Abstract

Existing research on risk management in adventure tourism has primarily focused on the participant's motivation, perception and experience of taking part in the risky activities. Within this research strand, injuries and fatalities caused by participation in adventure tourism have been consistently examined and policy-making mechanisms discussed to prevent their future occurrence. This study adopts a different perspective as it explores how risk is perceived and managed by instructors. Better understanding of this topic should enhance future risk management strategies in adventure tourism, thus improving safety and well-being of both participants and instructors. The outcome of a qualitative study conducted with adventure tourism operators in Dorset, UK, shows that the increased popularity of the industry has caused companies to take advantage of profit margins. There is evidence that instructors cut corners when managing risks which raises the probability of accidents as a result. The study outlines a number of areas for policy-making intervention required to enhance the quality of risk management practices in adventure tourism. These include the need for policy reinforcement of the safety standards; specialist training opportunities made available to instructors; and regular qualification re-assessment exercises.

Keywords: Adventure tourism; Risk management; Instructor; Managerial perspective; Planning.

Highlights

- We explore risk management in adventure tourism from the standpoint of instructors
- We find that, as the industry grows and consumer demand intensifies, instructors cut corners when managing risks
- There is a need for policy reinforcement of risk management in adventure tourism to enhance safety of participants and instructors
- Specialist training opportunities and regular qualification re-assessment exercises are also required

1. Introduction

Adventure tourism is a specialist sector of the tourism industry that demands more of the service provider and its participants (Callander and Page 2003) as it is an experience that inevitably puts the client at risk due to the nature of the activity offered (Schlegelmilch and Ollenburg 2013). Thus, a considerable responsibility is laid upon the activity instructor who faces the challenge not only to provide an exceptional experience, but also a safe one (Bentley *et al.* 2010). This notwithstanding, while a few notable exceptions that come from outdoor education, experiential education, human psychology and adventure sports coaching literature exist (see, for example, Boyes and O'Hare 2003; Collins and Collins 2013; Galloway 2007; Neill and Dias 2001), little research has been conducted in tourism domain specifically into the psychology of adventure tourism instructors where a substantial knowledge gap rests (Buckley 2010; Mackenzie and Kerr 2013). Instead, tourism-related studies have focused on the psychology and motivation of the adventure tourist (Buckley 2012; Robinson 2000; Schlegelmilch and Ollenburg 2013). The shortfall in the understanding of adventure instructor psychology suggests that the industry may potentially be unable to progress with the activities it has on offer in a safe manner. This is because the growing popularity of adventure activities is imposing significant risks as companies may cut corners to accommodate rising demand (Williams and Soutar 2005). This underlines the importance of exploring how adventure instructors cope with the added pressures. Effective management of risk in adventure tourism is vital for the long-term operational sustainability of the sector as accidents have serious repercussions on its businesses (Cater 2006).

The study into instructors' decision-making, especially in relation to their preparation of risk management and dynamic risk assessment (DRA), is fundamental in this exploration. This is because DRA is described as '*a scaffold which aids in the decision-making process under conditions which are fast paced and challenging'* (Asbury and Jacobs 2014, p.1). These are the circumstances an adventure tourism instructor would normally experience; these circumstances should be diligently analysed to identify the 'best practice' examples which could be summarised and then disseminated to all instructors. The importance of assessing the conditions stated above is underpinned by the fact that these conditions impose a certain level of stress and emotions on adventure tourism instructors (Asbury and Jacobs 2014; Buckley 2010). The ability of instructors to handle these stress and emotions while making important decisions about risk management on a tour represents a challenging task to fulfil.

This study evaluates the risk involved in adventure tourism to establish the measures that should be undertaken to ensure safe participation. In contrast with previous research which had largely focussed on consumers, it adopts a managerial approach and looks at adventure tourism instructors. Research into the perspectives of instructors should help adventure tourism operators better understand the needs of their workforce. This leads to the enhanced safety and improved well-being of employees and, ultimately, customers. Overall, this study strives to enhance public awareness of the crucial role played by the instructor in risk management and contribute to the recognition of the instructor as a vital component in business operations who deserves careful consideration in order to ensure the safe and successful delivery of adventure tourism.

2. Literature review

2.1 Adventure tourism

There are many dimensions of adventure tourism that must be taken into consideration when defining this varied industry (Buckley 2006). According to Swarbrooke *et al.* (2003, p. 4), it is difficult to find a precise definition of adventure tourism as *'it can be used to describe anything from*

taking a walk in the countryside to taking a flight in space.' There is an overlap between adventure, sports, leisure and outdoor recreation which blurs the definition of adventure tourism (Cater 2006). To aid in categorisation of the broad range of industry's activities, they have been divided into 'hard' and 'soft', 'remote' and 'local' and 'low cost' and 'high cost', to mention a few (Beedie and Hudson 2003; Buckley 2006; 2010; Scott and Mowen 2007; Swarbrooke *et al.* 2003). However, there is a general consensus in literature that creating a typology of adventure tourism activities represents a difficult, if not impossible, task to fulfil (Swarbrooke *et al.* 2003). Table 1 lists some popular activities that are categorised as adventure tourism as reported in peer-reviewed academic literature. It is important to note that while the list is extensive, it cannot be considered complete because of the substantial heterogeneity of the industry in question, as described above, and it is steady recent growth.

[Insert Table 1 here]

Due to the expanding market of adventure tourism, evidence of research conducted into its activities has been rapidly growing (Bentley *et al.* 2010). While some activities have been covered in the research more than the others, review of related literature indicates that the cornerstones of scientific inquiry within the topic in question rest upon the following three major issues: tourist risk and injuries; impacts of adventure tourism on the environment; and tourist motivation for and experience of participation. There are a number of factors that motivate people to partake in adventure tourism activities, such as the desire to be outdoors, experience the remote environment and watch the wildlife, the quest for physical challenges, better fitness levels and personal health improvements, the willingness to spend time with like-minded individuals, and the adrenaline rush produced by the risk involved (for a detailed analysis of adventure tourist motivations see, for example, Brymer and Gray 2010; Collins and Collins 2012; Ewert *et al.* 2013; Kerr and Mackenzie 2014). However, the risk that some adventure tourism activities offer can be more real than is imagined and may therefore cause injuries (Bailey 2010; Feltracco *et al.* 2012; Powell 2009; Schulze *et al.* 2002; Terra *et al.* 2013; Westman and Björnstig 2007). In extremely unfortunate events it can also lead to fatalities (Tarrant 2014). Casualties can have a detrimental effect on the industry as proven by the Lyme Bay tragedy (Woolven *et al.* 2007). The tragedy occurred when a group of young canoeists and two inexperienced and unqualified instructors were blown offshore when partaking in outdoor education activities in unforeseen weather conditions which resulted in fatalities. This incident brought about the new licensing of adventure activities and greater regulation of the sector in terms of its provision for minors (Woolven *et al.* 2007). Importantly, the regulation reinforcement did not extend to the provision of adventure tourism activities for adults, which is deemed a significant shortfall. This underlines the urgency for taking greater risk precautions and applying more care by the adventure tourism instructor, especially when dealing with adult participants.

2.2. Risk Management in adventure tourism

Excitement is a major pull factor that creates consumer demand for adventure tourism and the element of risk is the trigger to this excitement (Buckley 2006; Schlegelmilch and Ollenburg 2013). Literature posits that the main reason for why consumers choose to experience adventure tourism activities through a commercial operator is the assumption that they will be guided by experienced professionals who will take pre-cautionary measures to reduce the risk which would be significantly greater if they attempted the feat independently (Buckley 2010; Morgan 2000).

From the operator's perspective, there are a number of stages in adventure tourism risk management that represent important preventative measures. These start with the company, such as commercial, legal, medical and social risks, before moving onto the instructor with their operational,

physical and, again, social risks (Buckley 2010; Callander and Page 2003; Morgan 2000). Attention has been drawn to the importance of the instructor's expertise and skill as the actual risks that make a real difference to the operator and the tourist will be those managed by the instructor (Bergin and Jago 1999; Buckley 2010; Williams and Soutar 2005). Hence, it is paramount that the instructor's perspective is considered in all adventure tourism operations.

2.2.1. Commercial, legal and medical risks

Adhering to legal requirements is substantial in business to ensure long-term success and the nature of adventure tourism determines three vital areas of legality: permits and licenses; insurance; and disclaimers (Buckley 2010). Permits and licenses are an important aspect of the industry to reassure potential clients that the tour operator is well established and respectable. This prevents 'cowboys' from coming in and taking clients on dangerous tours without effective risk assessments (Figgis 1996). Permits and licenses have long come into practice to prevent risks and disasters due to previous incidents (Woolven *et al.* 2007).

Insurance helps adventure tourism operators reduce their costs and minimise legal risks; it is therefore an established practice that the participants arrange their own travel, including medical, insurance (Buckley 2010). Not only does this help diminish the costs for the adventure tourism operator, but it also reduces the cost of the tour and therefore provides competitive advantage.

The medical disclaimer is often signed by the adventure tourism participants to signify that they are sufficiently fit and able to undertake the activity (Williams and Soutar 2005). Tourists are required to disclose any medical conditions that could impede their mental or physical abilities to ensure the instructor is fully informed and prepared (Buckley 2010). It is important that adventure tourism operators do not take medical disclaimers for granted in relieving them of all responsibility. They should still maintain high standards of professional risk management to prevent any incidents. This is because even if they are not economically hurt by legal fees following an incident, their reputation will be scrutinised (Christiansen 1990; Williams and Soutar 2005).

2.2.2. Operational and physical risks

Operational risks managed by the instructors include the preparation for the activity and the guidance of the group. In order for this to be managed effectively, the instructor should have relevant and up-to-date qualifications to ensure they are fully prepared to escort the group (Buckley 2010; Williams and Soutar 2005). The instructor must assess the mental and physical abilities of their group; measure the instructor-to-participant ratio; plan the activity route based upon the group's ability; and ensure they have the equipment required (Morgan 1998). Furthermore, the instructor should assess the physical elements, such as the weather, and be able to predict sudden changes in their environment that may create dangerous situations (Buckley 2010). These pre-cautionary measures should not only provide safe experience, but also improve customer satisfaction (Morgan 1998).

2.2.3. Social risks

The social aspect of risk management is based on the 'soft' skills of the instructor that increase the probability of word-of-mouth recommendations (Williams and Soutar 2005). It has been acknowledged that customer satisfaction is not always the key objective in adventure tourism as they expect participants to be one-off customers (Morgan *et al.* 1997; Williams and Soutar 2005). In order for instructors to manage social risks effectively, they must present themselves in a professional and friendly manner. However, this may not be achieved if the instructor experiences psychological

tension from the lack of training or because of the external pressure which could subsequently compromise their judgment and minimise the ability to communicate effectively (Christiansen 1990).

In the UK context, the Adventure Activities Licencing Service (AALS), formerly known as the Adventure Activities Licencing Authority (AALA), oversees provision of adventure tourism, including risk management practices adopted by the sector representatives. AALS was created following the Lyme Bay tragedy; today it issues licenses, performs inspections and handles complaints about adventure tourism operators whose services are designed for minors (AALS 2016). There has been an on-going debate about the necessity of such a regulatory body and there is evidence pointing out that it will be abolished in the future (Health and Safety Executive 2011). This underlines the importance of studying risk management practices at the level of individual providers of adventure tourism activities and from the standpoint of their instructors as there will no longer be an 'umbrella' body overseeing the sector and the issue in question.

2.3. The role of adventure tourism instructors

The nature of adventure tourism activities alongside the consumer motivation to partake in these activities implies that risk and challenges should be sought out. This creates a difficult task for the instructor as risk should be reduced to a sufficient level but not removed altogether (Christiansen 1990). This task is often addressed through the marketing strategies, such as viral marketing and the performance of the instructor (Schlegelmilch and Ollenburg 2013).

Effective risk management in adventure tourism is paramount to enable long-term financial sustainability of business operations. The media do not necessarily work in favour of the sector in relation to advertising the risks. Stanbury *et al.* (2005) discuss the ways in which a crisis in adventure tourism can have a destructive and negative impact, especially in the handling of the media. This emphasises the need for the instructor to portray themselves correctly, minimise risks and handle incidents effectively.

It is fair to suggest that adventure tourism operators should provide their instructors with the best training, resources and support to ensure the instructors feel safe and secure in the service they deliver. However, literature recognises that, to-date, adventure tourism has primarily been concerned with the consumer well-being (Buckley 2010; Mackenzie and Kerr 2013). If this trend persists, it could have serious consequences on the industry's operational sustainability as instructors may not provide the experience expected, due to the stress and safety issues associated with higher demand.

2.4. Decision-making in Risk Management in Adventure Tourism

Decision-making in adventure tourism is driven by the dynamic and challenging environments that stage the activities (Collins and Collins 2013). It is paramount that instructors are able to resist the pressure of these environments and make quick, justified decisions to ensure the safety of their group (Bergin and Jago 1999; Christiansen 1990; Ewert and Hollenhorst 1991). A distinctive feature of adventure tourism is in that the decisions made by the instructor are not based on their own ability, but on the ability of the group as a whole (Collins and Collins 2013).

A number of models and conceptual frameworks have been developed to predict and guide people on the decision-making process related to risk management (Collins and Collins 2013). However, many of these are not realistic in the situations that an adventure tourism instructor would normally experience. Classic decision-making models are generally linear and employ rational processes that exclude the element of emotion (Collins and Collins 2013; Simon 1956). However, the decision-making in adventure tourism includes explicit and large emotional inputs as the decision will not be made in an ideal world (Collins and Collins 2013; Thompson and Dowding 2002). Instructors

utilise complex and naturalistic decision-making models that take into account the high pressure situation calling for the decision (Collins and Collins 2013; Cook *et al.* 2007; Klein 2008; Zsambok and Klein 1997).

Collins and Collins (2013) recognise that there has been a lack of research into the kind of decision-making process required in a dynamic and risky environment such as adventure tourism. Furthermore, there has been much debate over the ways that a decision would be made under pressure and assumptions about the decision-maker in order to present models (Collins and Collins 2013; Cook *et al.* 2007; Galloway 2005; McCammon 2004; Stemba 2005). It is naïve to assume that every risky situation could be modelled in terms of identifying effective decision-making process. This is because different personalities and circumstances can change the perspective of the decision-maker. Hence, there is a clear need to enhance understanding of how decisions are made by adventure tourism instructors due to the significant levels of risk attached to these tourism activities (Collins and Collins 2013).

Literature highlights the need for skilled and experienced adventure tourism instructors (Buckley 2010; Christiansen 1990; Martin *et al.* 2006; Williams and Soutar 2005) and suggests that it would be more reasonable to focus on the decision-making process models that are heuristic, naturalistic and meta-judgemental (Breakwell 2007; Collins and Collins 2013; Kahneman and Klein 2009; Martin *et al.* 2006). The decisions made through these processes would be from an experienced professional who is vigilant and mindful of their surroundings and participants (Martin *et al.* 2006; Schraagen 2008). The naturalistic models are a beneficial element of the contingency plan described by Christiansen (1990) who recognises this as part of company's professionalism and risk reduction strategies. These models help build confidence to the operator and provide support for the instructor who should be able to make the appropriate decision in challenging circumstances. Awareness, self-management and appraisal are highlighted by Collins and Collins (2013) as the key elements of the heuristic models which should have been sufficiently addressed yet in training.

In spite of the precautions that should be taken by adventure tourism operators to prepare instructors for the safety of their group, it is impossible to foresee some circumstances such as failure of equipment, poor weather or illness of participants. As a result, Dynamic Risk Assessment (DRA) comes into place as the instructor has to promptly respond to the immediate threat. The focus of DRA is to '*equip personnel with a consistent and common approach to assessing risks in the field'* (Asbury and Jacobs 2014, p.9). This theory suggests that the instructor should be assessing their situation and changing environment rather than the risk itself. As a result, the focus will be on the long-term, rather than on a short-term, solution. While the importance of the DRA concept as applied in the adventure tourism sector has been recognised, it has not yet been examined in detail and from the instructor's perspective (Asbury and Jacobs 2014).

2.5. Research gap

The literature review has defined adventure tourism and the activities involved in this sector. It has shown that existing research on adventure tourism has been largely concerned with customer motivations, risk perception and injuries; it has further indicated that improvements should be made to the current risk management system in adventure tourism in order for the operators to balance perceived and actual risks. It is clear that, due to the rising popularity of adventure tourism, some progress has already been made in this regard through, for example, such practices as licensing and training. The growth of consumer demand combined with past incidents is what makes it important to establish better forms of risk management practices for the adventure tourism operator to sustain

demand in a safe and commercially viable way. This can be achieved via further investigation of professional risk management strategies from the instructor's perspective.

3. Method

Literature review has revealed that participants have been the focus of existing research on risk management in adventure tourism. In order for the sector to remain operationally sustainable, risk management should also be examined from the standpoint of the instructors whose perspectives have largely been excluded from analysis to-date. This study aims to plug this knowledge gap Due to the exploratory nature of research inquiry, a qualitative tool, i.e. in-depth semi-structured interviews, was employed for primary data collection because of its capability to generate a wealth of data to instigate further study (Silverman 2000). Qualitative research was also deemed appropriate because adventure tourism, while steadily growing, yet represents a 'niche' tourism market segment which implies there are a limited number of instructors who would be available and willing to partake in this study. As a result, collection of quantitative, more generalisable and representative, data would be a difficult, if not impossible, task to fulfil (Veal 2006).

Semi-structured interviews with adventure tourism instructors were conducted in January – February 2015. The instructors based in Dorset (UK) whose contact details had been derived via a dedicated web search were approached with a request to partake in the study. In total, 12 instructors responded and were interviewed. On average, each interview lasted 25-30 minutes. An interview schedule is provided in Table 3. No incentives were offered. The interviews were digitally recorded and transcribed. The list of participants alongside the area of adventure tourism they specialise in and the years of their experience is provided in Table 2.

[Insert Table 2 here]

[Insert Table 3 here]

Thematic analysis was applied to systemise and interpret the outcome of interviews (Veal 2006). The major themes were derived from literature review; these were further supplemented with any additional themes which emerged from interviews (Miles and Huberman 1994). Table 4 outlines the coding structure utilised in this study. Verbatim quotations were used in the write-up of the outcome of thematic analysis to support the validity of the arguments developed (Silverman 2000).

[Insert Table 4 here]

The niche nature of the adventure tourism market imposed a number of limitations on the study. The narrow audience of skilled professionals targeted for interviews meant there were only a small number of contacts available. In addition, the busy nature of the adventure tourism business implied significant challenges in recruiting participants. Finally, the research ethics checklist required by the host institution (Veal 2006) and completed as part of this project meant interviews would be confined to the UK only as the complications involved in devising one standard of ethics to cover several countries prevented the interviews of willing participants in Greece, Turkey and Australia.

4. Results and discussion

Understanding how instructors manage stress and risk is important to the progression of adventure tourism while the capability to manage stress and risk at work may be dependent on the operator's motivation to be in business (Buckley 2010; Mackenzie and Kerr 2013; Williams and Soutar 2005). The majority of participants entered into the profession through their passion for adventure tourism:

"There was a free rock climbing day. I thought that sounded fun so the guide was there and off I went and after that I was gone. That was it. I just absolutely loved it." (Participant 6)

The result of this passion for the activities they instruct is the effort and time they spend providing a quality and safe experience for all participants. This demonstrates that there are additional qualities that instructors should possess in addition to the skills and qualifications required in order to manage risks effectively (Buckley 2006; 2010; Christiansen 1990; Williams and Soutar 2005). Passion and motivation is important for the development of the 'soft' skills of the facilitator; their professional growth; and their motivation to provide a well-managed and enjoyable experience.

4.1. Stress and emotions of adventure tourism

There are two conflicting views that have been discussed in academic literature. On the one hand, adventure tourism creates stress and pressure for instructors (Christiansen 1990; Mackenzie and Kerr 2013); on another hand, it is often described as a relaxed, friendly and enjoyable experience (Buckley 2006; 2010; Schlegelmilch and Ollenburg 2013). This study provides further evidence to the latter argument as the majority of participants referred to their job as being not stressful, but enjoyable, unless it is poorly managed and/or takes place in unfamiliar environments, such as abroad.

The participants stated that the ratio of instructors to participants is paramount to avoid stress and allow them to manage the group successfully. Williams and Soutar (2005) recognise companies are at risk of causing negative effects on their instructor's welfare and participant experience because the growing popularity of adventure tourism implies they are increasing the ratio of participants to instructors which is particularly applicable to larger companies. The majority of participants agreed that large adventure tourism operators are negatively affecting the industry because their main focus is on rapid profit maximisation which is achieved by pushing large numbers of participants through activities within a short period of time, rushing the process and increasing the risk factor (Hudson 2003):

"I think the larger ones [companies]… are trashing the whole industry and devaluing it in my view." (Participant 4)

"That process often gets rushed … The diving industry has gotten so competitive, especially at the recreational level… There's no profit, so the only way you can do it is by running loads and loads of them through." (Participants 3)

This is in partial agreement with literature which posits that many adventure tourism operators are rushing activities and taking risks (Williams and Soutar 2005) which is a product of increased commodification of many outdoor adventure experiences (Loynes 1998). Not only does this jeopardise the safety and experience of the participants, but also causes stress for the instructors. Although there are minimum standards set by agencies in this regard, these may be not enough to make adventure tourism safe and operationally sustainable. Interestingly, there is also an opposing view in literature on the role of large adventure tourism operators in risk management. Bentley *et al.* (2010) find, for instance, that larger companies with their highly standardised product portfolios have a better capability to minimise risk through the application of detailed management procedures and due to better availability of resources. The polarity of opinions calls for more in-depth research on this topic.

4.2. Decision-making in adventure tourism

Understanding the level and nature of stress and pressures that instructors are under and being able to regulate these effectively is paramount in risk management. If left uncontrolled, instructors

may be unable to make informed decisions in challenging environments (Bergin and Jago 1999; Christiansen 1990; Collins and Collins 2013; Ewert and Hollenhorst 1991). The added pressure of more participants causes stress, and therefore tiredness, in instructors; this, in turn, increases risk:

"I suppose there is a risk there because you get more tired. As you get tired there's always that element that you're going to forget something, miss something." (Participant 7)

Decision-making is a vital skill because instructors are dealing with dynamic situations. The workload, stress and pressures of the role should be contained to a manageable level, so the instructors are able to use their skills conscientiously (Torland 2010). These skills involve ability to deal with dynamic environments that adventure tourism activities take place in and make decisions in fast-paced situations (Collins and Collins 2013; Cook *et al.* 2007; Galloway 2005; McCammon 2004; Stemba 2005). However, no participant said that specific training was made available to them to help in this decision-making process; they just relied upon their equipment, experience and skills for the activity to deal with an incident:

"First aid we do every three years and repeat it so that we have to know. The rope work we know inside out and should use it every day. I know how to use the sat phone, so yes within reason I should be able to deal with it pretty quickly… is there any training? No… But it would help." (Participant 12)

Collins and Collins (2013) recognise that research is scarce in relation to decision making process models for dynamic environments. The unpredictability of the environment and people means this may be impossible to anticipate what may happen; this may serve as the reason for why the participants have not received dedicated training on a specific decision process under risk circumstances that should be followed. However, DRAs should be actioned by the instructors throughout their guidance of a group (Asbury and Jacobs 2014) and is paramount for risk management:

"You have to do a dynamic risk assessment on the day because the risks are always going to be changing depending on the people you get." (Participant 1)

The participants emphasised that it is not just the environment they are working in that causes risks, but also unpredictable people and therefore more focus should be put on people management courses for instructors to help them manage their group's health and safety (Torland 2010). All instructors were aware of the changing environment they work in; they should also be capable of assessing their group's mental health and physical fitness levels to make informed decisions about their suitability for the adventure tourism activities offered (Asbury and Jacobs 2014).

4.3. Standards of risk management in adventure tourism

Buckley (2010) discusses preventative measures that should be used in risk management. It is evident that standards of health and safety in any activity vary, depending on how seriously the risks are taken by the instructor. In each activity participants referred to the "governing bodies" or "agencies" which are responsible for qualifications and setting standards. However, several instructors argued that the minimum standards that have been set are insufficient to make adventure tourism safe for participants and instructors:

"A lot of the people I see down at these places, I would not let them work for me, I think they are disgusting what they do… There doesn't seem to be any laws anywhere… I don't think it's controlled enough but then again I don't want it totally controlled either… there has to be a balance. But these big companies need to be controlled… how nobody got hurt I don't know." (Participant 5)

Although risk management is largely the responsibility of the adventure tourism operator represented by the instructor (Buckley 2010), a higher level of safety standards should be enforced by the governing bodies and unqualified instructors should be prevented from working with tourists. In spite of the legalities in the form of licensing, qualifications and insurance for adventure tourism (Buckley 2010), participants discussed how some people in adventure tourism still do not follow the right procedures in risk management. This seems to be particularly prevalent abroad:

"[the right risk management procedures are not followed] …in England to a lesser extent but abroad, countries like Costa Rica and Panama it's like they don't care". (Participant 11)

The lack of reasonable safety and risk management standards has been recognised by all participants. This contradicts literature which states that there is a range of legal restrictions in the adventure tourism field which have prevented disreputable characters from operating unsafely (Buckley 2010; Figgis 1996; Woolven *et al.* 2007). While claiming that the quality of operational standards related to risk management in adventure tourism should be improved, operators seem to be aware about the progress that has been made in this direction recently:

"There are a few agencies that very clearly want to up their level of standards and are doing it. There's about 20 different agencies out there and there's about 3-4 of them that are consciously making an effort to make their basic level courses a little bit harder… So we should be seeing the results of that in a few years." (Participant 9)

4.4. Qualifications and Training

Qualifications and training of the instructors is vital for the success of adventure tourism operators (Buckley 2010; Christiansen 1990; Martin *et al.* 2006; Williams and Soutar 2005). These are important because instructors often deal with unskilled and inexperienced participants (Christiansen 1990). In light of academic predictions that adventure tourism will not be sustainable with its current attitude to risk management (Mackenzie and Kerr 2013; Williams and Soutar 2005), participants were asked what they believed would help improve operations. Each spoke about the qualifications that taught them the skills in their activities, however only one participant stated that he had done additional courses to help him understand people:

"Sports Coaching UK offer courses that are more designed to understand people whether that be youngsters, older people, people with disabilities, with learning disabilities…I think these extra courses are very important." (Participant 10)

The participants demonstrate the ways in which these extra qualifications can help improve the safety and contribute to the overall experience of the adventure tourists. Offering behavioural and psychological courses to instructors to enable them to fully comprehend the people they are dealing with could be a positive step for adventure tourism:

"Working with people [needs to be better understood], they are always unpredictable." (Participant 3)

This is in line with Christiansen (1990) who argues that it is important for an instructor to be experienced enough to handle the diversity of participants. At the initial stage of an individual's career in adventure tourism, when they are gaining experience, a training course dedicated to understanding and managing people would be beneficial. This is also in broad agreement with literature on outdoor recreation and outdoor education provision (see, for instance, Collins and Collins 2016; Hickman and Stokes 2016; McCammon 2004) that emphasises the need for designated decision making training courses for adventure instructors.

Furthermore, it has been established that it is not compulsory for most adventure tourism-related qualifications to be renewed. This is something that urgently calls for a change:

"I think you should be reassessed on your climbing awards because once you have it you've just got it and that's the end of it. A lot of people very quickly wander off it." (Participant 6)

Literature has emphasised the skills needed when taking out a group and without consistent upkeep of professional skills instructors could be instructing incorrectly which increases the possibility of danger (Christiansen 1990). Some governing bodies have started looking into this field and now insist upon reassessment:

"Something that [other countries in] the EU do which I really like… every two years their instructors have to be re-examined." (Participant 12)

This shows that the instructors may be willing to be re-examined on a regular basis to ensure delivery of safe service and enhance risk management. Re-examinations may prove to be particularly useful for those skillsets that instructors rarely use in order to avoid skill degradation. Further research is required to better understand the value of regular re-examinations for adventure tourism instructors as frequent re-assessments may not necessarily be favoured by smaller operators whose resources are limited. If further research identifies such a need, then reinforcement via dedicated policies and legal acts will be required to implement this in practice, thus maintaining high standards of skills and expertise among adventure tourism instructors (Buckley 2006; 2010; Christiansen 1990; Williams and Soutar 2005).

4.5. Health assessments

Assessing human health is important when developing approaches to manage people; hence, health assessments are mandatory in adventure tourism (Buckley 2010; Williams and Soutar 2005). However, existing polices which target health assessments in adventure tourism are incomplete as they focus on physical health of participants only:

"Their [participants] mental health [should be assessed] as well… if one person in a group has a problem and you have to deal with it, what does that do to everyone else psychologically? They are going to get a bit more apprehensive." (Participants 6)

The reason this is an important aspect of risk management in adventure tourism is because if one individual has any physical or mental problems while an activity or tour is underway, it can impact the rest of the group and intensify the problem that then needs to be controlled by the instructor. The problem can then spiral out of control, especially if this creates panic in the rest of the group. This highlights the importance of understanding and dealing with the participants' physical, as well as mental, abilities in adventure tourism.

The medical consent forms that participants must fill out before taking part in an adventure tourism activity help the instructors understand person's health and any conditions that could negatively affect the tour. The medical forms are useful as they allow the instructors to make any changes to the trip, possibly reducing the instructor-to-participant ratio or calling for additional help. All participants noted that medical consent forms are integral part of their risk management process; however, if some participants do not declare the factors which may detrimentally impact a tour, then this can create problems for the instructor as they may not have made the necessary precautions for the trip. This is where the introduction of a mandatory disclaimer may become useful as it shifts some of the medical risk responsibility from the instructor onto the participant (Williams and Soutar 2005).

4.6. Risk assessments and planning

Preventing an accident, rather than dealing with one after it has occurred is clearly the main focus of the instructors' risk management strategies which is in line with the DRA model discussed above. Extensive planning facilitates this, especially when the instructor is taking a group on tour. Buckley (2010) explains that planning involves considerations of the environment, particularly weather, conditions. However, the participants discussed additional planning of checking safety equipment and clothing and making contingency plans:

"As part of my risk assessment I have a map and on the map I have marks of where I was going and I have another map with me which said where all our escape routes were so I could get people off the water, where there was a lifeguard station if I needed to get first aid." (Participant 8)

The incident at Lyme Bay shows that forward planning and escape routes are vital so that at any point in the journey a group is not far from a safe point because conditions could change and unforeseen risks could suddenly appear (Woolven *et al.* 2007).

4.7. Environment and equipment

Literature demonstrates that in order for adventure tourism to be a successful industry it must be considerate of the environment that it relies upon (Bagri *et al.* 2009; Swarbrooke *et al.* 2003). The physical environment is a large consideration for instructors in their risk assessment:

"You can never control the environment; you can only control what you are doing within it." (Participant 2)

Consequently, to manage the risks effectively, the instructors need to ensure they know their location and the environment. Some instructors may use specific sites to take groups to while waiting for the unfavourable environmental conditions to by-pass. Using such pre-prepared sites, instructors can tailor the experience to suit the abilities of the group and avoid any uncontrollable risks:

"If they're quite new to paddling we would look for a really big safe area for people to go to… take them somewhere easier to control the situation." (Participant 7)

This allows the instructors to properly assess the ability of a group in a safe environment. Again, this highlights the importance of training in adventure tourism which should focus on dealing with the environment. This confirms what Buckley (2010) argues about assessing the environment but being fully prepared to respond quickly to the changing environment.

Another critical environmental factor to account for is the weather conditions that may impact an adventure tourism activity. Assessing weather conditions is an important part of risk management and planning because weather reports should be checked before the planned start of the event. These conditions should be carefully assessed at the site to see how it has affected the environment. If there is any doubt about the safety of the conditions then the trips must be cancelled in spite of upsetting customers.

As an instructor preparing for an activity or trip, equipment that is safe and functional is essential not only for the ensured safety of the group, but also paramount for their satisfaction (Buckley 2010; Morgan 1998; Williams and Soutar 2005). This demonstrates the need for correct, functional and effective equipment that is fit for purpose. Wearing the correct equipment is vital to ensure no participant becomes ill. This underlines the importance of doing risk assessments on the environmental conditions to ensure the equipment and clothing utilised by participants can safely cope with those conditions:

"If you see them on a cold day get out in shorts and t-shirt looking cold… they are going to get colder as the day goes on… If you let them go out without it then you are negligent" (Participant 5)

It is important for the instructors to do a DRA on this otherwise they can be found to be negligent regardless of the disclaimers employed as advised by literature (see, for instance, Buckley 2010; Williams and Soutar 2005). If the instructor is found negligent, this can have a long-term detrimental effect on the business, accentuating the need for instructors to take their duty of care and risk assessments seriously to ensure operational sustainability of adventure tourism (Stanbury *et al.* 2005).

5. Conclusion

This study set out to explore how risk is perceived and managed by adventure tourism instructors. It provided a better understanding of the professional risk management strategies adopted in the UK. Through the combined analysis of literature and primary research, this study identified the 'good business practice' risk management approaches and decision-making processes that should be integrated into risk management within adventure tourism to ensure safe delivery of its activities.

A range of shortcomings in managing risks in adventure tourism were highlighted. These were attributed to certain, predominantly large-scale, operators whose irresponsible practices in terms of addressing risk management in adventure tourism activities were recognised. The general consensus was that more control is required in the field of interest to ensure relevant permits, licenses and insurance policies are in place. Given the rising popularity of adventure tourism, it would be constructive for tourism policy-makers to pay more attention to this sector of the tourism industry and ensure they meet safety requirements and recommendations. Dedicated policies are also needed to ensure that regular re-assessments of instructor's capabilities to manage risk effectively are performed, especially from the standpoint of first aid provision and 'social skills' development.

There was a strong desire among adventure tourism instructors to gain access to dedicated training opportunities. These must be affordable and should ensure that: instructors are fully qualified and regularly re-tested to maintain their skills and knowledge for exceptional performance; there is the right ratio of participants to instructors to relieve the stress and pressure for adventure tourism instructors; and instructors are taught a range of people management and environment assessment skills so that they are fully prepared to work safely and effectively with tourists, the environment and the equipment. Such training opportunities should be provided by industry experts and reinforced by dedicated policies.

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Table 1. Adventure tourism activities as reviewed in academic literature.

Adventure activities	**Research Conducted into Activities**
White-water kayaking	Buckley (2006; 2010); Diafas *et al.* (2010); Fiore and Houston (2001); Galloway (2010; 2012); Poff and Stuessy (2000); Strugar-Fritsch (2008)
White-water rafting	Attarian and Siderelis (2013); Buckley (2006; 2010); Bujdosó and Dávid (2013); Greffrath and Roux (2011; 2012); Jackson and Verscheure (2006); Morais and Zillifro (2003); Serenari *et al.* (2012); Strugar-Fritsch (2008)
Sea kayaking	Bailey (2010); Buckley (2006; 2010); Ewert *et al.* (2013); Morgan *et al.* (2005); Powell (2009); Varley (2011); Woolven *et al.* (2007)
Paragliding	Buckley (2010); Bujdosó and Dávid (2013); Feltracco *et al.* (2012); Schulze *et al.* (2002); Terra *et al.* (2013)
Sky-diving	Breivik (2010); Buckley (2010); Kerr and Mackenzie (2014); Hetland and Vitterso (2012); Westman and Björnstig (2007)
Canoeing	Buckley (2010); Bujdosó and Dávid (2013); Hardiman and Burgin (2011); Tarrant (2014)
Scuba diving	Buckley (2006; 2010); Morgan (2009); Ong and Musa (2011); Wilks (2009)
Rock climbing	Backe *et al.* (2009); Beedie and Hudson (2003); Buckley (2010); Schöffl *et al.* (2010)
Mountaineering	Buckley (2006; 2010); Mackenzie and Kerr (2012); Varley *et al.* (2013)
Bungee jumping	Bujdosó and Dávid (2013); Hudson (2003); Kane (2013); Mckay (2013)

Table 2. Profile of participants.

Participant code	**Area of adventure tourism specialisation**	**Years of experience** ***Extensive = more than 5 years;*** ***Intermediate = 2-5 years;*** ***Limited = less than 2 years***
1	A broad range of land and water-based HAT activities, including canoeing, kayaking and white water rafting	Extensive
2	A broad range of water-based HAT activities	Intermediate
3	Diving	Extensive
4	Paragliding	Extensive
5	A broad range of land and water-based HAT activities, including canoeing, kayaking and white water rafting	Intermediate
6	Rock climbing	Limited
7	A broad range of water-based HAT activities	Extensive
8	A broad range of water-based HAT activities	Intermediate
9	A broad range of land and water-based HAT activities, including canoeing, kayaking, diving and white water rafting	Intermediate
10	Paragliding	Extensive
11	Sky-diving and paragliding	Extensive
12	A broad range of land and water-based HAT activities, including canoeing, kayaking and white water rafting	Intermediate

Table 3. Interview schedule and prompts

Main questions	**Prompts**
How did you get into adventure tourism (motivation)?	a. Hobby and passion b. A matter of coincidence c. Transfer from generation to generation
How have you felt about your job so far?	a. Development of skills b. Training c. Support
Tell me about your experience of taking groups out on trips?	a. How long? b. Equipment c. Legal agreements d. Arrangement for rescue e. Contingency plan
What are the policies for weather conditions?	a. Cancel the trip b. Precautions while on a trip
What assessments are made before participants take part?	a. Health forms b. Disclaimers c. Does guide do own health assessment d. Authority to refuse a participant e. Assessment of suitable clothing f. Assessment of equipment and conditions
What risk assessment practices are in place?	a. Equipment checks b. Responsibility c. Legal
Tell me about any problems you have ever experienced when with a group?	a. What exactly? b. Why? (Hysterical participant, unfit, unwell?) c. How was it handled? d. Has anything changed as a result?
In what way do you receive support from the centre manager/ tour operator?	a. Appraisal b. Listening to suggestions
Can you describe what might make you feel overloaded	a. Ratio of guide to participants b. Level of ability of each participant c. Unsafe? d. Not enough time between shifts
What do you feel could be improved in your job?	a. Pay b. Development opportunities c. Working conditions
How would you like to progress?	-

Table 4. Coding structure with themes and codes. The TOTAL figure demonstrates the number of citations assigned for each code.

Themes	**Main codes**	**TOTAL**	
		Number of participants	**% of participants**
Motivation to be in business	Hobby and passion	11	92
	Coincidence	2	17
Working environment	Relaxed and enjoyable	10	83
	Stressful at times	6	50
	Stressful	2	17
Determinants of stress at work	Management	9	75
	Clients	9	75
	Working environment	1	8
Causes of risk	Clients	12	100
	Weather	12	100
	Lack of preparation / skills	4	33
Impact on effective decision-making	'Soft skills'	10	83
	'Hard skills'	3	25
Standards and regulations	The role of governing bodies	11	92
	Large operators	7	58
	Small operators	3	25
Skills and qualifications	The role of courses attended	8	67
	Development opportunities	7	58
	External influences	5	42
Risk assessments	Instructor's health	12	100
	Client's health	12	100
	Weather and the terrain	12	100
	Equipment	11	92