L. L. (1993). River magic: Extraordinary experience and the extended service encounter. *Journal of Consumer Research*, 20(1), 24–45.
- Baker, B. J., Jordan, J. S., & Funk, D. C. (2018). Run Again Another Day: The Role of Consumer Characteristics and Satisfaction in Repeat Consumption of a Sport-Related Experience Product. *Journal of Sport Management*. <https://doi.org/10.1123/jsm.2017-0042>
- Bauman, A., Murphy, N., & Lane, A. (2008). The role of community programmes and mass events in promoting physical activity to patients. *British Journal of Sports Medicine*, 43(1), 44–46. <https://doi.org/10.1136/bjism.2008.054189>
- Bauman, A., Murphy, N., & Lane, A. (2009). The role of community programmes and mass events in promoting physical activity to patients. *British Journal of Sports Medicine*, 43, 44–46.
- Baym, N. K. (2010). *Personal connections in the digital age*. Cambridge: Polity.
- Bell, E., Bryman, A., & Bill, H. (2019). *Business research methods* (Fifth). Oxford University Press.
- Birrell, S. (1981). Sport as ritual: Interpretations from Durkheim to Goffman. *Social Forces*, 60(2), 354–376.
- Borgers, J., Pilgaard, M., Vanreusel, B., & Scheerder, J. (2016). Can we consider changes in sports participation as institutional change? A conceptual framework. *International Review for the Sociology of Sport*, 53(1), 84–100.
- Borgers, J., Vos, S., & Scheerder, J. (2015). Belgium (Flanders): Trends and Governance in Running. In J. Scheerder, K. Breedveld, & J. Borgers (Eds.), *Running across Europe* (pp. 28–58). Palgrave Macmillan: London.
- Brady, M., & Cronin, J. (2001). Some new thoughts on conceptualizing perceived service quality: A hierarchical approach. *Journal of Marketing*, 65(3), 34–49.
- Brill, P. A., Macera, C. A., Davis, D. R., Blair, S. N., & Gordon, N. (2000). Muscular strength and physical function. *Medicine & Science in Sports & Exercise*, 32(2), 412.
- Britannica. (n.d.). *Switzerland - Demographic trends*. Retrieved 8 October 2021, from <https://www.britannica.com/place/Switzerland/Demographic-trends>

- Brüschweiler, M. (2020a). *Ausdauersportwettkämpfe in der Schweiz. Entstehung - Entwicklung - Zukunft* (Issue September). Universität Zürich.
- Brüschweiler, M. (2020b). *Ausdauersportwettkämpfe in der Schweiz. Resultate der Online-Umfrage 2019*.
- Bryant, B. (1987). Built for excitement. *American Demographics*, 9(3), 38–42.
- Bryman, A., & Bell, E. (2015). *Business Research Methods* (Fourth Edi). Oxford: University Press.
- Bryman, Alan, & Bell, E. (2007). *Business Research Methods* by Alan Bryman. In *2nd edition*.
- Bundesamt für Statistik. (n.d.). *Bevölkerung*. Retrieved 8 October 2021, from <https://www.bfs.admin.ch/bfs/de/home/statistiken/bevoelkerung/standentwicklung/bevoelkerung.html>
- Burgess, T. F. (2001). A general introduction to the design of questionnaires for survey research. In *INFORMATION SYSTEMS SERVICES Guide to the Design of Questionnaires*. University of Leeds.
- Carillo, K., Cachat-Rosset, G., Marsan, J., Saba, T., & Klarsfeld, A. (2020). Adjusting to epidemic-induced tele- work: Empirical insights from teleworkers in France. *European Journal of Information Systems*, 25(1), 1–20. <https://doi.org/10.1080/0960085X.2020.1829512>
- Carlson, B. D., Suter, T. A., & Brown, T. J. (2008). Social versus psychological brand community: The role of psychological sense of brand community. *Journal of Business Research*, 61(4), 284–291.
- Caspersen, C. J., Powell, K. E., & Christenson, G. M. (1985). Physical Activity, Exercise, and Physical Fitness: Definitions and Distinctions for Health-Related Research. *Public Health Reports*, 100(2), 126–131.
- Cater, J. K. (2011). Skype a cost-effective method for qualitative research. *Rehabilitation Counselors & Educators Journal*, 4, 1017.
- Chalip, L. (2006). Towards Social Leverage of Sport Events. *Journal of Sport & Tourism*, 11(2), 109–127. <https://doi.org/10.1080/14775080601155126>
- Chalip, L., & Costa, C. A. (2005). Sport event tourism and the destination brand: Towards a general theory. *Sport in Society*, 8(2), 218–237.
- Chalip, L., Green, B. C., & Hill, B. (2003). Effects of sport event media on destination image and intention to visit. *Journal of Sport Management*, 17(3), 214–234.
- Chatton, A., & Kayser, B. (2013). Self-reported health, physical activity and socioeconomic status of middle-aged and elderly participants in a popular road running race in Switzerland: better off than the general population? *Swiss Medical Weekly*, 143:w13710. <https://smw.ch/article/doi/smw.2013.13710>
- Cheung, S. Y., Lo, R. K., Mak, J. Y., & Fan, J. (2017). Destination image and sports Tourists' consumption patterns of major sports events. *Journal of Multidisciplinary Research*, 9(3), 5–15.
- Chung, K. S. (2020). Spectators' sensory experience and sociability at the American racetrack. *Managing Sport and Leisure*, 25(5), 1–14. <https://doi.org/10.1080/23750472.2020.1723431>

- Churchill, G., & Surprenant, C. (1982). An investigation into the determinants of customer satisfaction. *Journal of Marketing Research*, 19(4), 491–504.
- Coleman, R., & Ramchandani, G. (2010). The hidden benefits of non-elite mass participationsports events: An economic perspective. *International Journal of Sports Marketing and Sponsorship*, 12(1), 19–31. <https://doi.org/10.1108/IJSMS-12-01-2010-B004>
- Collis, J., & Hussey, R. (2009). *Business Research. A practical guide for undergraduate & postgraduate students* (Third Edit). New York: Palgrave Macmillan.
- Cordina, R., Gannon, M. J., & Croall, R. (2019). Over and over: Local fans and spectator sport tourist engagement. *The Service Industries Journal*, 39(7–8), 590–608. <https://doi.org/10.1080/02642069.2018.1534962>
- Cornwell, T. B. (1990). T-shirts as wearable diary: An examination of artifact consumption and garnering related to life events. In M. E. Goldberg, G. Gorn, & R. W. Pollay (Eds.), *Advances in consumer research* (pp. 375–379). Provo, UT: Association for Consumer Research.
- Cornwell, T. B., Jahn, S., Xie, H., & Suh, W. S. (2018). Feeling that in-group feeling at a sponsored sporting event: Links to memory and future attendance. *Journal of Sport Management*, 32(5), 426–437. <https://doi.org/10.1123/jsm.2017-0248>
- Crawford, M. T., & Salaman, L. (2012). Entitativity, identity, and the fulfilment of psychological needs. *Journal of Experimental Social Psychology*, 48(3), 726–730.
- crazy about sports. (n.d.). *sport*. Retrieved 18 February 2022, from <https://www.crazyaboutsports.de/tag/sport/>
- Creswell, J. W. (2009). *Research Design. Qualitative, Quantitative, and Mixed Methods Approaches* (Third Edit). SAGE Publications, Inc.
- Crofts, C., Dickson, G., Schofield, G., & Funk, D. (2012). Post-event behavioural intentions of participants in a women-only mass participation sporting event. *International Journal of Sport Management and Marketing*, 12(3–4), 260–274. <https://doi.org/10.1504/IJSMM.2012.052679>
- Crofts, C., Schofield, G., & Dickson, G. (2012). Women-only mass participation sporting events: Does participation facilitate changes in physical activity? *Annals of Leisure Research*, 15(2), 148–159. <https://doi.org/10.1080/11745398.2012.685297>
- Cunningham, G. B., Fairley, S., Ferkins, L., Kerwin, S., Lock, D., Shaw, S., & Wicker, P. (2018). eSport: Construct specifications and implications for sport management. *Sport Management Review*, 21(1), 1–6. <https://doi.org/10.1016/j.smr.2017.11.002>
- Davenport, T. H. (2014). What businesses can learn from sports analytics. *MIT Sloan Management Review*, 55(4), 10–13.
- De Geus, B., de Bourdeaudhuij, I., Jannes, C., & Meeusen, R. (2008). Psychosocial and environmental factors associated with cycling for transport among a working population. *Health Education Research*, 23, 697–708.
- Deakin, H., & Wakefield, K. (2013). Skype interviewing: Reflections of two PhD researchers. *Qualitative Research*, 14(5), 603–616. doi: 10.1177/1468794113488126
- Deci, E. ., & Ryan, R. M. (1985). Intrinsic Motivation and Self-Determination in Human Behaviour. *Plenum Press: New York*.

- Delaney, B. (2020). *Zwift: Your complete guide: What Zwift is, how it works and what equipment you need*. Bikeradar. <https://www.bikeradar.com/features/zwift-your-complete-guide/>
- Deng, Q., & Li, M. (2014). A model of event–destination image transfer. *Journal of Travel Research*, 53(1), 69–82.
- Dietrich, K., & Heinemann, K. (1989). *Der nichtsportliche Sport: Beiträge zum Wandel im Sport*. Schorndorf: Hofmann.
- Döringer, S. (2021). 'The problem-centred expert interview'. Combining qualitative interviewing approaches for investigating implicit expert knowledge. *International Journal of Social Research Methodology*, 24(3), 265–278. <https://doi.org/10.1080/13645579.2020.1766777>
- Duetz, M. S., Abel, T., & Niemann, S. (2003). Health measures: differentiating associations with gender and socio-economic status. *European Journal of Public Health*, 13(4), 313–319.
- Duglio, S., & Beltramo, R. (2017). Estimating the economic impacts of a small-scale sport tourism event: The case of the Italo-Swiss Mountain Trail CollonTrek. *Sustainability*, 9, 343–360.
- Egresi, I., & Kara, F. (2014). Motives of tourists attending small-scale events: The case of three local festivals and events in Istanbul, Turkey. *GeoJournal of Tourism and Geosites*, 14(2), 93–110.
- Ehrlén, V., & Villi, M. (2020). 'I shared the joy': sport-related social support and communality on Instagram. *Visual Studies*, 35(2–3), 260–272. <https://doi.org/10.1080/1472586X.2020.1790304>
- Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, 14(4), 532–550.
- Filo, K., & Coghlan, A. (2016). Exploring the positive psychology domains of well-being activated through charity sport event experiences. *Event Management*, 20(2), 181–199. <https://doi.org/10.3727/152599516X14610017108701>
- Frederick, C. M., & Ryan, R. M. (1993). Differences in motivation for sport and exercise and their relations with participation and mental health. *Journal of Sport Behavior*, 16(3), 124–146.
- Funk, D. C., Toohey, K., & Bruun, T. (2007). International sport event participation: prior sport involvement; destination image; and travel motives. *European Sport Management Quarterly*, 7(3), 227–248.
- Funk, D., Jordan, J., Ridinger, L., & Kaplanidou, K. (2011). Capacity of mass participant sport events for the development of activity commitment and future exercise intention. *Leisure Sciences*, 33(3), 250–268.
- Gandhi-Arora, R., & Shaw, R. (2002). Visitor loyalty in sport tourism: An empirical investigation. *Current Issues in Tourism*, 5(1), 45–53.
- Garber, C. E., Blissmer, B., Deschenes, M. R., Franklin, B. A., Lamonte, M. J., Lee, I.-M., Nieman, D. C., & Swain, D. P. (2011). Quantity and Quality of Exercise for Developing and Maintaining Cardiorespiratory, Musculoskeletal, and Neuromotor Fitness in Apparently Healthy Adults: Guidance for Prescribing Exercise. *Medicine & Science in Sports & Exercise*, 43(7), 1334–1359.

- Getz, D., & Andersson, T. (2010). The event-tourist career trajectory: A study of high involvement amateur distance runners. *Scandinavian Journal of Hospitality and Tourism*, 10(4), 468–491.
- Getz, D., & McConnell, A. (2014). Comparing trail runners and mountain bikers: Motivation, involvement, portfolios, and event-tourist careers. *Journal of Convention & Event Tourism*, 15, 69–100.
- Gigathlon. (n.d.). *Seit 25 Jahren einzigartig*. Retrieved 13 February 2022, from <https://www.gigathlon.com/switzerland/2022/de/was-ist-gigathlon>
- Gillespie, L. D., Robertson, M. C., Gillespie, W. J., Lamb, S. E., Gates, S., & Cumming, R. G. (2009). Interventions for preventing falls in older people living in the community. *Cochrane Database of Systematic Reviews*. doi:10.1002/14651858.cd007146.pub
- Goffman, E. (1981). *Encounters: Two studies in the sociology of interaction* (1st ed.). Bobbs-Merrill.
- Gray, T., Norton, C., Breault-Hood, J., Christie, B., & Taylor, N. (2018). Curating a Public Self: Exploring Social Media Images of Women in the Outdoors. *Journal of Outdoor Recreation, Education, and Leadership*, 10(2), 153–170. doi:10.18666/jorel-2018-v10-i2-8191
- Green, B. C. (2005). Building sport programs to optimize athlete recruitment, retention, and transition: Toward a normative theory of sport development. *Journal of Sport Management*, 19, 233–253.
- Griffin, M. (2010). Setting the scene: hailing women into a running identity. *Qualitative Research in Sport and Exercise*, 2(2), 153–174.
- Grohs, R., Wieser, V. E., & Pristach, M. (2020). Value cocreation at sport events. *European Sport Management Quarterly*, 20(1), 69–87. <https://doi.org/10.1080/16184742.2019.1702708>
- Guttman, A. (1978). From ritual to record: The nature of modern sports. *Columbia University Press*.
- Hacker, J., Vom Brocke, J., Handali, J., Otto, M., & Schneider, J. (2020). Virtually in this together—how web-conferencing systems enabled a new virtual togetherness during the COVID-19 crisis. *European Journal of Information Systems*, 25(1), 1–22.
- Hallmann, K., & Breuer, C. (2010). The impact of image congruence between sport event and destination on behavioural intentions. *Tourism Review*, 65(1), 66–74. doi:10.1108/16605371011040915
- Hallmann, Kirstin, & Wicker, P. (2012). Consumer profiles of runners at marathon races. *International Journal of Event and Festival Management*, 3(2), 171–187. <https://doi.org/10.1108/17582951211229717>
- Halpenny, E., Kulczycki, C., & Moghimehfar, F. (2016). Factors effecting destination and event loyalty: Examining the sustainability of a recurrent small-scale running event at Banff National Park. *Journal of Sport & Tourism*, 20, 233–262.
- Handelman, D. (1990). *Models and mirrors: towards an anthropology of public events*. New York: Cambridge University Press.
- Havitz, M., & Dimanche, F. (1990). Proposition for testing the involvement construct in recreation. *Leisure Sciences*, 12, 179–195.

- Helsen, K., Derom, I., Corthouts, J., De Bosscher, V., Willem, A., & Scheerder, J. (2021). Participatory sport events in times of COVID-19: analysing the (virtual) sport behaviour of event participants. *European Sport Management Quarterly*.
<https://doi.org/10.1080/16184742.2021.1956560>
- Hemmonsby, J., & Tichaawa, T. (2018). The effects of major sport event leveraging for tourism and destination branding: The case of South Africa as an emerging destination. *GeoJournal of Tourism and Geosites*, 21(1), 213–282.
- Higham, J. (1999). Commentary - Sport as an Avenue of Tourism Development: An Analysis of the Positive and Negative Impacts of Sport Tourism. *Current Issues in Tourism*, 2(1), 82–90.
- Hinch, T., & Kono, S. (2018). Ultramarathon Runners' Attachment to Place: An Interpretation of Runner Generated Images during On-site Training Camps. *Journal of Sport & Tourism*, 22(2), 109–130. doi:10.1080/14775085.2017.1371065
- Hindson, A., Gidlow, B., & Peebles, C. (1994). The “trickle-down” effect of top-level sport: Myth or reality? A case-study of the Olympics. *Australian Journal of Leisure and Recreation*, 4(1), 16–31.
- Hoff, O., Schwehr, T., Hellmüller, P., Clausen, J., & Nathani, C. (2017). Sport und Wirtschaft Schweiz. Wirtschaftliche Bedeutung des Sports in der Schweiz. In *Sportunterricht*. Bundesamt für Sport BASPO.
- Holt, D. B., & Cameron, D. (2010). Cultural strategy: Using innovative ideologies to build break-through brands. *Oxford: Oxford University Press*.
- Homburg, C., & Giering, A. (2001). Personal characteristics as moderators of the relationship between customer satisfaction and loyalty—An empirical analysis. *Psychology & Marketing*, 18(1), 43–66. doi:10.1002/1520-6793
- Horbel, C., Popp, B., Woratschek, H., & Wilson, B. (2016). How context shapes value co-creation: Spectator experience of sport events. *The Service Industries Journal*, 36(11–12), 510–531.
- Hoye, R. (2015). *Sport management: Principles and applications* (4th ed.). Elsevier Butterworth-Heinemann.
- Huang, H., Mao, L., Wang, J., & Zhang, J. (2015). Assessing the relationships between image congruence, tourist satisfaction and intention to revisit in marathon tourism: The Shanghai International Marathon. *International Journal of Sports Marketing and Sponsorship*, 16, 46–66.
- Huberman, A. M., & Miles, M. B. (1994). *Data Management and Analysis Methods* (N. K. Denzin & Y. S. Lincoln (eds.)). *Handbook of Qualitative Research*. Thousand Oaks, CA: Sage.
- Hui, M. K., & Bateson, J. E. (1991). Perceived control and the effects of crowding and consumer choice on the service experience. *Journal of Consumer Research*, 18(2), 174–184.
- Islam, J. U., Rahman, Z., & Hollebeek, L. D. (2018). Consumer engagement in online brand communities: A solicitation of congruity theory. *Internet Research*, 28(1), 23–45.
- Jahn, S., Cornwell, T. B., Drengner, J., & Gaus, H. (2018). Temporary communitas and willingness to return to events. *Journal of Business Research*, 92, 329–338.
<https://doi.org/10.1016/j.jbusres.2018.08.005>

- Janghorban, R., Latifnejad Roudsari, R., & Taghipour, A. (2014). *International Journal of Qualitative Studies on Health and Well-being* Skype interviewing: The new generation of online synchronous interview in qualitative research. <https://doi.org/10.3402/qhw.v9.24152>
- Jenny, S. E., Douglas Manning, R., Keiper, M. C., & Olrich, T. W. (2017). Virtual(ly) Athletes: Where eSports Fit Within the Definition of "Sport. *Quest*, 69(1), 1–18. <https://doi.org/10.1080/00336297.2016.1144517>
- Kaplanidou, K., & Gibson, H. (2010). Predicting behavioral intentions of active event sport tourists: The case of a small-scale recurring sports event. *Journal of Sport and Tourism*, 15, 163–179.
- Kim, J., Kang, J. H., & Kim, Y. K. (2014). Impact of mega sport events on destination image and country image. *Sport Marketing Quarterly*, 23(3), 161–175.
- Koetsier, J. (2020). Why 2020 Is A Critical Global Tipping Point For Social Media. *Forbes*. <https://www.forbes.com/sites/johnkoetsier/2020/02/18/why-2020-is-a-critical-global-tipping-point-for-social-media/?sh=6430caa2fa5a>
- Kolyperas, D., & Sparks, L. (2018). Exploring value co-creation in Fan Fests: The role of fans. *Journal of Strategic Marketing*, 26(1), 71–84.
- Kozinets, R. V. (2002). Can consumers escape the market? Emancipatory illuminations from Burning Man. *Journal of Consumer Research*, 29(1), 20–38.
- Krejcie, R. V., & Morgan, D. W. (1970). *Determining sample size for research activities*. Educational and Psychological Measurement, 30, pp. 607-10.
- Kwon, H. H., Trail, G. T., & Anderson, D. S. (2005). Are multiple points of attachment necessary to predict cognitive, affective, conative, or behavioral loyalty? *Sport Management Review*, 8(3), 255–270. doi:10.1016/S1441-3523(05)70041-3
- Lamprecht, M., Bürgi, R., & Stamm, H. (2020). *Sport Schweiz 2020: Sportaktivität und Sportinteresse der Schweizer Bevölkerung*. Magglingen: Bundesamt für Sport BASPO.
- Lane, A., Murphy, N., Bauman, A., & Chey, T. (2012). Active for a day: Predictors of relapse among previously active mass event participants. *Journal of Physical Activity and Health*, 9, 48–52.
- Lee, Y.-K., Lee, C.-K., Lee, S.-K., & Babin, B. J. (2008). Festivalscapes and patrons' emotions, satisfaction, and loyalty. *Journal of Business Research*, 61(1), 56–64.
- Lera-Lopez, F., & Rapun-Garate, M. (2011). Determinants of sports participation and attendance: Differences and similarities. *International Journal of Sports Marketing and Sponsorship*, 12, 167–190.
- LimeSurvey. (n.d.). *Machen Sie Fragen zu Antworten*. Retrieved 13 January 2022, from <https://www.limesurvey.org/de/>
- Lin, H., Gursoy, D., & Zhang, M. (2020). Impact of customer-to-customer interactions on overall service experience: A social service scape perspective. *International Journal of Hospitality Management*, 87, 1–9. <https://doi.org/10.1016/j.ijhm.2019.102376>
- Lough, N. L., Pharr, J. R., & Owen, J. O. (2014). Runner identity and sponsorship: Evaluating the Rock 'n' Roll Marathon. *Sport Marketing Quarterly*, 23(4), 198–211.
- Loy, J. W. (1968). The nature of sport: A definitional effort. *Quest*, 10(1), 1–15. <https://doi.org/10.1080/00336297.1968.10519640>

- Ma, S. C., & Kaplanidou, K. (2018). Effects of event service quality on the quality of life and behavioral intentions of recreational runners. *Leisure Sciences*, 1–21. <https://doi.org/10.1080/01490400.2018.1448028>
- Machleit, K. A., Eroglu, S. A., & Mantel, S. P. (2000). Perceived retail crowding and shopping satisfaction: What modifies this relationship? *Journal of Consumer Psychology*, 9(1), 29–42.
- Maslow, A. H. (1981). *Motivation and personality*. Prabhat Prakashan.
- Matzler, K., Füller, J., Renzl, B., Herting, S., & Späth, S. (2008). Customer satisfaction with Alpine ski areas: The moderating effects of personal, situational, and product factors. *Journal of Travel Research*, 46(4), 403–413. <https://doi.org/10.1177/0047287507312401>
- McAlister, L., & Pessemier, E. (1982). Variety seeking behavior: An interdisciplinary review. *Journal of Consumer Research*, 9(3), 311–322. doi:10.1086/208926
- McGehee, N. G., Yoon, Y., & Cardenas, D. (2003). Involvement and travel for recreational runners in North Carolina. *Journal of Sport Management*, 17, 305–324.
- McLeroy, K. R., Bibeau, D., Steckler, A., & Glanz, K. (1988). An ecological perspective on health promotion programs. *Health Education Quarterly*, 15(4), 351–377. <https://doi.org/10.1177/109019818801500401>
- Melnick, M. J. (1993). Searching for sociability in the stands: a theory of sports spectating. *Journal of Sport Management*, 7, 44–60.
- Meuser, M., & Nagel, U. (2009). *The expert interview and changes in knowledge production*. In A. Bogner, B. Littig, & W. Menz (Eds.), *Interviewing experts* (pp. 17–42). Palgrave Macmillan UK.
- Meyer, K., Rezny, L., Breuer, C., Lamprecht, M., & Stamm, H. (2005). Physical activity of adults aged 50 years and older in Switzerland. *Sozial- Und Präventivmedizin*, 50(4), 218–229.
- Mikkonen, J., & Lahovuuo, I. (2020). Involving events as cocreators of destination brand: The case of South Savo region. *Event Management*, 24(2–3), 375–387.
- Milgram, P., & Kishino, F. (1994). *A taxonomy of mixed reality visual displays*. IEICE Transactions on Information and Systems, E77-D(12),. Retrieved 17 January 2022, from https://www.researchgate.net/publication/231514051_A_Taxonomy_of_Mixed_Reality_Visual_Displays
- Mittal, V., & Kamakura, W. (2001). Satisfaction, repurchase intent, and repurchase behavior: Investigating the moderating effect of customer characteristics. *Journal of Marketing Research*, 38(1), 131–142.
- Moreno, F. C., Prado-Gascó, V., Hervás, J. C., Núñez-Pomar, J., & Sanz, V. A. (2015). Spectator emotions: Effects on quality, satisfaction, value, and future intentions. *Journal of Business Research*, 68(7), 1445–1449.
- Morgan, A., Wilk, V., Sibson, R., & Willson, G. (2021). Sport event and destination co-branding: Analysis of social media sentiment in an international, professional sport event crisis. *Tourism Management Perspectives*, 39, 100848. <https://sci-hub.se/10.1016/j.tmp.2021.100848>
- Morris, J. (1994). Exercise in the prevention of coronary heart disease: today's best buy in public health. *Medicine & Science in Sports & Exercise*, 26(7), 807–814.

- Munar, A. M., & Jacobsen, J. K. S. (2013). Trust and involvement in tourism social media and web-based travel information sources. *Scandinavian Journal of Hospitality and Tourism*, 13(1), 1–19. doi:10.1080/15022250.2013.764511
- Munar, A. M., & Ooi, C.-S. (2012). The truth of the crowds: social media and the heritage experience. In L. Smith, E. Waterton, & S. Watson (Eds.), *The cultural moment in tourism* (pp. 255–273). Abingdon: Routledge.
- Munar, Ana María, & Steen Jacobsen, J. K. (2014). Motivations for sharing tourism experiences through social media. *Tourism Management*, 43, 46–54. <https://doi.org/10.1016/j.tourman.2014.01.012>
- Nordvall, A., Petterson, R., Svensson, B., & Brown, S. (2014). Designing events for social interaction. *Event Management*, 18(2), 127–140.
- Nusair, K., Butt, I., & Nikhashemi, S. R. (2019). A bibliometric analysis of social media in hospitality and tourism research. *International Journal of Contemporary Hospitality Management*, 31(7), 2691–2719.
- Obst, P. L., & White, K. M. (2005). An exploration of the interplay between psychological sense of community, social identification and salience. *Journal of Community & Applied Social Psychology*, 15, 127–135.
- Ogles, B. N., & Masters, K. S. (2003). A typology of marathon runners based on cluster analysis of motivations. *Journal of Sport Behavior*, 26(1), 69–75.
- Olive, R. (2015). Reframing Surfing: Physical Culture in Online Spaces. *Media International Australia*, 155(1), 99–107. doi:10.1177/1329878x1515500112
- Perić, M., Vitezić, V., & Badurina, J. (2019). Business models for active outdoor sport event tourism experiences. *Tourism Management Perspectives*, 32, 100561.
- Pierce, J. P., Stefanick, M. L., Flatt, S. W., Natarajan, L., Sternfeld, B., Madlensky, L., Al-Delaimy, W. K., Thomson, C. A., Hajek, R., Parker, B. A., Newman, V. A., & Caan. (2007). Greater Survival After Breast Cancer in Physically Active Women With High Vegetable-Fruit Intake Regardless of Obesity. *Journal of Clinical Oncology*, 25(17), 2345–2351. doi:10.1200/jco.2006.08.6819
- Pintrich, P. (2000). An achievement goal theory perspective on issues in motivation terminology, theory, and research. *Contemporary Educational Psychology*, 25(1), 92–104.
- Preuss, H., & Solberg, H. A. (2006). Attracting major sporting events: The role of local residents. *European Sport Management Quarterly*, 6(4), 391–411.
- Ramachandran, A., Snehathatha, C., Mary, S., Mukesh, B., Bhaskar, A. D., & Vijay, V. (2006). The Indian Diabetes Prevention Programme shows that lifestyle modification and metformin prevent type 2 diabetes in Asian Indian subjects with impaired glucose tolerance (IDPP-1). *Diabetologia*, 49(2), 289–297.
- Rao, A., & Ruekert, R. W. (1994). Brand alliances as signals of product quality. *Sloan Management Review*, 36(1), 87–97.
- Reichheld, F. (1996). *The loyalty effect: The hidden force behind growth, profits, and lasting value*. Boston, MA: Harvard Business School Press.
- Rihova, I., Buhalis, D., Moital, M., & Beth Gouthro, M. (2013). Social layers of customer-to-customer value co-creation. *Journal of Service Management*, 24(5), 553–566.
- Ritchie, J. R. B. (1984). Assessing the impacts of hallmark events: Conceptual and research issues. *Journal of Travel Research*, 23, 2–11.

- Ritchie, J., & Spencer, L. (1994). Qualitative data analysis for applied policy research. In A. Brymann & R. G. Burgess (Eds.), *Analysing Qualitative Data* (pp. 173–194). London: Routledge.
- Rowe, S. (1998). Modern sports: Liminal ritual or liminoid leisure. *Journal of Ritual Studies*, 12(1), 47–60.
- Russell, C. A., & Levy, S. J. (2012). The Temporal and Focal Dynamics of Volitional Reconsumption: A Phenomenological Investigation of Repeated Hedonic Experiences. *Journal of Consumer Research*, 39(2), 341–359.
- Sanchis-Gomar, F., Olaso-Gonzalez, G., Corella, D., Gomez-Cabrera, M. C., & Vina, J. (2011). Increased average longevity among the “Tour de France” cyclists. *International Journal of Sports Medicine*, 32, 644–647.
- Scheerder, J., Breedveld, K., & Borgers, J. (2015). Who Is Doing a Run with the Running Boom? In J. Scheerder, K. Breedveld, & J. Borgers (Eds.), *Running across Europe*. Palgrave Macmillan: London.
- Schlemmer, P., Barth, M., & Schnitzer, M. (2020). Research note sport tourism versus event tourism: Considerations on a necessary distinction and integration. *Journal of Convention & Event Tourism*, 21(2), 91–99.
- Seo, M., Kim, J., & Yang, H. (2016). Frequent Interaction and Fast Feedback Predict Perceived Social Support: Using Crawled and Self-reported Data of Facebook Users. *Journal of Computer-Mediated Communication*, 22(4), 282–297. doi:10.1111/jcc4.12160
- Seo, W., Lewin, L., Moon, B., & Moon, B. (2018). Moderating effects of affective image on relationship between novelty-seeking and behavioural intentions of runners. *South African Journal for Research in Sport, Physical Education and Recreation*, 40, 105–120.
- Serazio, M. (2013). The elementary forms of sports fandom. *Communication & Sport*, 1(4), 303–325. <https://doi.org/10.1177/2167479512462017>
- Sheldon, K. M., Elliott, A. J., Kim, Y., & Kassir, T. (2001). What is satisfying about satisfying events? Testing 10 candidate psychological needs. *Journal of Personality and Social Psychology*, 80(2), 325–339.
- Shiple, R., Holloway, I., & Jones, I. (2012). Organisations, practices, actors, and events: Exploring inside the distance running social world. *International Review for the Sociology of Sport*, 48, 259–276.
- Shipway, R., & Jones, I. (2007). Running away from home: understanding visitor experiences and behaviour at sport tourism events. *International Journal of Tourism Research*, 9(5), 373–383.
- Shipway, R., & Jones, I. (2008). The great suburban Everest: An ‘insiders’ perspective on experiences at the 2007 Flora London Marathon. *Journal of Sport & Tourism*, 13(1), 61–77. <https://doi.org/doi:10.1080/14775080801972213>
- Slutzky, C. B., & Simpkins, S. D. (2009). The link between children’s sport participation and self-esteem: Exploring the mediating role of sport self-concept. *Psychology of Sport and Exercise*, 10(3), 381–389.
- Smith, S. L. (1998). Athletes, runners, and joggers: participant-group dynamics in a sport of ‘individuals’. *Sociology of Sport Journal*, 15(2), 174–192.

- Sonmez, S., & Graefe, A. (1998). Determining future travel behavior from past travel experience and perceptions of risk and safety. *Journal of Travel Research*, 37(4), 171–177.
- Speicher, M., Hall, B. D., & Nebeling, M. (2019). What is mixed reality? *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems*, 1–15. Glasgow, Scotland, UK.
- Sponser Sport Food ®. (n.d.). *Endurance Sports*. Retrieved 26 April 2021, from <https://www.sponser.com/cms/en/your-sport/sports-area/endurance-sports/#:~:text=Introduction to sports nutrition in endurance sports&text=Endurance is the ability to,recover as soon as possible.&text=Long-distance running%2C cycling%2C,swimming are typica>
- Stevinson, C., & Hickson, M. (2013). Exploring the public health potential of a mass community participation event. *Journal of Public Health*, 36(2), 268–274. <https://doi.org/10.1093/pubmed/ftd082>
- Stokols, D. (1972). On the distinction between density and crowding: Some implications for future research. *Psychological Review*, 79(3), 275–277.
- STRAVA. (n.d.). *Features für Sportler entwickelt von Sportlern*. Retrieved 17 January 2022, from <https://www.strava.com/features>
- Studer, F., Schlesinger, T., & Engel, C. (2011). Socio-economic and cultural determinants of sports participation in Switzerland from 2000 to 2008. *European Journal for Sport and Society*, 8, 147–166.
- Sullivan, J. R. (2012). Skype: An appropriate method of data collection for qualitative interviews? *The Hilltop Review*, 6, 5460.
- Swann, W. B. J. (1983). *Self-verification: Bringing social reality into harmony with the self* (J. S. & A. G. G. (Eds.) (ed.); Vol. 2, pp. 33–66). Hillsdale, NJ: Erlbaum.
- Szymanski, D. M., & Henard, D. H. (2001). Customer satisfaction: A meta-analysis of the empirical evidence. *Journal of the Academy of Marketing Science*, 29(1), 16–35. doi:10.1177/0092070301291002
- Taks, M., Green, B. C., Misener, L., & Chalip, L. (2014). Evaluating sport development outcomes: the case of a medium-sized international sport event. *European Sport Management Quarterly*, 4:3, 213–237, 14(3), 213–237. <https://doi.org/10.1080/16184742.2014.882370>
- Taylor, R. S., Unal, B., Critchely, J. A., & Capewell, S. (2006). Mortality reductions in patients receiving exercise-based cardiac rehabilitation: how much can be attributed to cardiovascular risk factor improvements? *European Journal of Cardiovascular Prevention and Rehabilitation*, 13(3), 369–374. <https://doi.org/10.1097/01.hjr.0000199492.00967.11>
- Teixeira, P. J., Carrace, E. V., Markland, D., Silva, M. N., & Ryan, R. M. (2012). Exercise, physical activity, and self-determination theory: A systematic review. *International Journal of Behavioral Nutrition and Physical Activity*, 9.
- Temerak, M. S. (2019). Bikini or burkini? The role of swimwear and age as determinants of beach interaction with others. *Tourism Management*, 75, 269–283. <https://doi.org/10.1016/j.tourman.2019.05.010>
- Temerak, Mohamed Sobhy, & Winklhofer, H. (2021). Participant engagement in running events and why it matters who else takes part. *European Sport Management Quarterly*. <https://doi.org/10.1080/16184742.2021.1956990>

- Theodorakis, N., Kaplanidou, K., & Karabaxoglou, I. (2015). Effect of event service quality and satisfaction on happiness among runners of a recurring sport event. *Leisure Sciences*, 37, 87–107.
- Thomas, L., MacMillan, J., McColl, E., Hale, C., & Bond, S. (1995). Comparison of focus group and individual interview methodology in examining patient satisfaction with nursing care. *Social Sciences in Health*, 1, 206–219.
- Thorpe, H. (2017). Action Sports, Social Media, and New Technologies: Towards a Research Agenda. *Communication & Sport*, 5(5), 554–578. doi:10.1177/2167479516638125
- Turner, V. (1969). *The ritual process: Structure and anti-structure*. Chicago, IL: Aldine Publishing.
- Urbanova, L. B., Holubcikova, J., Geckova, A. M., Reijneveld, S. A., & van Dijk, J. P. (2019). Does life satisfaction mediate the association between socioeconomic status and excessive internet use? *International Journal of Environmental Research and Public Health*, 3914. <https://doi.org/10.3390/ijerph16203914>
- Van Dyck, D., Cardon, G., De Bourdeaudhuij, I., De Ridder, L., & Willem, A. (2017). Who Participates in Running Events? Socio-Demographic Characteristics, Psychosocial Factors and Barriers as Correlates of Non-Participation—A Pilot Study in Belgium. *International Journal of Environmental Research and Public Health*, 14(11), 1315. <https://doi.org/10.3390/IJERPH14111315>
- Van Leeuwen, L., Quick, S., & Daniel, K. (2002). The sport spectator satisfaction model: A conceptual framework for understanding the satisfaction of spectators. *Sport Management Review*, 5(2), 99–128. doi:10.1016/S1441-3523(02)70063-6
- Vargo, S. L., & Lusch, R. F. (2008). Service-dominant logic: Continuing the evolution. *Journal of the Academy of Marketing Science*, 36(1), 1–10.
- Vargo, S. L., & Lusch, R. F. (2016). Institutions and axioms: An extension and update of service-dominant logic. *Journal of the Academy of Marketing Science*, 44(1), 5–23.
- Vignais, N., Kulpa, R., Brault, S., Presse, D., & Bideau, B. (2015). Which technology to investigate visual perception in sport: Video vs. virtual reality. *Human Movement Science*, 39, 12–26. <https://doi.org/10.1016/j.humov.2014.10.006>
- Voltes-Dorta, A., & Martin, J. C. (2021). The influence of race performance on re-participation behaviour of trail runners in the Transgrancanaria event. *European Sport Management Quarterly*, 21(1), 58–77. <https://doi.org/10.1080/16184742.2020.1723120>
- Waizenegger, L., McKenna, B., Cai, W., & Bendz, T. (2020). An affordance perspective of team collaboration and enforced working from home during COVID-19. *European Journal of Information Systems*, 25(1), 1–14.
- Wattanasuwan, K. (2005). The self and symbolic consumption. *Journal of American Academy of Business*, 6(1), 179–184.
- Weed, M. (2009). Progress in sports tourism research? A meta-review and exploration of futures. *Tourism Management*, 30(5), 615–628.
- Weed, M., & Bull, C. (2004). *Sports tourism: Participants, policy and providers*. Oxford: Elsevier Butterworth-Heinemann.
- Weed, M., Coren, E., & Fiore, J. (2009). *A systematic review of the evidence base for developing a physical activity and health legacy from the London 2012 Olympic and Paralympic Games*. Canterbury: SPEAR/Canterbury Christ Church University.

- Weed, M., Coren, E., Fiore, J., Wellard, I., & Mansfield, L. Chatziefstathiou, D. Dowse, S. (2012). Developing a physical activity legacy from the London 2012 Olympic and Paralympic Games: A policy-led systematic review. *Perspectives in Public Health*, 132(2), 75–80. doi:10.1177/ 1757913911435758
- Westmattmann, D., Grotenhermen, J.-G., Sprenger, M., & Schewe, G. (2020). The show must go on - virtualisation of sport events during the COVID-19 pandemic. *European Journal of Information Systems*, 30(2), 119–136. <https://doi.org/10.1080/0960085X.2020.1850186>
- Wicker, P., Hallmann, K., & Zhang, J. (2012). What is influencing consumer expenditure and intention to revisit? An investigation of marathon events. *Journal of Sport and Tourism*, 17, 165–182.
- Willem, A., De Rycke, J., & Theeboom, M. (2017). The role of autonomous and controlled motivation in exercise intentions of participants in a mass cycling event. *Frontiers in Psychology*, 8(354). <https://doi.org/10.3389/fpsyg.2017.00354>
- Wilson, T. D., & Gilbert, D. T. (2005). Affective forecasting: Knowing what to want. *Current Directions in Psychological Science*, 14(3), 131–134.
- Woermann, N. (2012). On the Slope Is on the Screen: Prosumption, Social Media Practices, and Scopic Systems in the Freeskiing Subculture. *American Behavioral Scientist*, 56(4), 618–640. doi:10.1177/ 0002764211429363
- Woratschek, H., Horbel, C., & Popp, B. (2014). The sport value framework—A new fundamental logic for analyses in sport management. *European Sport Management Quarterly*, 14(1), 6–24.
- World Health Organization. (2020). *Physical activity*. <https://www.who.int/news-room/fact-sheets/detail/physical-activity>
- Xiao, X., Hedman, J., Tan, F. T. C., Tan, C. W., Clemmensen, T., Lim, E., Henningsson, S., Mukkamala, R., Vatraru, R., & van Hillegersberg, J. (2017). Sports digitalization: A review and a research agenda. *Proceedings of the 38th International Conference on Information Systems, Seoul*.
- Yair, G. (1992). What keeps them running? The "circle of commitment" of long distance runners. *Leisure Studies*, 11(3), 257–270.
- Yoshida, M., & James, J. D. (2010). Customer satisfaction with game and service experiences: Antecedents and consequences. *Journal of Sport Management*, 24(3), 338–361. doi:10.1123/jsm.24.3.338
- Zecevic, C. A., Tremblay, L., Lovsin, T., & Michel, L. (2010). Parental influence on young children's physical activity. *International Journal of Pediatrics*, 468526–468535. <https://doi.org/10.1155/2010/468526>
- Zhang, J. J. (2015). What to study? That is a question: A conscious thought analysis. *Journal of Sport Management*, 29(1), 1–10.
- Zhang, K., & DeLoose, S. (2009). Wikis. *Administrative and Organizational Studies*, 1.

Acknowledgments

At this point, I want to thank those people who supported me during the process of this master thesis and provided me with help and guidance.

Firstly, my appreciation goes to my advisor Roland Anderegg, for the helpful suggestions, the constructive feedback and the smooth cooperation while building this master thesis.

With practical inputs and informed knowledge in the event area, Walter Burk, as my Co-Advisor, answered my questions and supported me in the expert interviews.

A special Thank You goes to all my experts who made themselves available for my expert interviews and provided me with firsthand insight into the event area. They helped me distribute the survey to their event participants. For the experts being part of my focus group and expert talk, I want to extend my acknowledgement for their critical view of my results to complete this paper with an informative conclusion.

For my questionnaire, I was grateful to count on Prof. Dr. Kerstin Wagner, assisting me with practical knowledge and guiding the questionnaire into a good direction.

To attract enough participants for the survey, a particular Thank You goes to Thomas Häusermann, who provided me not only with his expert knowledge, but donated a free start at his event.

The core of my master thesis, the survey, could not have been a success without all participants. Therefore, I want to thank all participants for their diligent completion and submission.

With suggestions, critical inputs and support, my private surrounding has been by my side during the entire process, especially while creating the survey and distributing the questionnaire. Therefore, a big Thank You is addressed to them.

Finally, I want to say Thank You to Vanessa Lannou for her detailed and crucial proofreading of my master thesis.

Romy Steingruber

Zizers, 04 March 2022

Questions

Events

1. What are success factors for an event?
2. What challenges do you face when organizing your event(s)?
3. What was going on in the event management sector in the last 15 months?
4. What influences the society currently most, aside from Corona?
5. What higher-ranked trends influence the organization of events in the future?

Competition characteristics

6. Does absolute thinking of accomplishment has a future?
7. How realistic are individual competitions where each participant can put together their own competition out of several options (sports type, length, time measuring)?
8. How big is the potential of challenges (tasks to overcome / course sections before, during or after the race with bonus system)?

Social / participants

9. How does the trend to family / team / group event look like?
10. How do you approach different goals and needs of your participants?
11. What do you want to learn from your participants what you do not know yet?

Virtuality / digitalisation

12. What chances do the virtual possibilities offer you before, during and after the event?
13. What additional value generates social media for you and the participants? What additional expenses does it have on the other side?

Codebook

1. What are success factors for an event?	
Professional / good organisation	<ul style="list-style-type: none"> • Organisation needs to work out (10): clear process; volunteers act as host; holistic journey needs to be right; good participant information; good structured; participants only need to focus on themselves; high quality of the event; tell a story with everything we have: finisher price is from the region; no appearance to want make profit of the event; easy from the enrolment until the award ceremony and between a smooth flow • Simple registration process; possibility of late registrations on race day; payment on race day • Participants are bonded automatically when the organisation is good • Team with whom you organise the event: plan one year for 3.5h of event
Needs	<ul style="list-style-type: none"> • Fulfill needs / requests of the participants (2) • Generate new needs • Courses need to be suitable for the mass (3): not too hard but still nice landscape and fast times; the broader the offers the more interesting for the whole society; attractive sports type to approach as much people as possible
Target group	<ul style="list-style-type: none"> • Good distribution of the target group (3): market analysis; concurrence analysis → is there still space • Target group needs to be correct
Feeling of the event	<ul style="list-style-type: none"> • Whole atmosphere (3): speaker; good spirit; good value for registration fee; socialising after the race in the catering area • Attractive course: short and long distances • Satisfied participants (3): collected experience in the relative surrounding, fulfil the expectations; going home with a good feeling • Experience emotions (2): a lot of unsportsmanlike; challenge; group experience
Communication	<ul style="list-style-type: none"> • Informative; on point; personalised; speak to the emotions • At least deliver what you promised: more positive emotion is fine, but not less • Make curious, could be fun
Weather	<ul style="list-style-type: none"> • Snow conditions: if the possibility to train in advance exists, then more participants at the event • Good weather / snow conditions
Region	<ul style="list-style-type: none"> • Exclusiveness in the region (2) • Uniqueness • Anchoring in the region / village (2): support from village, commune, politics and residents
Event philosophy	<ul style="list-style-type: none"> • Why organise the event: vision; mission; values • USP (unique selling proposition / point) (2): own story differentiates from others; need something to set ourselves apart • Framework: stick to the philosophy and build your own reputation which is not changeable
Participants goal	<ul style="list-style-type: none"> • No competition to others but to themselves

	<ul style="list-style-type: none"> • Compare with others, emotions • Good evaluation of participants impressions after first event • Sponsoring: enough money available • Volunteers
Diverse	
2. What challenges do you face when organizing your event(s)?	
Corona	<ul style="list-style-type: none"> • Insecurity (4): normal organisation of the event but keep in mind what to do if it comes differently • Challenge for budget management (2): do people participate? do they return? or did they realise it is also possible alone and have no desire for events anymore? • Huge challenge (3): changes a lot in course and date; prepare and implement protection concept plus certificate control • Different regulations and restrictions (2): with travel restrictions number of participants felt; easier if the event is just in Switzerland
Outdoor	<ul style="list-style-type: none"> • Several circumstances to take into consideration (2): Outdoor and long • Environmental influence that cannot be controlled
Logistics	<ul style="list-style-type: none"> • Visitors (2): bring the crowd to the event area; handle stream of visitors • Race process is routine and experience • Effect bags loaded at the start area and brought to the finish line
Finance	<ul style="list-style-type: none"> • Find enough sponsors (5): not possible without them; in future also difficult for smaller events; a lot of them focused on digital events (or e-sports) or have less money available due to Corona • Cooperation with sponsors: effort and service in return much more important; everything needs to be documented • Financial backstop to handle a cancellation: large number of events makes it difficult to create a consistent financial basis
Volunteers	<ul style="list-style-type: none"> • Find enough volunteers (7): returning ones with knowledge; limited budget; 3G rules do not help; do they come again? • Find people that commit themselves to an idea in their free time
Weather	<ul style="list-style-type: none"> • Snow security (3): enough and good snow available • Three dates available: short notice planning (e.g., volunteers need to be ready for all dates) • Possibility that there is snow • Good weather brings a lot of participants • Lake needs to be frozen
Date	<ul style="list-style-type: none"> • Find a date (2): that does not concurrence others; suits the weather conditions • Wednesday afternoon: special day for all parties involved
New ideas	<ul style="list-style-type: none"> • Stay attractive for participants (2): include them as fast as possible • Stay tuned and implement new cool things (4): have courage to dare something as organisers; how to adapt or implement new ideas? believe in the launch of new things for the development of the society and forward movement

	<ul style="list-style-type: none"> • Communicate new formats clear and simple • Try to find out what is the next trend sport for our athletes: cycling: gravel, street, mountain bike; trailrun • We try to participate in events ourselves, speak directly with the participants and reacts fast on inquiries
Permission	<ul style="list-style-type: none"> • Community normally good, canton more difficult but rarely problems • More requests: security, public authorities • Obtain permissions more and more on a bureaucratic way • Residents: combine organisations needs and needs of residents represented through the host city
Diverse event details	<ul style="list-style-type: none"> • Individualism: People do more individual sport instead of joining clubs → events are dependent on clubs and scarcity of members can lead to a problem • Nutrition: enough products for all stations; where to prepare the nutrition? • Security: disposition needs to work if something happens • Race numbers sorted right • Effort and output are in no relationship at E-Bike events: 12-18 participants that need an own course, volunteers, Samaritan • Withdraw of official Swiss organisation because of huge effort, now freer
3. What was going on in the event management sector in the last 15 months?	
Corona	<ul style="list-style-type: none"> • Additional effort because of Corona • Big insecurity (2): if event can take place; people book more short-term • Planification: plan in eventuality and at short notice; always on last point; plan more spontaneous and in scenarios → not be plannable at the table because more outside framework is given • More engaged with the protection concept instead of the event organisation itself • Deliver difficulties: order now to have products on event day but no idea how many athletes → plan early but want to decide late • Organisation was on hold: scenarios have been defined • Go back into the groove after Corona "break": heavy emotional situation • Date collision: events were moved in autumn
Digitalisation	<ul style="list-style-type: none"> • A lot is going to be digitalised (2): boost into the virtual history / race, put more on that • Actual race virtual: picked people up who have felt themselves unwell in the mass; smaller and more personally • Social media is a must: more intensive and more is demanded
New ideas	<ul style="list-style-type: none"> • Destinations are open for new ideas • Forced to rethink if the format is still beneficial • A lot of ideas have not had space in daily life: see and use this time as a chance • There was a trend to overtrump each other and in lately there is a trend back to the simple

Participant's behaviour	<ul style="list-style-type: none"> • Decrease of participants numbers (3): more people run but they do not take part at events → has our event the right format? long distance races need to be planned long in advance and with the insecurity this leads to less participants • Behaviour of participants is more difficult to estimate (6): different needs; what do they want, what size, closeness / distance; how many athletes do we have → empirical value got lost; more new events are coming and people decide last minute where they want to participate; unburdened participation is not possible, togetherness needs to be learned new • Reduction in spectators: need to do a Corona test and do not want to meet in crowd • Positive (2): appreciation got even bigger than before; through Corona one step back and looking forward to just participate in an event; sport is in the focus and not everything around • Gain knowledge if organisation economised good in the last years to overcome one year without event • How to finance events different? • Attract new sponsors with the health factor and kids • Market of events is big which leads to trade rivalry and makes it hard to reach a number of participants which is worthwhile • Limit number of participants: participants want to participate because it is limited → better budget for organiser because a lot of costs are dependent on participants (finisher prices) and therefore no losses
Finance	
4. What influences the society currently most, aside from Corona?	
Outdoor sports	<ul style="list-style-type: none"> • Increased popularity of outdoor sports (3): move and do sports; huge boom increases the competitiveness among bikers, hiker and so, on the available paths • Increased poly-sportivity
Independent sport behaviour	<ul style="list-style-type: none"> • Informal sport habits (3): just go when feel the need; pay when is used; less club registration; organised sport suffered as people want to be flexible and independent and do sport whenever and wherever they want; increased place and time independency • Sport club lost importance: people do not want to bind themselves
Digitalisation	<ul style="list-style-type: none"> • Watch more events through the screen • Digitalisation • AI
Sustainability	<ul style="list-style-type: none"> • Forced to make thoughts about it • Lost popularity during Corona • Climate / environment: been noticed at event and take care of that → recycling, multi-way dishes
Finance	<ul style="list-style-type: none"> • Financial awareness / possibilities of society • Sponsoring situation: they invest more into digital / virtual events which makes it hard to find sponsors
Other trends	<ul style="list-style-type: none"> • Black life matters: training at workplace, diversity, integrity • Mode and material have made a big step

	<ul style="list-style-type: none"> • Home office: other possibilities to do sport • Life style (2): live healthy; work-life-balance; fitness • Exaggerated mobility: fly to London over the weekend; party in Zürich • Influence (2): people need to compare themselves with others; influence them; get influenced; show what I am doing and eating • Surplus supply: oversaturated event offers and leisure possibilities
5. What higher-ranked trends influence the organisation of events in the future?	
Digitalisation	<ul style="list-style-type: none"> • Digitalisation (2): find ways that not everything is on paper (e.g., meetings, information for participants) • E-sports (2): need to be included in a way • Access to a lot of data (e.g., how many Watts do they push, what did they eat before and after): complex sports can be brought to the broad publicity and to people who do not know that much from the particular sport → expensive • Virtual possibilities (2): combination, AI • Be informed faster (2): know already during the race on which ranking they are; follow everything live • Include digital medias: social media, website (important channel) • Train / run digital • Media on sport events: find formats that are interesting for media and find new channels to show sport • How can new technologic possibilities be used for sustainable experiences? <p>Use the same kind of event for several locations → at digital formats effort for each additional event can be reduced</p> <p>To include the trend of self-determination and self-realisation</p>
Sustainability	<ul style="list-style-type: none"> • Separate rubbish; one way cups; more way cutlery • How much do people fly? Climate neutral events? What does the organiser wants?
Health and fitness	<ul style="list-style-type: none"> • Health, fitness and sports as lifestyle (2): argue for events • Move: people go into the nature
Individualisation	<ul style="list-style-type: none"> • Individualisation • It is visible and heard that after Corona, people want common experiences and are thankful for common experiences = counter movement of the individualisation
Participants behaviour	<ul style="list-style-type: none"> • Direct / personal contact will get more important in the future: could give a change • Psychic aspect of the athlete is more important and athlete is an important part of the sport: fair play, stay transparent • People decide last minute: people do not want to bind themselves
Event behaviour	<ul style="list-style-type: none"> • Number of events: multiplied and flourished • Concurrence of other races to get the needed number of participants • Bring sport to the people: events in the city

	<ul style="list-style-type: none"> • Some events will die, and some will survive but these will get bigger • Corona: under which conditions is the event feasible? • Need to do bigger and more eccentric events to raise yourself from the mass • What is the trend of big mass events (thousands) in the future? • Attract participants from abroad to increase number of participants
Internationalisation	
6. Does absolute thinking of accomplishment has a future?	
Yes	<ul style="list-style-type: none"> • Competitions live from that: victory is important • Performance stays important for the majority (3): events are to measure yourself; only people with ambition; just for fun is rare • Absolutely (3): do not underestimate this fact; the longer the more; innermost driver of us is measurability: take care to not push it too much into the back • Not the same significance anymore but still important for future (6): performance thinking still has its right but is a small percentage that takes part for performance; less distinctive than previous; figureheads are needed but are less important; at several races it is needed; thinking of accomplishment and rankings will also be part of sport formats in the future • Competition character will always have an entitlement as long as we are political, financial, and ecological able to have such a big freedom that we can move around in our society as we are doing now • Time is included in number and gets measured anyway
Yes, part of	
Yes and no	<ul style="list-style-type: none"> • Twice the same category (distance and time measuring) with different names («march» and «run») (2): 75% in «march» although they ran like the runners → mental aspect, some dogged participants see their chance for a podium in cosy chat categories • Two courses, one with and one without ranking: participants without ranking decrease • Trend is rather away but in niche sport types it is trend to performance in future • More variants need to be created to orient the event towards the broad society and not just for competitive athletes • Is a mixture (6): performance is needed otherwise the event is not needed and everyone could go themselves; people ahead want to win, ones behind to finish; challenge will be to bring personal performance in line with personal experience in new sport formats; dogged thought of accomplishment is not desired but accomplishment because of joy is something cool; participants during Corona times were not performance oriented and performance oriented want to come back when the event is normal again
No	<ul style="list-style-type: none"> • Less performance focused (2): fun events have potential, experience has a big share • Important that events for common experiences are available: still needed and target group available
Reason: finish	<ul style="list-style-type: none"> • Event as a driver: reach the finish line is also a form of accomplishment and performance • Set targets and reach them has future (4): with healthy lifestyle that will come; overcome course / challenge; am I able to do / finish it? where are my limits? important is to finish but not the time • Prestige "I have done event XY"

	<ul style="list-style-type: none"> • Be part (2): Enjoy the run; take pictures; speak with others but in the end, you achieved something that is measurable • Ambitious hobby participants that aim to get better every year (2): need something to compare their performance with • Need to compare and measure is one part of the participants (2): comparison with a welcupp athlete is nice • Important motivation driver for training: see your development • Driver for innovation: faster, better, farther, longer • Start blocks and most people want to start in block 1, they appreciate to start in a block more ahead
Reason: comparison	
Reason: community	<ul style="list-style-type: none"> • Participate in sport events to be part of the community
Reason: lifestyle	<ul style="list-style-type: none"> • Lifestyle sport: enjoy movement / fun (Stand up Paddle) vs. health sport
Without time measuring	<ul style="list-style-type: none"> • Races without time measuring have no future (2): needs something • Run without time measuring chip and register the time afterwards on internet page to see a ranking; possibility to cheat exists
7. How realistic are individual competitions where each participant can put together their own competition out of several options (sports type, length, time measuring)?	
Yes	<ul style="list-style-type: none"> • Has potential at some events (4): for performance oriented possible • Has potential at some events (2): especially at events without performance it can be interesting • Depending on sport type and locality
No	<ul style="list-style-type: none"> • No big future (2): rather Strava • Not possible (3): aspect of security and no overview guaranteed; possible for team sports where rules and game understanding are behind; at branded events, as they have a name and people know what they have done therefore it would lose the power • Sceptical
Organisation	<ul style="list-style-type: none"> • Huge effort for organiser (2): more to coordinate • Difficult to realise if everyone puts their own event together • Impossible for organisation to realise • Individual is a challenge: how many participants want individual?
Digital events	<ul style="list-style-type: none"> • A lot of events during Corona, which could stay in the future but will not replace real events as the social aspect is missing • Place and time independent virtual formats (2): possible, but not the same experience; are not having a future except it is for charity events where ranking is not the focus • Virtual events with a given course but not linked to a specific day: will come more in the future
Comparison	<ul style="list-style-type: none"> • Correct measuring (length, time, altitude) is important (2): for a real competition the course needs to be the same for everyone • Difficult to generate a rank list • Trend to comparison among each other: Strava or other Apps → individual competition is coming also outside of events
Broad offers	<ul style="list-style-type: none"> • Be open why people come but for all people

	<ul style="list-style-type: none"> • Be positioned broad (3): different lengths; breadth offers but feasible for the organiser • Variation: participants can run longer but with a possible intermediate finish • Main course is the most important
Individual time announcement	<ul style="list-style-type: none"> • Walking with time measuring but no ranking: times get communicated individually because it is your event and your time and you should not compare yourself with the mass • Data privacy: participants that do not want to be on the ranking list
Clarity	<ul style="list-style-type: none"> • Do people still understand what they get? • KISS: keep it simple and stupid → keep clarity
Challenge	<ul style="list-style-type: none"> • Without time measuring could be, but brings challenges: difficult to track people and cannot control if someone is lost • Technologically no problem but logistically: ambitious swimmers swim into slower ones
8. How big is the potential of challenges (tasks to overcome or course sections before, during or after the race with bonus system)?	
Not so big	<ul style="list-style-type: none"> • Possibility to win / gain something at event XY-individual but during original race difficult • Not so big (3): at their event
Yes	<ul style="list-style-type: none"> • Challenges are attractive when a lot of participants are able to overcome them; playful elements are included; and an arc of suspense (limited time) is available • Has future during training: programmed segments on Strava or with watches • Has potential (7): another event format where challenges can be a great alternative; possible if it is not just to ride but something else (e.g., paper chase); exercises have a future; is often searched • Individual competition connected with challenge (2): could have potential but needs to be linked to the main idea / character of the event and not just individual • Strava is used often but no idea how big the potential is
Yes and no	<ul style="list-style-type: none"> • At performance oriented events not possible with bonus system but at fun events can be possible because time is less important • Don't know / indecisive • Will never replace the absolute race
Ideas	<ul style="list-style-type: none"> • Who has fastest last kilometre? (2): Like that slowest has also chances • Sprint after 6.5km: extend the field and make it more attractive for the spectator • Enduro format: total course of 25km and within this distance time will be measured in several sections → somewhat competition but not too much (run as a group until section starts and meet at the end of section to continue together) • Event experience: use strengths and weaknesses (e.g., one segment up hill, one downhill) → something for everyone
Advantages	<ul style="list-style-type: none"> • Makes it possible to compare uneven conditions: e-Bikes have different motors which would make a normal race unfair • Kids: stations (through cans, think exercises) where they can collect points and / or time; possible that parents can walk with them

	<ul style="list-style-type: none"> • Kids / family sector: flatten the full ambition driver of kids that it can give something to win in a challenge instead of just coming from A to B • Good to sell • Stimulate people for sport / training for mass sport events • Exciting for participants (2): several small highlights to motivate, give chances to everyone • Exciting for spectators: interesting places / segments which are good to communicate and to put food stations there • Clarity and simplicity of challenge (4): when do I need to do what? with increasing complexity it is getting more difficult to guide participants and make it transparent, needs to be really simple that it works and keeping the fun part • Logistic and organisation will have a limitation • Security is important (2): framework conditions set close
Disadvantage	
9. How does the trend to family / team / group event look like?	
Positive	<ul style="list-style-type: none"> • Increasing (5): Together is more important, need for common is more; experience together • Side event (2): experience something together is interesting but not as a main offer; classical team events are leading compared to events that focus on single athletes and do team next to it • Maybe not so important anymore in order that all need to stand at the start line at the same time but to overcome a competition or a sport event together is mostly more fun than individually • Need to take care that thought of performance of Elite teams does not destroy the experience of other participants → what is allowed in which category? • Trend to multi-sport festival: offer for kids, 5km night run → risk for participant for a bad focus on actual event
Team	<ul style="list-style-type: none"> • Team events increasing (5): Couple / team is trend; group event / relay function really good • Teams available on a small level but constant → could increase in future • Team thoughts: companies go with at least 4 participants where all are together but also each for themselves • Additional day with relay / team
Community	<ul style="list-style-type: none"> • Important trend (2): big factor at fun events • Social aspect around the event is important (2): competition itself individually but everything around is in groups / teams / clubs
Family	<ul style="list-style-type: none"> • Kids day some days in advance and adults make main race on weekend → inspire the young • Target group "whole family" is too small (3): no potential visible for doing the event XY as a family; rarely the whole family takes part but as a family at the event • Need for family event is existing (5): strong increase every year which will go on like that; since offering shorter distances, more and more parents take part at the event with their kids; kids event is a lighthouse where families make sport together; MuKi / VaKi
Course	<ul style="list-style-type: none"> • Easy small course: feasible for everyone

	<ul style="list-style-type: none"> • Course for youth to also give a chance for beginners and slower
10. How do you approach different goals and needs of your participants?	
Not	<ul style="list-style-type: none"> • Ignore (7): we have our philosophy; do not make all of them happy; is not possible to pick up everyone; think for what we stand and implement that consistent; hold on the original event character; ones are happy to win, others to be part; cut off times to sort participants out that are not able to do it in time • Not conscious taking care (2): element water has an effect to make everyone equally and no big differences are visible
Approach everyone	<ul style="list-style-type: none"> • Formats are open and feasible for the majority of the society (4): open category for everyone; categories based on age group; sport for everyone is goal • Different events: event XY = for beginners, event YZ = performance oriented
Distance variation	<ul style="list-style-type: none"> • Different offers (5): lot of categories / distances / altitudes / paths / difficulties; one for every age class; important to take the needs into consideration
Focus on the last runner	<ul style="list-style-type: none"> • Wait for ranking publication until the last crosses the finish line • Start tidy up after the last participant passed (2): is appreciated by participants
Experience	<ul style="list-style-type: none"> • Category with time measuring but no ranking; prizes get drawn (goes down well); compare them with themselves • Fun events: average age is lower and other target group is addressed • Put focus on experience and away from performance • No age categories: no focus on performance but experience
Nordic Walking	<ul style="list-style-type: none"> • Attractive for a particular target group • Still a lot of Nordic Walking
Different foci	<ul style="list-style-type: none"> • Security (2): do not attract beginners, as it is too dangerous • Motivate first timers • A lot of elderly that are really sportive • Huge focus on women: more qualification slots, more women events • Life style (2): reduce weight, stay sportive, health
Virtual event	<ul style="list-style-type: none"> • Participants can decide if they want to do the event as a group or individually less exposed
11. What do you want to learn from your participants what you do not know yet?	
Fun	<ul style="list-style-type: none"> • Fun factor: is the assumption right that this is important know? That motivation reasons are different than in past years? • Transfer the philosophy of having fun and enjoy the event: how can we do that? Do we succeed in doing that? Is that the need?
Expectation	<ul style="list-style-type: none"> • Recipe for success (5): what do participants want? what are the key characteristics (surrounding, emotionality) to participate? what do organisations need to offer? what are the three most important points participants expect from an event?

	<ul style="list-style-type: none"> • How is the desire for endurance events in the future (2): how are the needs after Corona? why do they want to participate? why not? is it still in demand? or have they realised it goes perfectly without events, just run for fun at home? • How satisfied are they? • What are key factors to try out new sport event formats? • Would events without time measuring appeal to the Swiss society? • Time measuring (2): how important? do participants need it? is a financial driver • Why less participants without time measuring? • Distances: which distances? • Side events: what participants look as interesting? • Infrastructure (2): how important are showers? are Toitoi needed? for people without certificate? • Medals, finisher gift (2): still demanded or not because of sustainability reason? • Nutrition: bring their own nutrition to avoid huge amount of food waste? • Sustainability: where can we be sustainable without taking something of the athletes, they want? • Race week: several races during the week to generate nights for the destination • Rank announcement or overall evaluation: for whom we do what? rank announcement for the first three or is it part of the event? • Starting window: duration? start earlier / later? • Crowd or individual: what do they prefer?
Time measuring	
Event characteristics	
Communication	<ul style="list-style-type: none"> • Time point: when do participants need to know when the start is or how to get there? • How to gather the information?
Added value	<ul style="list-style-type: none"> • Nights and adding value: do people revisit the village / city without the event? or was it one-time? • How much added value does such an event really create?
Before event	<ul style="list-style-type: none"> • Personal goals? • How do you prepare yourself? • How long can the driving journey be? • Do you take part at other events?
Who	<ul style="list-style-type: none"> • What kind of participants do we have? (2): football teams, unsportsmanlike, ambitious, age distribution • Who is it that comes to events?
12. What chances do the virtual possibilities offer you before, during and after the event?	
Marketing	<ul style="list-style-type: none"> • Explain histories next to the race • Make race known (website, social media) (2): important to be present in the public perception; a lot is done while sharing pictures • Preparation and explanations for the event can be presented multifaceted

Communication	<ul style="list-style-type: none"> • Simple and fast contacting and communication with people (2) • Communication with and among participants can be hold up
Tracking	<ul style="list-style-type: none"> • Live tracking at one place or from everywhere (5): compare each other during the competition (are the others before or after me); for spectators to know where your people are; development of the field • Evaluation of participants among each other (2): analysis of the activities after the competition; who took which path; interim times • Organiser needs to provide the course map and participants can upload their courses
Training	<ul style="list-style-type: none"> • Platform (3): whole race courses are available online to train; training courses; training challenges • Strava (3): provide the course on Strava in advance; measure digital with Strava in advance: who is faster in which segments? try to improve the time at the real event
Videos / photos	<ul style="list-style-type: none"> • Personal video (2): participants get identified at several spots and at the end every participant gets a 2-3min video of him-/herself • Photos • Show emotions that have been at the event
Time measuring	<ul style="list-style-type: none"> • Net time (time measuring starts when participant crosses the start line) • Ranking
Events	<ul style="list-style-type: none"> • Virtual events (5): works not really or just over a limited time; not possible; absolute virtual events has limited potential • New possibilities with virtual races: time measuring, new apps • Missing exchange among athletes at virtual events: connection with other participants which is not replaceable virtually; virtual briefing or award ceremony also possible but does it not loose personality? • Addition to the event on side: overcome a virtual challenge to get something • Touristic offer for destinations
Tourism	
13. What additional value generates social media for you and the participants? What additional expenses does it have on the other side?	
Additional expenses	<ul style="list-style-type: none"> • Invest more in staff (2): several percentage work per year • Little effort: save at other places • Professional organisation (3): bilingual is additional effort but output is even bigger; post actual videos and photos of start, finish, spectators, runners on social media in real time; when, then do it professional • Additional effort is huge (4): used for dialogue which means of an action follows a reaction; helpful tools available to share content on different channels; available on many platforms and get messages on every platform and answering in real time is appropriate • Advertisement (5): behind the scenes, pictures of the area to make people curious and joyful; show at which point we are in the organisation; selling is the most important reason; save for less classical advertisement; organic growth through pictures • Less direct feedback of participants as they post pictures on their own platforms and not on guest book of organiser • Not possible to think away (2): with every year more
Marketing	

	<ul style="list-style-type: none"> • Reach a lot with small effort (time, money) • Important for participants (5): post mud pictures; show that they have done it; see what they do; post picture with finisher gift • No need for social media: no need for more participants as limit is reached; fear that even more stupid questions will arise • Not so much social media
Participants	
Not / little used	<ul style="list-style-type: none"> • Emails are answered fast • Participants (7): directly and fast; include the most used platforms; communicate tailored to suit a market need; authenticity over the way; interaction with the athletes; stay active and in contact; information that event takes place; keep participants at the event • Nothing printed anymore, just digital: program, information
Communication	
Ideas	<ul style="list-style-type: none"> • Selfie station (2): sponsoring board on the course; selfie point that sends photos directly to the phone number • Reels: short videos, series in advance • Live videos on site: accompany participants and make small videos to generate a positive effect of the event

Appendix B: Survey

Questionnaire

Survey audience

This survey is exclusively for individuals who have participated in at least one endurance sports event in Switzerland.

1. Have you ever participated in an endurance sports event in Switzerland?

(Select one answer)

- Yes No

Event behaviour

Here, the focus lies on your previous experiences in endurance sport events in Switzerland.

2. In which sport types have you participated in an event?

(Select the appropriate answers)

- Road bike Mountain bike Road run Trail run
 Nordic Walking Orienteering Obstacle run Inline skating
 Swim SwimRun Duathlon Triathlon
 Gigathlon Cross-country skiing Ski touring Snowshoe
 Others

3. Which sport types do you practice actively in training?

(Select the appropriate answers)

- Road bike Mountain bike Road run Trail run
 Nordic Walking Orienteering Obstacle run Inline skating
 Swim Cross-country skiing Ski touring Snowshoe
 Others

4. Think of your favourite event that you have participated in: in which sports type was this event?

(Select one answer)

- Road bike Mountain bike Road run Trail run
 Nordic Walking Orienteering Obstacle run Inline skating
 Swim SwimRun Duathlon Triathlon
 Gigathlon Cross-country skiing Ski touring Snowshoe
 Others

5. Think of the above mentioned event: what motivated you to participate in this event?

(Select the appropriate answers)

- Challenge Experience / fun Comparison with myself
 Comparison with others Motivation for training Community
 Event itself Finishing Environment
 Friends / family / group Spectators Affiliation
 Victory Alternative program Others

6. Think of an event participation in another sports type: in which sports type was this event?
(If you have participated just in one event so far, select «only one event»)

(Select one answer)

- | | | | |
|---|---|---------------------------------------|---|
| <input type="checkbox"/> Road bike | <input type="checkbox"/> Mountain bike | <input type="checkbox"/> Road run | <input type="checkbox"/> Trail run |
| <input type="checkbox"/> Nordic Walking | <input type="checkbox"/> Orienteering | <input type="checkbox"/> Obstacle run | <input type="checkbox"/> Inline skating |
| <input type="checkbox"/> Swim | <input type="checkbox"/> SwimRun | <input type="checkbox"/> Duathlon | <input type="checkbox"/> Triathlon |
| <input type="checkbox"/> Gigathlon | <input type="checkbox"/> Cross-country skiing | <input type="checkbox"/> Ski touring | <input type="checkbox"/> Snowshoe |
| <input type="checkbox"/> Only one event | <input type="checkbox"/> Others | | |

7. Think of the above mentioned event: what motivated you to participate in this event?
(If you have chosen «only one event», select once more «only one event»)

(Select the appropriate answers)

- | | | |
|---|--|---|
| <input type="checkbox"/> Challenge | <input type="checkbox"/> Experience / fun | <input type="checkbox"/> Comparison with myself |
| <input type="checkbox"/> Comparison with others | <input type="checkbox"/> Motivation for training | <input type="checkbox"/> Community |
| <input type="checkbox"/> Event itself | <input type="checkbox"/> Finishing | <input type="checkbox"/> Environment |
| <input type="checkbox"/> Friends / family / group | <input type="checkbox"/> Spectators | <input type="checkbox"/> Affiliation |
| <input type="checkbox"/> Victory | <input type="checkbox"/> Alternative program | <input type="checkbox"/> Only one event |
| <input type="checkbox"/> Others | | |

Ideal sports event

Imagine your ideal sports event. It does not matter if you ever participated in such an event or if it is something completely new. Trust your gut and let your imagination run wild.

8. How many different sport types should the event combine?

(Select one answer)

- 1 2 3 4 5

9. Which sport types would that be? (Select the respective number of question 8)

(Select the appropriate answers)

- | | | | |
|---|---|---------------------------------------|---|
| <input type="checkbox"/> Road bike | <input type="checkbox"/> Mountain bike | <input type="checkbox"/> Road run | <input type="checkbox"/> Trail run |
| <input type="checkbox"/> Nordic Walking | <input type="checkbox"/> Orienteering | <input type="checkbox"/> Obstacle run | <input type="checkbox"/> Inline skating |
| <input type="checkbox"/> Swim | <input type="checkbox"/> Cross-country skiing | <input type="checkbox"/> Ski touring | <input type="checkbox"/> Snowshoe |
| <input type="checkbox"/> Others | | | |

10. How long should the event duration be? (Several days are with an overnight stay)

(Select one answer)

- | | | |
|------------------------------------|-----------------------------------|------------------------------------|
| <input type="checkbox"/> 1-2 hours | <input type="checkbox"/> Half day | <input type="checkbox"/> Whole day |
| <input type="checkbox"/> 2 days | <input type="checkbox"/> 3 days | <input type="checkbox"/> Others |

11. How long should the distance be? (Evidence from running: sprint = 5km, short = 10km, medium = 21km, long = 42km, ultra > 42km)

(Select one answer)

- | | | |
|---------------------------------|--------------------------------|---------------------------------|
| <input type="checkbox"/> Sprint | <input type="checkbox"/> Short | <input type="checkbox"/> Medium |
| <input type="checkbox"/> Long | <input type="checkbox"/> Ultra | <input type="checkbox"/> Others |

12. How does the evaluation look like?

(Select one answer)

- Without time measuring
 Ranking list in alphabetic order (with position)
 Ranking list in alphabetic order (without position)
 Ranking list according to time
 Others

13. In which social form would you like to complete the event?

(Select one answer)

- Single Couple - together Couple - alternating
 Team - together Team - alternating Family - together
 Family - alternating Others

14. How should the event format look like?

(Select the appropriate answers)

- Classical event
 Fun event: performance is in the background, the primary focus lies on the fun
 Challenge: additional exercises to overcome during the race
 Individual: complete a given course independent of date and time and upload the result
 Competition series: events of the same sports type in the region with minimal infrastructure and low entry fee
 Competition series: events in different sport types in the region
 Others

15. Do you have any comments regarding your ideal sports event?

(Insert your answer here)

Demographics

You are nearly done – I would just need a few personal data points.

16. What is your gender?

(Select one answer)

- Female Male Others

17. What is your year of birth?

(Select one answer)

- 1921 1922 ... 2004 2005

18. In which canton do you live?

(Select one answer)

- AG AI AR BE BL BS FR GE
 GL GR JU LU NE NW OW SG
 SH SO SZ TG TI UR VD VS
 ZG ZH Others

19. If you want to participate in the competition for the free start at the Transviamala or Transruinalta, I will need your email address. It will solely be used for the competition and deleted afterwards.
(Insert your answer here)

Declaration

"I herewith declare that this is my independent work written by me and using only admissible aides and no other sources than those given. I have marked as such, all passages which have been taken literally or analogously from another source. I am aware that if this is not the case, the executive board of the university of applied sciences is entitled to rescind any qualifications awarded or any title bestowed based on this work."

Zizers, 04 March 2022



Romy Steingruber