

Risk is my business. Determinants of revisit intentions among participants in extreme sporting events

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Abstract

Multi-billion-dollar revenues and thousands of people involved, qualify extreme sports as a growing marketing phenomenon. This study addresses the determinants of consumer-athletes intention to revisit extreme sport events. We propose a model investigating the role sensation-seeking tendency, event satisfaction, and event image fit in determining revisit intention of active participants, basing on sensation seeking theory. The model is empirically tested with the SPSS PROCESS macro on 240 active participants in extreme sport events. The findings suggest that sensation-seeking leads to revisit intention only through satisfaction, especially when event image fit is strong.

Keyword: Extreme sports, revisit intentions, sport events, sensation seeking, image fit, moderated mediation.

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Introduction

We can define extreme sports as those activities subjecting participants to extraordinary physical and mental challenges such as speed, depth, or natural forces, and which often entail risks and/or extreme endurance. Extreme sports involve physical prowess and a particular attitude towards the world and the self. Examples are skydiving, BMX, base jumping, snowboarding, cliff jumping and motor racing (Brymer and Houge Mackenzie, 2016), but also caving (Bentley and Page, 2001) and triathlon (Atkinson, 2008).

In the extreme sports industry, contrary to traditional sports, active consumer-athletes make over 70% of revenues (rather than passive spectators, NerdWallet, 2015; ISPO, 2016; Nielsen, Scarborough, 2017). Notably, the number of athletes-consumers in extreme sports is fast growing. For instance, since 2014 more than 22 million athletes yearly participate in extreme sports (TBI, 2014); wakeboarding has reached 32% in the US alone (3.5 million people), and snowboarding surged 7.2 million U.S. participants (up 51% from 1999).

Arguably, the average income of extreme sports athletes-consumers tends to be higher than the national average (ChronReport, 2011), making them a large, high-potential, appealing target market. Hence, not surprisingly, many extreme sports disciplines have devised specific events, such as the BMX World Championship or the ESPN X-Games. Events are nowadays the bulk of the extreme sports industry and represent unique occasions for participants to gather and compete. Many of these events have grown from niche sports to globally renowned competitions, attracting thousands of athletes from around the world, and having become multimillion brands. For instance, the Ironman brand is worth US\$650 million, attracting about 3,000 athletes and generating US\$932 million revenues (Roethenbaugh, 2017).

From a managerial viewpoint, understanding drivers of consumer decision making is crucial (e.g., Scarpi, 2005, 2009); accordingly, in the extreme sports industry, examining athletes' revisit intention for events is crucial (Shonk and Chelladurai, 2008), no less than it is for events in general (Risitano *et al.*, 2017). Accordingly, the present research addresses revisit intention as the dependent variable. The plethora of studies considering revisit intentions as the major dependent variable witnesses the central role of this construct, in a variety of settings, from festivals (Baker and Crompton, 2000) to destinations (Stylos *et al.*, 2017) to traditional sports tourism (Shonk & Chelladurai, 2008).

Extreme sports are likely to be relevant from a theoretical point of view as well. Literature considering those consumption behaviors denoted by a

specific psychological characterization regarding risk (e.g., Self *et al.*, 2007; Corciolani *et al.*, 2018) and danger (Puchan, 2005), has suggested that, in such settings, traditional marketing-related aspects are likely to work differently than in traditional contexts (Laurendeau, 2006). Such suggestion may appear particularly relevant for extreme sports, as participating individuals show the willingness to actively seek for risks rather than avoiding them (Milovanovic, 2005); further, they voluntarily engage in extreme, even life-threatening activities in a quest to push forward their physical and psychological limits (Brymer and Houge, Mackenzie, 2016), ultimately aiming to belong to a restricted group of “super” humans (Lyng and Matthews, 2007).

Weirdly, despite such managerial and theoretical relevance of extreme sports previous research addressing extreme sports-related consumption behavior is scarce. On one hand, this may be due to the relatively recent, groundbreaking popularity of extreme sports; on the other hand, as we specify in the theoretical background, extreme athletes are differentiated from average individuals due to specific psychological differences, so that the mechanisms driving their intention to revisit are likely to be driven by different psychological levers as well. Further, existing study on extreme sports consumption have proposed interpretive frameworks only partially able to capture the key components of participants’ consumption experiences, as they usually fail in considering the key, specific psychological dimensions denoting extreme sports participants (Lyng, 2014).

This study aims to fill this gap by investigating the determinants of revisit intention for extreme sporting events.

In doing so, we use concepts and constructs from the psychological literature addressing extreme behaviors, as well as from sport management literature; this allows to consider some key specificities of extreme athletes noted by literature in psychology. According to psychological literature, extreme sports differ from traditional sports also with respect to the kind of individuals practicing them (Lyng, 1990), which exhibit different behavioral drivers than those of traditional athletes (Laurendeau, 2006). Extreme individuals actively seek sensations which originate from risks (Milovanovic, 2005), and engage in exhausting, even potentially deadly activities aiming to constantly push forward their physical and psychological limits to seek strong sensations (Brymer & Houge-Mackenzie, 2016).

In particular, from sensation seeking theory, we derive the construct of sensation seeking tendency, and fit (congruence) between the image of the event and the image of the self, while from sport management literature we derive the concept of satisfaction. Recent research called for a more thorough investigation of the drivers of satisfaction toward an event when individual

physical performance actively contributes to the event consumer experience (Du *et al.*, 2015). However, despite attention to event satisfaction and sporting event satisfaction (e.g. Brown *et al.*, 2016; Du *et al.*, 2015), most studies have considered passive participation (e.g., Ko *et al.*, 2011; Lee *et al.*, 2011); extreme sports settings make no exception (Tsuji *et al.*, 2007).

Also, these psychological specificities have been hardly put in relation with managerially relevant outcomes. However, notably previous studies have suggested that such intrinsic psychological characteristics of extreme sports, may have important marketing implications, but also that marketing related variables might work differently in this context (Puchan, 2005; Self, Henry, Findley, & Reilly, 2007). Accordingly, we investigate how event revisit intentions for extreme consumers-athletes could be shaped by not only a set of marketing-related variables usually addressed in the behavioral intentions literature and in traditional sport management research, but also by context-specific variables related to the unique psychology of extreme individuals.

Findings provided in this study suggest that a thorough understanding of revisit intention toward extreme sporting events requires a deep consideration of unique psychology-related elements of extreme athletes to be successfully managed.

The present research provides multiple contributions. First, it is set in the context extreme sporting events rather than traditional ones, and addresses active rather than passive participation, thus answering recent calls for research (e.g., Du *et al.*, 2015). Second, it integrates considerations from psychology within a managerial framework to identify linkages between the unique characteristics of individuals engaging in extreme activities with a managerially relevant outcome (revisit intentions).

In the following, we develop a model embedding insights from sensation-seeking theory and test it on data from natural settings provided by some of the major extreme sporting events, and ultimately summarize results providing theoretical as well managerial implications.

1. Theoretical background and hypotheses

1.1. Sensation-Seeking tendency and event satisfaction

Sensation-seeking theory can help understanding individual involvement in extreme sports. It is based on the sensation-seeking personality trait (Schroth, 1995), which refers to the individual need to continuously look for an optimal level of stimulation by means of “the seeking of varied, novel,

complex and intense sensations and experiences, and the willingness to take physical, social, legal, and financial risks for the sake of such experiences” (Zuckerman, 1994, p. 27). It refers to a personal trait urging individuals to seek new experiences and intense sensations to maintain an optimal level of arousal, thus leading him/her to voluntarily taking the risks which usually these experiences are associated to (Zuckerman, 1994). Experiences sensation-seekers look for are usually denoted by novelty, intensity and riskiness; sensations-seekers look for incremental levels of such characteristics, to increase the intensity of experienced stimulation (Roberti 2004). This psychological mechanisms has been recently compared to addiction (Heirene *et al.*, 2016; Frühauf *et al.*, 2017).

Recent research has highlighted positive associations between sensation seeking and a variety of risky behaviors, such as adventure tourism (Holm *et al.*, 2017) and extreme sports (Marengo *et al.*, 2017). Arguably, individuals denoted by sensation seeking motives have been exhibiting a frequent engagement in extreme sports (Heirene *et al.*, 2016).

Such multiple evidence from these studies might suggest that events properly aligning with participants’ optimal levels of arousal will be more likely to induce more positive reactions from the participating athletes. Accordingly, a study by Xu *et al.* (2012) set in storm chaser events found significant, positive associations between event satisfaction and sensation-seeking. Based on these considerations and findings, we advance the following:

H1: Sensation-seeking tendency positively influences athletes’ satisfaction with the event.

1.2. Event satisfaction and revisit intentions

Marketing and sports marketing research have pointed satisfaction as a crucial determinant of positive consumer outcomes, such as customer retention (Yoshida and James, 2010) and patronage (Kwon *et al.*, 2005). A lot of research has shown the link between consumer satisfaction and consumer attitudes. Attitudes are known as “a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor” (Eagly and Chaiken, 1993, p. 1). When an individual positively or negatively evaluates a certain object, such evaluation is reflected in the attitudes towards that object (Fishbein and Ajzen, 1975). This process of attitude-formation can be direct (e.g., through the direct experience), or indirect (e.g., through exposure to word of mouth). Once a consumer forms its attitudes, they are

likely to drive his/her responses (Fazio *et al.*, 1989), behavioral intentions (Downs and Hausenblas, 2005), and post-purchase outcomes (like satisfaction, Oliver, 1999; Hellier *et al.*, 2003). Sports consumption makes no exception, so that a positive relation between event participants' satisfaction and their revisit intentions has been observed (Kaplanidou & Gibson, 2010).

Accordingly, we advance the following hypothesis:

H2: event satisfaction has a positive impact on revisit intentions.

1.3. The role of event image fit

Event images in general and specifically of sporting events is usually conceptualized following Keller's (1993) theoretical framework, which suggested that brand images are constituted of attitudes, attributes, benefits, and costs with respect to a certain entity (Kaplanidou & Vogt, 2007). Accordingly, Gwinner (1997) defined event image as "overall subjective perceptions of the [event] activity" (p. 148). Sport events' images are crafted to carry significant meaning for the participants and refer, for instance, to physical activity components (Kaplanidou and Vogt, 2007) and/or to relevant subculture associations among participants (Green, 2001; Kaplanidou & Vogt, 2007).

In the sport industry, brands are often associated with events, to the point that event and brand image frequently overlap (Gwinner & Eaton, 1999; Walker *et al.*, 2013). Consumers associate functional, symbolic, and emotional meanings to sporting events (Filo *et al.*, 2008): accordingly, event image can be defined as the consumer's holistic interpretation of the meanings (s)he attributes to an event (Gwinner and Eaton, 1999). The extreme sports industry is particularly characterized by highly symbolic, iconic events (e.g. X-Games) that have been labeled as sophisticated (Bennett and Lachowetz, 2004) and innovative (Franke and Shah, 2003), and act as symbols of their respective sport discipline. Positive images of an object usually reinforce consumers' positive intentions toward that object (Graeff, 1997); similarly, perceptions of event image influence participants' intention to take part in the event again in future, though usually indirectly (Kaplanidou & Vogt, 2007).

The fit (or congruence) of brand image with consumer image is a core concept in marketing (Hosany and Martin, 2012) and was found to be relevant in a number of consumption contexts, from retail (Das, 2013) to tourism (Usakli and Baloglu, 2011) to food (Shamah *et al.* 2018). Sports marketing research in traditional sports settings has devoted to a great deal of attention

to image fit (or congruence) between an event and the brand sponsoring/organizing it (Du *et al.*, 2015; Papadimitriou *et al.*, 2016), suggesting a determinant role of image congruence in determining purchase intention (Koo *et al.*, 2006). However, literature is apparently limited when it comes to fit between the event and the image of the consumer rather than of the brand (Kwak & Kang, 2009), even more in the context of extreme sports.

Consumer affective state during consumption can determine satisfaction or dissatisfaction (Wirtz, 1994). Image congruity triggers an emotional response towards a certain object (i.e., the brand/event), and, accordingly, has been indicated as a key determinant of customer satisfaction (He and Mukherjee, 2007). In a similar fashion, (Escalas and Bettman, 2005) suggested that consumers choose brands/events whose images are perceived as matching the group they wish to belong to. Accordingly, event image might play a crucial role in fostering consumers' tendencies to revisit an event. It is quite established that consumers make use of image cues to come closer to their desired self and to remark their differentiation from dissociative groups (in this case, non-extreme individuals; Lyng and Matthews, 2007). Thus, in extreme sporting events, which carry strong image-related cues, consumers' intention to revisit may increase significantly when image fit is higher, particularly if considering that extreme athletes have been reported to be denoted by strong, energetic self-images (Schreier *et al.*, 2007), denoting a more intense, inner life (Coffey, 2008) especially if compared to more "traditional" individuals.

In this vein, image fit (or congruence) is likely to boost consumers' perceptual and behavioral cues and, accordingly, has often been proposed or found to be a moderating variable in diverse contexts. For instance, between attractiveness of product and service alternatives and consumer satisfaction (Yim *et al.*, 2007), between consumer's self-image and the image of a product or service (Wiedmann *et al.*, 2007), and between consumer's attitude to brand extension and consumer's attitude to an extended brand (Martínez and Pina, 2010).

Thus, we propose the following:

H3: Event image fit moderates the relationship between satisfaction and revisit intentions, with a more positive event image fit leading to a stronger revisit intention.

1.4. Sensation seeking tendency and revisit intention

By applying insights from the psychological literature on extreme individuals to a consumer setting, we offer a theoretical framework emphasizing

the interaction between the unique characteristics of extreme individuals (i.e., sensation-seeking tendency), and some key consumer outcomes (i.e., satisfaction), and considering in turn the impact of satisfaction on revisit intentions. This is to say, we posit satisfaction as mediator of the relationship between sensation seeking tendency and revisit intention.

Researchers in psychology suggested that extreme individuals' positive attitude toward risks is linked to an active search for those risks (Lyng, 1990), but sensation-seekers do not exhibit inherently differential levels of satisfaction compared with non-sensation seeking individuals (Brymer & Houge Mackenzie, 2016). We hence consider the effect of sensation seeking on revisit intention as being indirect rather than direct. More formally, we advance that satisfaction is a full mediator of the relationship between sensation seeking tendency and revisit intention. In other words, sensation seeking tendency can be harnessed into a managerially relevant behavior -such as revisit intention- only through satisfaction.

Accordingly, we propose the following:

H4: Sensation seeking tendency has no direct effect on revisit intention but has an indirect effect through satisfaction.

2. Research context

Skydiving can be also defined as sport parachuting. The origins of this sport can be dated back to 1800s, when early exhibition jumpers used to employ the newly invented parachutes to launch from hot air balloons. During 1900s, with the introduction of the airplane the use of parachutes was mainly related to military purposes. However, after the end of the Second World War, the use of parachute was gradually extended also outside the military; several civilian parachute organizations were created, and in 1948 the World Air Sports Federation included parachuting among air sports. With the diffusion of the aerial free flight, this sport was increasingly identified with the English term "skydiving". From the 1960s on, skydiving became an increasingly popular sporting discipline, and experienced many evolutionary patterns, both technological (e.g., the invention of new materials) and in terms of techniques (e.g., the introduction of new free fall flying techniques). Today, skydiving represents a remarkably popular phenomenon: for instance, in 2017 3.2 million jumps were performed in the U.S. alone (United States Parachute Association, 2017).

Early development of snowboarding can be traced back yet to the 1960s. However, the actual shift in popularity was achieved in the mid-1980s, with early specialized manufacturers being able to devise a clever diversification

of their products, as well as creating a unique market appeal (Langran, 2012); such popularity was almost simultaneously harnessed by the creation of specific snowboarding areas within existing skiing areas. In 1998 snowboarding was included among Olympic sports. Since 1999, popularity of snowboarding experienced a remarkable growth, surging today 7.2 million U.S. participants (up 51% from 1999) (Xtremesports, 2008).

In the 1970s Southern California, children were imitating the contemporary motocross champions by riding modified bikes on dirt tracks. This practice gained a rapid popularity, thanks also to its depiction in Bruce Brown's motocross documentary "On any Sunday", starring the actor and avid racing motorcyclist Steve McQueen (American Bicycle Association, 2015). 1981 saw the foundation of the International BMX Federation; the year after, the first BMX world championship was held. In 1993, BMX was integrated into the Union Cyclist International (UCI). By the mid-1990s, BMX popularity was further revived with its inclusion among disciplines admitted to the X-Games (Kusz, 2003), one of the most iconic events in the extreme sports industry (Forbes, 2014).

Despite some competitions including multiple sports have been yet reported in the early 1900s, 1974 marked the first time in which a sporting competition was referred to as "triathlon": in California, the San Diego Track Club, organized the first triathlon race, codifying the three sports disciplines which still nowadays compose any triathlon race: swimming, cycling, and running. In 1978 a group of enthusiasts organized in Hawaii a competition that later would have represented the prototype for the long-distance Ironman triathlon. 1989 saw the creation of the International Triathlon Union, and in 1994 Triathlon became an Olympic sport. Today, around triathlon revolves an entire industry, involving multi-million brands and thousands of athletes: for instance, the Ironman brand (which from a specific kind of triathlon is now a brand encompassing a number of championships, series, and triathlon-related products and services) is worth US\$650 million, attracting about 3,000 athletes and generating US\$932 million revenues (Roethenbaugh, 2017).

These sports can also be found in lists of the world's most extreme sports (e.g., Xtremesports, 2008) and are considered extreme also by academic literature (Atkinson, 2008; Brymer & Houge Mackenzie, 2016).

3. Sample description

Based on these considerations, the data were collected through a questionnaire administered to athletes participating in leading championships for these extreme sports. Data were collected in the summer of 2017. All the

surveyed events required consumers-athletes to register and to wear a numbered bib. Hence, for each event the researchers randomly extracted 60 numbers; the athletes with the corresponding bib were thereby interviewed.

A total sample of 240 respondents was collected. Notably, 75% were males, reflecting the demographics of a male-dominated world and reflecting well the population of extreme sports according to media reports (TBI, 2014) and to academic literature (Schreier *et al.*, 2007). The majority of participants fell within the 19-49 age range, mostly holding a high school diploma. The questionnaire was personally administered to consumer-athletes, in the effort to minimize the risk of partially completed questionnaires. The questions were pre-tested on a pilot sample to ensure their easy understandability and to avoid any perception of ambiguity (Podsakoff *et al.*, 2003). To address evaluation apprehension and social desirability issues, researchers reassured respondents explicitly stating that there were no right or wrong answers, and asked to answer questions honestly (Podsakoff *et al.*, 2003).

Table 1 – Socio-demographic profile of the sample

Socio-demographic variables of survey respondents (N = 240)		
	Percentage	No.
<i>Gender</i>		
Male	75%	180
Female	25%	60
<i>Total</i>	100%	240
<i>Age</i>		
Less than 19	20%	48
19-29	27%	64
30-39	24%	58
40-49	19%	46
50-65	7%	17
Above 65	3%	7
<i>Total</i>	100%	240
<i>Education</i>		
Primary school	1%	2
Junior high school	14%	34
Senior high school	60%	144
University or above	25%	60
<i>Total</i>	100%	240

4. Model estimation

To examine the hypotheses within the model, the model was tested with the PROCESS macro for SPSS. The mean scores on the items for each construct (Hayes, 2013) were used. Event image fit was entered as a moderator of the relationship between satisfaction and revisit intention. Revisit intention with regards to the event was the dependent variable. The analysis assessed (1) the effects of sensation seeking tendency on revisit intention (both directly and indirectly, through event satisfaction), (2) the effect of sensation seeking tendency on satisfaction, and (3) the effect of satisfaction on revisit intention (as moderated by event image fit). The analysis combined mediation and moderation to estimate the conditional indirect effect of sensation seeking on revisit intention through satisfaction as moderated by event image fit and event image (Model 14 by Hayes, 2013). The statistical significance of the effects was evaluated by means of 5,000 bootstrap samples to create bias-corrected confidence intervals (CIs; 95%) with heteroscedasticity-consistent SEs. An interval not containing zero indicates significance at the .05 level (Hayes, 2013).

5. Results

5.1. Scales and measurements

The present study adopted measures for revisit intention from Kaplanidou and Gibson (2010); for event image fit from Grohs and Reisinger (2014); for sensation seeking from Hoyle et al (2002), and satisfaction toward the event from Picon, Castro, & Roldan (2014). Survey items were measured using 7-point Likert scales ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

For all measures, we checked for composite reliability, internal consistency, convergent validity and discriminant validity following standard procedures from extant literature (Fornell and Larcker, 1981; Hair *et al.*, 2010). Composite reliability scores were all above the recommended threshold of .70, with values ranging between .86 and .95; we checked for internal consistency using Cronbach's alpha, which, for all constructs, was above .70 (values ranging between .82 and .90).

Average Variance Extracted (AVE) was used to assess convergent validity; all scores met the recommended threshold of .50 (values ranging between .66 and .85). Finally, square root of AVE was greater than the intercorrelations between scales, supporting discriminant validity. We tested for item

cross-loadings, of which none was higher on another construct than on their own. Results of these checks support the scales reliability and validity.

Table 2 – Construct measures

Measures	Chronbach's Alpha
Sensation seeking (adapted from Hoyle et al. 2002)	.95
I would like to explore strange places.	
I get restless when I spend too much time at home.	
I prefer friends who are excitingly unpredictable	
I like to do frightening things.	
Satisfaction (adapted from Picón et al. 2014)	.89
This event meets my needs.	
This event is as good as or even better than other events.	
This event gives me what I expect.	
In general, my experience with this event is positive.	
Event image (adapted from Grohs and Reisinger 2014)	.94
This event is cool.	
This event is innovative.	
This event is sportive.	
This event is up to date.	
This event is active.	
Behavioral intentions (adapted from Kaplanidou and Gibson 2010)	.94
I am more likely to attend this event in the future.	
The likelihood that I will attend this event in the future is high.	
I will attend this event in the future.	

5.2. Moderated mediation model

The results from SPSS-PROCESS are reported in Fig. 1.
H1: The estimates indicate that sensation seeking tendency positively influences satisfaction ($B = .27; p < .001$): H1 is hence supported.

H2: The estimates indicate a positive impact of satisfaction on revisit intention ($B = .27$; $p < .001$). Thus, H2 is confirmed.

H3: The estimates indicate that event image fit significantly moderates the effect of satisfaction on revisit intention ($B = .27$; $p < .05$). In particular, the linkage between satisfaction and revisit intention was stronger when individuals exhibited a stronger event image fit ($Effect_{high} = .15$ vs. $Effect_{low} = .08$). Thus, H3 is confirmed.

H4: The estimates indicate that the direct effect of sensation-seeking tendency on revisit intention is not significant ($B = .01$; $p = .87$). This supports H4 and suggests that sensation-seeking tendency has an effect on intentions only through satisfaction. This also means that satisfaction is a full mediator of the relationship between sensation seeking and revisit intention.

In summary, this means that revisit intention was stronger for individuals who were sensation seekers, but also highly satisfied with the event and displayed a stronger event image fit.

Figure 1 – The model with estimates

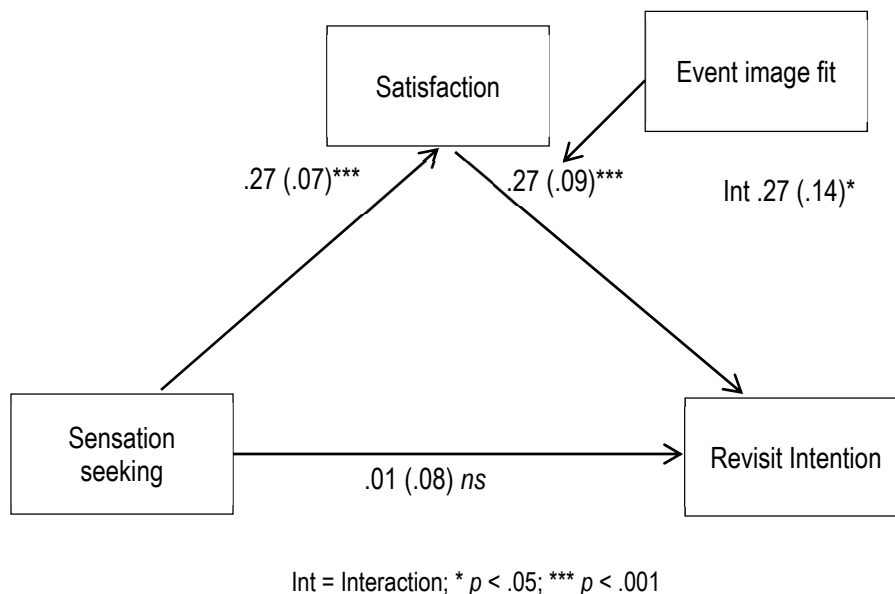


Table 3 – Results of Hypothesis Testing

Hypothesis	Estimate (Std. Error)	Significance	Supported/Not supported
H1 (Sensation Seeking → Satisfaction)	.27	Significant	Supported
H2 (Satisfaction → Revisit Intentions)	.27	Significant	Supported
H3 (Moderating role of Image fit)	.27	Significant	Supported
H4 (Sensation Seeking → Revisit Intentions)	.01	Non-Significant	Supported

6. Discussion

With its multi-billion-dollar value, the extreme sports market tends to revolve around events that are function like brands: they have a specific positioning, can attract thousands of athletes, and gather sponsoring by major other brands like Red Bull, Mercedes, Gatorade, etc.

A lot of research testifies that revisit intention is central for the event success, with sporting events making no exception (Shonk & Chelladurai, 2008). It is worth noting that extant research is quite incongruent to investigating behavioral intentions in extreme sports, as, so far, virtually no study has accounted for the specificities of extreme sports practitioners (Brymer & Houge, Mackenzie, 2016). Available theoretical perspectives, mostly developed within traditional sports settings, have not been able to fully account for the psychological perspectives and behavioral drivers of sensation seeking individuals.

The present study based on sensation seeking theory to identify the determinants of the behavior of extreme individuals and translated those constructs into managerially relevant outcomes -such as revisit intention- in the context of extreme sport events. Particularly, the significant role of sensation seeking tendency in shaping event satisfaction (Hypothesis 1) proves that individual psychology components are a significant addition in predicting revisit intentions in the context of extreme sports events, suggesting the presence of an underlying, combined effect of marketing-related factors and psychological factors unique of extreme individuals (Raggiotto and Scarpi, 2019). In turn, feelings of satisfaction lead to higher intention to participate again in the event (Hypothesis 2). Furthermore, the moderation adds to the picture that event image fit interacts with satisfaction and revisit intentions (Hypothesis 3). In line with previous studies (e.g., Florek and Insch, 2011), when the event image fits the participants' self-perceptions, then revisit intention is enhanced.

Finally, results reveal that sensation-seeking tendency influences revisit intentions only through satisfaction (Hypothesis 4), suggesting that satisfaction is a full mediator of the relationship between sensation seeking and revisit intention.

In summary, this means that revisit intention was stronger for individuals who were sensation seekers, but also highly satisfied with the event and displayed a stronger event image fit.

Thus, we proposed a unique model that uses reliable variables whose use outside their original domain of psychology has been very limited, but that works and shows that the inclusion of the sensation seeking tendency variable is important. Overall, in line with recent research (e.g., Scarpi et al., 2018) empirical evidence provided in this study suggests a close interplay between marketing-related variables and psychological traits specifically denoting extreme individuals (Raggiotto & Scarpi, 2019). Such reported interplay suggests, in turn, that in order to get a complete understanding of how extreme individuals live the event experience, there is a need to consider their unique psychological specificities (Lyng, 1990).

This study addresses “classic” drivers of revisit intentions from the sports marketing literature, such as satisfaction (Koo *et al.*, 2014), but also shows that -as extreme activities entail a sense of thrill (Self, Henry, Findley, & Reilly, 2007), and extreme participants have been pointed by psychological literature as exhibiting unique behavioral patterns – also specific psychological variables are important in this context (Milovanovic, 2005; Laurendeau, 2006; Lyng & Matthews, 2007).

This research provides a representation of the drivers of repatronage intention in extreme sports events that combines two streams of literature: on one hand, it considers well established sports marketing drivers of event revisit intentions like satisfaction (Funk *et al.*, 2011) and event image fit (Koo *et al.*, 2006); on the other hand, this research posits that those constructs might be only a face of the same coin in the context of extreme sports. Literature on extreme activities underline the relevance of a need to seek sensations (Scarpi *et al.*, 2018) as a key component of “extreme” experiences, that also determine different behavioral patterns of participating individuals. Thus, based on the psychological literature on sensation seeking tendency, the model poses the sensation seeking personality trait as an additional driver of the event revisit intention, to account for the psychology of extreme individuals.

Findings confirm previous research in showing that satisfaction and event image are key drivers of event revisit intentions (Kaplanidou and Vogt, 2007; Kaplanidou and Gibson, 2010). The framework is further expanded by introducing the concept of sensation seeking tendency, adapted from the sensation

seeking psychological theory. The present study further combines satisfaction and image congruence with sensation seeking tendency, to demonstrate that they jointly impact consumer's event revisit intention.

Further, studies on active participation in sports are notably lacking, as the majority of extant contributions usually considers passive sport participation (for instance, sport events' spectators). Active participation may have been probably neglected in traditional sports because the number of athletes is significantly smaller if compared to the number of spectators. Oppositely, setting the analysis in the context of extreme sports allows to present study to check for the relevance of psychological constructs from sensation-seeking theory, and to simultaneously answer recent calls about filling the gap related to active participation (Ramchandani *et al.*, 2015), as the majority of revenues in extreme sports come from active participants (NerdWallet, 2015; ISPO, 2016; Nielsen Scarborough, 2017).

Conclusion

As the study is set in an industry whose estimated worth exceeds \$US 6 billion (Forbes, 2014), and given the importance of revisit intentions for any event practitioner, the present study might offer some managerial insights.

The analysis considers those psychological drivers which can be addressed by the actions of event marketers. For instance, managers could address consumers' sensation-seeking tendency by providing increasing levels of difficulty and novelty, this may provide unique competitive benefits, leading to the development of highly-differentiated, innovative events; further, this is might be a likely source of benefits for the image of the event itself, as well as a source for a better market positioning. The key role of the fit between the self the event image moderates the relationship between satisfaction and revisit intentions, suggesting the need to adopt even in extreme sports event management a more customer-based perspective in delivering the image of the event, rather than merely pursuing the image desired by event managers. In this sense, managers should be aware that revisit intention is driven not only by the image of the event itself, but also by how such image fits the self-perception of the customers and to the extent to which they perceive it as useful to maintain their own optimal level of arousal. The more consumers feel that the event fits with themselves -as sensation-seekers-, the more the likelihood they revisit the event in the future.

Managerial knowledge on how to target sensation-seekers may benefit of the results of this analysis as well, regarding how such sensation-seeking tendency can interact with satisfaction judgments that ultimately translate in higher revisit intention. In this sense, results of this study suggest that participants' inner, psychological involvement in extreme sports is not likely to directly translate into higher revisit intention by itself. Rather, there is a systematic interrelation with event-related features which drive the probability individuals will revisit the event in the future. From a managerial viewpoint, event organizers should hence consider a meticulous definition of how the event deploys and transmits itself and its image to participants.

Some limitations can be identified in this study. First, the conceptual model is based on sensation seeking theory; however, different psychological approaches have been applied to extreme sports (see e.g., Brymer & Houge Mackenzie, 2016), that, for the sake of the operationalizability of the proposed model, were neglected in this study.

Second, the present study did not consider the potential role of the sports event venue, despite tourism management and marketing literature reported strong interactions between event and destination images, which are likely to interact and jointly impacting on participants' intentions and behaviors (Kaplanidou & Vogt, 2007).

However, the complementarity of sensation seeking, satisfaction and image fit in driving event revisit intentions encourage researchers to consider envision extreme sports events from a wider perspective. Future research could explore consumers' motivations to participate in extreme sports, and taking increasing risks and threats. Future research could also investigate passive participants in extreme sports, to identify what drivers could trigger the shift from passive participation into active participation.

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