

# Risk-Taking Attitude and Behavior of Adventure Recreationists: A Review

Lee TH<sup>1,2\*</sup>, Tseng CH<sup>2,3</sup> and Jan FH<sup>3</sup>

<sup>1</sup>Graduate School of Leisure and Exercise Studies, Taiwan

<sup>2</sup>National Yunlin University of Science and Technology, Taiwan

<sup>3</sup>Department of Tourism and Hospitality, Transworld University, Taiwan

## Abstract

Adventure tourism is a fast growing sub-sector of the tourism industry. To better understand the adventure tourism, the risk-taking attitude and the adventure behaviors of recreationists must be considered. This study clarifies these risk-taking attitudes and adventure behaviors by reviewing relevant literature. Recreation experiences, personality, and risk-taking attitude are precedents of adventure behavior. By assessing the factors that affect adventure behavior, adventure tourism managers can provide the best adventure activities for participants.

**Keywords:** Adventure tourism; Risk-taking attitude; Adventure behavior

## Introduction

In recent years, adventure tourism has been a fast-growing sector of the tourism industry [1,2]. According to the Adventure Travel Trade Association [3], adventure tourism has contributed approximately one trillion U.S. dollars of global production value.

Adventure recreationists participate in adventure activities for the adventure experiences [2]. Adventure tourism can be regarded as the process by which recreationists purposefully seek specific activities with dangerous or uncertain outcomes, such as white water rafting, scuba diving, river tracing, snowboarding, surfing, sailboarding, kite boarding, and rock climbing, to satisfy their desire to engage in adventurous behaviors [2,4-11].

Previous studies have attempted to elucidate various aspects of adventure tourism, such as participation motivation, satisfaction and behavior intentions [8,12-14], risk management [1], and environmental behavior [11,15,16].

Adventure recreationists seek recreation experiences that differ from those available through other outdoor activities [17]. Weaver [16] suggested demographic variables may influence risk-taking attitudes. However, few studies have elucidated the relationship between risk-taking attitude and the adventure behaviors of recreationists. To better understand the adventure tourism, the attitudes risk-taking attitude and adventure behavior of recreationists must be considered. Accordingly, this study clarifies the risk-taking attitude and adventure behavior by reviewing relevant literature.

## The Adventure Recreationists

Adventure recreation can be defined as activities with inherent elements of physical, emotional, or psychological risk, danger or uncertain outcomes, which typically take place within a natural environment [18]. Accordingly, an adventure recreationist is an individual who participates in activities that involve risk, danger or uncertain outcomes.

Adventure activities could be separated into soft and hard [19]. The hard adventure tourist likes to participate in activities with more risk, challenge and uncertainty [19,20], because soft adventure activities do not provide enough risk or enough of an adrenaline rush to arouse or motivate [21]. According to Sung [22], adventure recreationists can be divided into six groups, which are general enthusiasts, budget-oriented

youths, soft moderates, upper high naturalists, family vacationers, and active soloists.

Adventure tourism is one of the most rapidly growing industries in the world. The Outdoor Industry Foundation [23] reports that almost 143 million Americans, or 49.2 percent of the US population, participated in an outdoor activity at least once in 2013. According to a global report on adventure tourism [24], 42% of travelers departed on adventure trips in 2013, and the global value of adventure tourism in that year was US\$ 263 billion, representing an increase of 195% over the preceding two years. United Nations World Tourism Organization [24] also reported that 57% of adventure recreationists were male and 43% were female, and adventure recreationists rank natural beauty as the most important factor in selecting their destination, followed by the activities available and the climate.

## Risk-Taking Attitude

Attitude is a psychological tendency that is expressed as positive or negative evaluations of certain behaviors in which people are engaged [25,26]. Attitudes have been assumed to reflect individuals' beliefs, feelings, and behavioral intentions [27]. Researchers have defined risk as an everyday experience, and everyone experiences it to varying degrees [28]. Lee and Tseng [9] suggested that risk-taking attitude represents an individual's positive or negative evaluation of controlled behavior with a perceived uncertain outcome. Thus, in this study, risk-taking attitude is defined as an individual's belief, feeling, and behavioral intention with respect to participation in risky activities.

Although adventure tourism involves elements of risk and uncertain results, and attitudes toward risk are important in explaining adventure behaviors, this risk and uncertainty of outcome motivate participation in adventure tourism. Cater [29] claimed that rather than demanding actual risk and uncertainty of outcomes, participants in commercial

**\*Corresponding author:** Lee TH, Graduate School of Leisure and Exercise Studies, National Yunlin University of Science and Technology, Taiwan. 123, Section 3, University Road, Touliu, Yunlin, Taiwan 640, Tel: 886-5-531-2183; E-mail: [thlee@yuntech.edu.tw](mailto:thlee@yuntech.edu.tw)

**Received** March 16, 2015; **Accepted** April 30, 2015; **Published** May 10, 2015

**Citation:** Lee TH, Tseng CH, Jan FH (2015) Risk-Taking Attitude and Behavior of Adventure Recreationists: A Review. J Tourism Hospit 4: 149. doi:10.4172/2167-0269.1000149

**Copyright:** © 2015 Lee TH, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

adventure activities primarily seek fear and thrills. In commercial adventure activities, participants must be protected from actual risks and hazards that are associated with the adventure activities. However, if the adventure providers manage all of the risk and adventure out of the experience, then the experience will be unappealing and unexciting [29].

Cater [29] also suggested the existence of a close relationship between real risk and perceived risk. Weber, Blais, and Betz [30] utilized the Domain-Specific Risk Taking Scale (DPSPERT) to measure perceptions of risk in five risk content domains: financial, health/safety, recreational, ethical, and social. Mishra, Lalumière, and Williams [31] also used the DPSPERT to assess attitudes toward risk associated with gambling. The Brief Sensation-Seeking Scale (BSSS) has been used to measure attitudes to risk that are manifest in four ways: experience-seeking, susceptibility to boredom, thrill and adventure-seeking, and disinhibition [32].

Zuckerman, Eysenck, and Eysenck [33] suggested that experience-seeking is individuals' seeking experience through the mind and senses, travel, and a nonconforming life-style. People enjoy short-term sensory experiences in the form of hallucinations, fantasies, dreams, and self-contemplation [34]. Susceptibility to boredom refers to an individual's strong dislike of routine, repetitive experiences and dull people [33]. Unlike experience-seeking, susceptibility to boredom is related to aversion to sameness [34]. Thrill and adventure-seeking indicates a desire to engage in sports or activities that involve speed or danger [33]. Disinhibition concerns social and sexual disinhibition, such as variety in sexual partners, social drinking, and partying [33]. Males exhibit greater disinhibition than do females [34]. These four constructs (experience-seeking, susceptibility to boredom, thrill and adventure-seeking, and disinhibition) have been widely used to measure individuals' risk-taking attitudes [32-35].

The BSSS was created by adapting the Sensation Seeking Scale [33] and has been widely used to measure attitudes to risk [32,36,37].

Demographic variables such as gender, education level and age can affect risk-taking attitudes [16,37,38]. Scholars have suggested that men, younger people, and well-educated people are likely to have more positive risk-taking attitudes [16,37,38].

Attitudes to risk-taking have been discussed in relation to different issues, such as flooding [39], and among various groups, such as offenders [40], undergraduate students [38], entrepreneurs [41], medical travelers [42], and adventure recreationists [9]. Some studies have suggested that attitudes to risk-taking influence governance, such as in flood prevention planning [39], and the management of prisoners [41]. Recently, in the context of tourism, risk-taking attitudes may affect a tourist's perceived value of medical travel and loyalty [42] and adventure behavior [9]. According to aforementioned literature, risk-taking attitudes may affect the adventure behavior and travel decisions related to travel.

## Adventure Behavior

Ewert and Vernon [18] claimed that adventure activities incorporate elements of physical, emotional, or psychological risk and potential danger. Participants can satisfy their desire to experience risk and danger by participating in such activities [6,10]. Thus, adventure behaviors may be defined as the behaviors of an individual who is taking part in an adventure activity that involves risk, an uncertain outcome, and potential danger [2,9,29,43,44].

Ewert and Hollenhorst [45] examined the relationship between the degree of engagement in an adventure activity and personal attributes of adventure recreationists. As the level of engagement increases, skill, frequency of participation, internalized locus of control, and preferred level of risk all increase. Ewert, Gilbertson, Luo, and Voight [46] elucidated motivations for participation in recreational adventure activities, and identified three groups of motivating factors, which were social factors, factors related to sensation-seeking, and factors related to self-image. Participation in adventure activities can meet participants' psychological need for challenge [1,16,47,48]. Tsaour and Lin [47] identified seven classes of challenge for adventure recreationists, which were uncertainty in the environment, insufficiency of resources, relationships with partners, difficulty of the activity, the ability of partners, equipment, and a sense of competition.

Ong and Musa [11] examined the influences of experience, personality and attitude toward on the underwater behavior of SCUBA divers, and found that recreation experience, personality, and attitude significantly influence a diver's underwater behavior (including their non-contact diving behavior, buoyancy control diving behavior, and safety diving behavior).

## Risk-Taking Attitude and Adventure Behavior

According to the Theory of planned behavior TPB [25], adventure recreationists' attitudes may affect their adventure behavioral intentions. Numerous studies have utilized TPB theory to assess behavioral models [15,49]. Researchers have also found a significant relationship between attitude and behavioral intention [11,50]. Adventure activities involve elements of risk and uncertain results, so attitudes toward risk may have an important role in explaining adventure recreationists' behaviors. Recently, Lee and Tseng [9] examined the structural relationship between risk-taking attitude and adventure behavior, but measured both by self-reporting. Risk-taking attitude and actual adventure behaviors have not yet been objectively determined. Accordingly, future research should develop an approach that combines quantitative with qualitative methods, such as the use of implicit measurement techniques, to make unobtrusive behavioral observations and thereby directly elucidate adventure behaviors [51].

## Conclusion

Adventure activities have elements of risk and uncertain results; therefore, risk-taking attitudes may have an important role in explaining the adventure behaviors of recreationists. Understanding adventure behavior will allow adventure tourism managers to provide suitable recreation programs that meet adventure recreationists' needs. To construct a complete model of risk-taking behavior, future research should consider a wide range of adventure activities, such as terrestrial, airborne, and aquatic activities. By exactly assessing the factors that affect adventure behaviors, adventure tourism managers can provide the best adventure activities for participants.

## References

1. Bentley TA, Cater C, Page SJ (2010) Adventure and ecotourism safety in Queensland: Operator experiences and practice. *Tourism Management* 31: 563-571.
2. Buckley R (2010) *Adventure tourism management*. Oxford: Elsevier.
3. Adventure Travel Trade Association (2011) *Adventure tourism development index report*.
4. Buckley R (2012) Rush as a key motivation in skilled adventure tourism: Resolving the risk recreation paradox. *Tourism Management* 33: 961-970.

5. Ding C, Schuett MA (2013) Examining the motivation and involvement of Chinese rock climbers. *Journal of Outdoor Recreation. Education and Leadership* 5: 54-73.
6. Hall CM, McArthur S (1994) Commercial white water rafting in Australia. *Australian Journal of Leisure and Recreation* 6: 25-30.
7. Hung CS, Lee TH (2012) Impact of place attachment and recreation involvement on satisfaction and future behavior: Evidence from Taiwanese recreational surfers. *South African Journal for Research in Sport, Physical Education and Recreation* 34: 93-105.
8. Lee TH (2006) Assessing a river tracing behavioural model: A Taiwan example. *Anatolia: An International Journal of Tourism and Hospitality Research* 17: 322-328.
9. Lee TH, Tseng CH (2015) How personality and risk-taking attitude affect the behavior of adventure recreationists. *Tourism Geographies* 17: 307-331.
10. Morgan D, Fluker M (2006) Risk management for Australian commercial adventure tourism operation. In Y. Mansfeld, A Pizam, *Tourism, security and safety: From theory to practice*, Oxford: Elsevier: 153-168.
11. Ong TF, Musa G (2012) Examining the influences of experience, personality and attitude on SCUBA divers' underwater behaviour: A structural equation model. *Tourism Management* 33: 1521-1534.
12. Faullant R, Matzler K, Mooradian TA (2011) Personality, basic emotions, and satisfaction: Primary emotions in the mountaineering experience. *Tourism Management* 32: 1423-1430.
13. Williams P, Soutar GN (2009) Value, satisfaction and behavioral intentions in an adventure tourism context. *Annals of Tourism Research* 36: 413-438.
14. Wu CHJ, Liang RD (2011) The relationship between white water rafting experience formation and customer reaction: A flow theory perspective. *Tourism Management* 32: 317-325.
15. Serenari C, Leung Y, Attarian A, Franck C (2012) Understanding environmentally significant behavior among whitewater rafting and trekking guides in the Garhwal Himalaya, India. *Journal of Sustainable Tourism* 20: 757-772.
16. Weaver DB (2012) Psychographic insights from a South Carolina protected area. *Tourism Management* 33: 371-379.
17. Berns GN, Simpson S (2009) Outdoor recreation participation and environmental concern: A research summary. *Journal of Experiential Education* 32: 79-91.
18. Ewert A, Vernon F (2013) Outdoor and adventure recreation. In *Human Kinetics (Ed.), Introduction to recreation and leisure (2nd ed.)*. Champaign, IL: Human Kinetics.
19. Hill BJ (1995) A guide to adventure travel. *Parks and Recreation* 30: 56-65.
20. Lipscombe N (1995) Appropriate adventure: Participation for the aged. *Australian Parks and Recreation* 31: 41-45.
21. Scott K, Mowen JC (2007) Travelers and their traits: A hierarchical model approach. *Journal of Consumer Behaviour* 6: 146-157.
22. Sung H (2004) Classification of adventure travelers: Behavior, decision making, and target markets. *Journal of Travel Research* 42: 343-356.
23. Outdoor Industry Foundation (2015) 2014 Outdoor recreation participation report.
24. United Nations World Tourism Organization (2015) Global Report on Adventure Tourism.
25. Ajzen I (1991) The theory of planned behavior. *Organization Behavior and Human Decision Processes* 50: 179-211.
26. Schiffman LG, Kanuk LL (1994) *Consumer behavior (5th edn)*. Englewood Cliffs, NJ: Prentice Hall.
27. Kim DY, Chen Z, Hwang YH (2011) Are we really measuring what we think we're measuring? Assessing attitudes towards destinations with the implicit association test. *International Journal of Tourism Research* 13: 468-481.
28. Pizam A (2004) The relationship between risk-taking, sensation-seeking, and the tourist behavior of young adults: A cross-cultural study. *Journal of Travel Research* 42: 251-260.
29. Cater CI (2006) Playing with risk? Participant perceptions of risk and management implications in adventure tourism. *Tourism Management* 27: 317-325.
30. Weber EU, Blais AR., Betz NE (2002) A domain-specific risk-attitude scale: Measuring risk perceptions and risk behaviors. *Journal of Behavioral Decision Making* 15: 263-290.
31. Mishra S, Lalumière ML, Williams RJ (2010) Gambling as a form of risk-taking: Individual differences in personality, risk-accepting attitudes, and behavioral preferences for risk. *Personality and Individual Differences* 49: 616-621.
32. Hoyle RH, Stephenson MT, Palmgreen P, Lorch EP., Donohew RL (2002) Reliability and validity of a brief measure of sensation seeking. *Psychology of Sport and Exercise* 32: 401-414.
33. Zuckerman M, Eysenck S, Eysenck HJ (1978) Sensation seeking in England and America: Cross-cultural age and sex comparisons. *Journal of Consulting and Clinical Psychology* 46: 139-149.
34. Zuckerman M (1971) Dimensions of sensation seeking. *Journal of Consulting and Clinical Psychology* 36: 45-52.
35. Russo MF (1993) A Sensation Seeking Scale for Children: further refinement and psychometric development. *Journal of Psychopathology and Behavioral Assessment* 15: 69-86.
36. Eachus P (2004) Using the brief sensation seeking scale (BSSS) to predict holiday preferences. *Personality and Individual Differences* 36: 141-153.
37. Han P, Balaban V, Marano C (2010) Travel characteristics and risk-taking attitude in youths traveling to nonindustrialized countries. *Journal of Travel Medicine* 17: 316-321.
38. Cheung HY, Wu J, Tao J (2013) Risk perception and risk-taking attitude: A comparison between Hong Kong and Mainland Chinese undergraduate students. *The Asia-Pacific Education Researcher* 22: 497-506.
39. Viglione A (2014) Insights from socio-hydrology modelling on dealing with flood risk—roles of collective memory, risk-taking attitude and trust. *Journal of Hydrology* 518: 71-82.
40. Gummerum M, Hanoch Y, Rolison JJ (2014) Offenders' risk-taking attitude inside and outside the prison walls. *Risk analysis* 34: 1870-1881.
41. Block J, Sandner P, Spiegel F (2015) How do risk attitudes differ within the group of entrepreneurs? The role of motivation and procedural utility. *Journal of Small Business Management* 53: 183-206.
42. Lu HY, Wu WY, Chen SH (2014) Influences on the perceived value of medical travel: the moderating roles of risk attitude, self-esteem and word-of-mouth. *Current Issues in Tourism* (ahead-of-print): 1-15.
43. Walle AH (1997) Pursuing risk or insight: Marketing adventure. *Annals of Tourism Research* 24: 265-282.
44. Pomfret G (2012) Personal emotional journeys associated with adventure activities on packaged mountaineering holidays. *Tourism Management Perspectives* 4: 145-154.
45. Ewert A, Hollenhorst S (1989) Testing the adventure model: Empirical support for a model of risk recreation participation. *Journal of Leisure Research* 21: 124-139.
46. Ewert A, Gilbertson K, Luo YC, Voight A (2013) Beyond "Because It's There": Motivations for pursuing adventure recreational activities. *Journal of Leisure Research* 45: 91-111.
47. Tsaor SH, Lin WR (2013) Antecedents and consequences of recreationist – environment fit: A study of Mt. Yushan climbers. *Journal of Outdoor Recreation Study* 25: 79-98.
48. Xu S, Barbieri C, Stanis SW, Market PS (2012) Sensation-seeking attributes associated with storm-chasing tourists: Implications for future engagement. *International of Tourism Research* 14: 269-284.
49. Hoyt AL, Rhodes RE, Hausenblas HA, Giacobbi PR Jr (2009) Integrating five-factor model facet-level traits with the theory of planned behavior and exercise. *Psychology of Sport and Exercise* 10: 565-572.
50. Kaplanidou K, Gibson HJ (2010) Predicting behavioral intentions of active event spot tourists: The case of a small-scale recurring sports event. *Journal of Sport and Tourism* 15: 163-179.
51. Verdugo CV (1997) Dual "realities" of conservation behavior: Self-reports vs. observations of reuse and recycling behavior. *Journal of Environmental Psychology* 17: 135-145.