# Psychological Factors that Lead to Nature-Based Adventure Activities, with Sustainability and Technological Approaches

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Abstract—Tourism is one of the principal economic foam of Sri Lanka and relies remarkably on its destinations. Nature-based adventure parks become a sustainable source of economic, social. and environmental development linked through tourism. The present study aimed to identify the psychological factors that support improving foreign tourist attraction in sustainable tourism development with the technology effect. The tourists were interviewed through the questionnaire and observed data of sociodemographic and psychological factors of 82 participants on the location of the adventure parks in Sri Lanka. Most Males (75.61%), followed by females (24.39%) with visitors were between the ages of 25-30yrs (42.76%), ages 15-20 (18.87%), 20-25 (27.68%), and above 30yrs (10.69%). Foreign visitors were engaged in activities with 62.20% of their friends, 39.02% of their families, 14.63% of alone, and 14.17% of other individuals who were specifically visiting for tourism. The data were analyzed through Microsoft Excel and SPSS Software. From the study, it is revealed that most tourists are attracted due to the Fun/Adventure experience (8.63%), Thrill (8.27%), and stress buster (7.84%). These factors were major tourist attraction factors. However, improved technology has reduced risk and received the lowest average (3.67%). That was a negative part of the Sri Lanka adventure park availability. According to these findings, Tourists seek Fun/Adventure, thrill, and stress release through their journey. But due to lack of technology use is demotivated to attract again here. So, it is better that Adventure Park owners/managers should consider increasing the fun/adventure, thrill, and stress buster factors by improving the technology assistant for sustainable nature tourist development

*Keywords*—Adventure tourism, Mental-wellbeing, Motivation, Sustainable, Technology

#### I. INTRODUCTION

Tourism is an important source of export sustainable economic development in the countries (Milne & Ateljevic, 2010), and Sri Lanka also reversionary benefits from it (Anushan, 2017). The diversity of the geographical locations, cultural aspects, unique history, and natural beauty attract engaging recreational activities for the people of Sri Lanka completely suitable destination (Fernando, 2016). From a tourism perspective, there also can find out a strong relationship between tourism and sustainability (Hanna, et al., 2019). In tourism, human psychology is based on environmental and social aspects that can affect the tourist's behavior, attitudes, and motivations (Simkova, 2014). Studies shows wealthy persons have engaged in those activities due to the breakdown of their monotonous lifestyles, mood fixations, higher life satisfaction, relaxation, life changes, reduce stress levels and improve work efficiency (Neal, et al., 2007).

According to the United Nation's Sustainable Development Goals its required tourism sustainability refers to "the development of tourism-related operations in ways that aid in global sustainability changes". The successful growth of nature tourism can be beneficial for environment sustain and for people relation with nature protection (Nation, 2022). Ensuring a balance between social, environmental, and economic consequences of tourism is all that becomes sustainable tourism (Strba, et al., 2022). In sustainability, tourism is based on nature and is often considered as the tourist influence to environmentally friendly, attitudes development, knowledge and personality development" (Nicole, et al., 2015). This is mentioned in relation to nature-based tourism can embrace because it is believed that using modern concepts of sustainability will strengthen the validity of the research (Force, et al., 2017).

Further, (Barriga, 2017), sustainable tourism comprises a variety of techniques, including adventure tourism, ecotourism, and birdwatching. In this regard, ecotourism is sustainable from a social and environmental perspective. However, according to Fennell's study (Fennell, 2021) the adverse impacts of new technology, safety and health issues, financial losses, and disasters on the environment and it brings about in a new era of travel and tourism instead of using harmful methods that disregard people, destinations, and the environment. Present, tourism promoters have a chance to rethink tourism in new ways and promote travel with a positive effects (Everingham & Chassagne, 2020). With respect to all this there were important to identify the factors which tourist was attracted to Sri Lanka nature-based adventure activities. For that,

this study evaluates visitors' motivation factors and potentials of their plan to travel again.

#### II. METHODOLOGY

This cross-sectional descriptive study was carried out on 82 participants of the foreign tourist adventures who participated in the Activation base, water-based and landbased activities around the recreational activity's centers from March 2022 to May 2023 in Sri Lanka. The sample was both male and female participants who were between 15 to 35 years. The study objective was to identify the motivational factors that they attracted to nature-based adventure parks with sustainable and technological interventions. The data was gathered by visiting the adventure parks and filling out the questionnaire by interviewing them. The sample size was participants who were willing to answer questions during the study period in these locations through the snowball sampling methods. For this study tourists with differently-abled persons were excluded due to their perceptions could be varied. The persons who are not willing to engage in activities are also excluded. The questionnaire was designed to comprise two sections including the first section on sociodemographic characteristics, and the second section dealt with the motivations for making the adventure tourism trip with contained 15 items that were motivations linked around sustainability. The motivation scale was measured using a 5-point Likert scale, where one means the lowest and five the highest. Then After the well-informed objective of the study questionnaire was provided. After completing the data collection all data were included in the Microsoft Excel sheet to analyze the data. After data collection data was analyzed using SPSS version 20 (SPSS Inc., Chicago, IL).

# III. RESULTS AND DISCUSSIONS

Initiate the study by gathering sociological data to identify the sample.

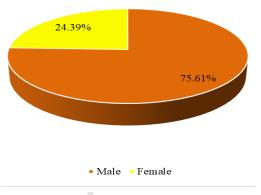


Figure 1. Tourist with genders

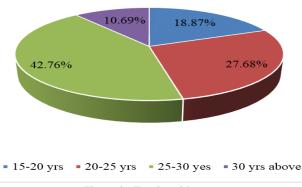


Figure 2. Tourist with ages

For the study, the sample comprised foreign tourists with their perception of natute based activity enagdged tourism. Males (75.61%) made up the largest group, followed by females (24.39%) shown in Figure 1. Figure 2 shows the majority of visitors (42.76%) were between the ages of 25 and 30, followed by visitors between the ages of 15 and 20 (18.87%), 20 and 25 (27.68%), and above 30yrs (10.69%). Foreign visitors participated in activities with 62.20% of their friends, 39.02% of their family, 14.63% alone, and 14.17% of other individuals who were specifically visiting for tourism shown in Figure 3. It becomes clear during the conversation that they were visitors with a recreational intent and were here on business.

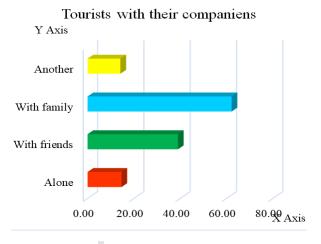


Figure 1. Tourists with their companies

In order to promote sustainability through economic growth during a time of economic crisis, this study's significant findings recognized five important factors. The primary goal of the current study was to discover the factors that lie behind demand in an adventure location in order to ensure the tourist industry's sustainability over the long term, results are shown in Table 1.

Table 1. Factors that lie behind demand in an adventure location	Table 1.	Factors that	lie behind	demand in an	adventure	location
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		Factors for		Factors for		rage
		Activation		Water base	prior	itizes
		base	base	Adventure		
		Adventure sports	Adventure sports	sports		
		<u>^</u>	1 1		%	Order
		N	70	Oruer		
01.	Thrill	4.32+4.00	4.43+5.00	4.00 + 4.00	8.27%	2
02.	Requires zeal	3.58+4.00	3.56+4.00	3.42+3.50	6.15%	12
03.	Spells status	3.24+3.00	3.09+3.00	2.92 + 3.00	6.86%	6
04.	Builds confidence	3.50+4.00	3.49+4.00	3.48+3.50	6.45%	8
05.	Helps in personality development	3.80+4.00	3.65+4.00	3.47+4.00	6.31%	10
06.	Instills self- belief	4.38+4.00	3.33+3.00	3.42+3.00	6.26%	11
07.	Creates unique identity	3.64+4.00	3.47+3.00	3.44+3.00	6.37%	9
08.	Stress buster	3.10+3.00	3.05+3.00	3.83+4.00	7.84%	3
09.	Helps in goal- setting	3.39+3.00	3.25+3.00	3.83+3.00	6.91%	5
10.	Is challenging	3.39+3.00	3.44+3.00	3.43+4.00	6.10%	13
11.	Requires toughness	3.05+3.00	3.07+3.00	3.02+3.00	6.12%	14
12.	Builds sense of achievement	3.53+4.00	3.42+3.00	3.53+4.00	6.61%	7
13.	Is a unique experience	3.93+4.00	3.94+4.00	3.42+3.50	7.46%	4
14.	It is fun/adventure	4.18+4.00	4.10+4.00	3.66+4.00	8.63%	1
15.	Improved technology has reduced risk	3.27+3.00	3.27+3.00	2.83+3.00	3.67%	15

The following classification has been used to group these motives including physical, such as relaxation; cultural, interpersonal, such as socializing; and meeting new people; such as discovering new geographical areas and prestige, such as self-esteem and self-actualization. The most significant factor was, "It is fun/Adventure," which has the most significant potential to explain the total variance, affecting 8.63% of totally of them. According to the studies, the fun/adventure factor contributes to tourists' contentment. The adventure variable was thus a finding of the study because both the literature review and the study's findings contained that dimension. The study also found that also supports escaping stress, tension, relationships, and escapism apart from fun and enjoyment (Sirgy, et al., 2010). The second factor was "Thrill" which reached 8.24% of the total variance. It is defined by a sudden feeling of excitement and pleasure (Buckley, 2018) explained by a behavior related to the feeling of challenging to break the monotonous lifestyles of which they had. These researchers stated that the Thrill aspect results in satisfied guests. The study of the Giddy also

emphasized the tourist more seeking the thrill during their travels.

For the third factor, "Stress buster", the study has shown that it included 7.84% of the total variables. It is concerned with the physical and mental health of the tourist. This is tourists' reason for visiting an adventure destination scoping with relaxing, resting, getting away from the hustle, and escaping the montunoes life style of the daily routine tension and stress. Concerning the motivational dimension of relaxation, some authors have similar findings, Naidoo et al., found relation and refresh (Naidoo, et al., 2015). As well as Bichler and Peters also found it as a motivation for relaxation (Bichler & Peter, 2021). On the other hand, Pop et al., discovered that stress levels had decreased. In order to enhance the stress release component of adventure sports attraction, rest and relaxation places could also be incorporated into adventure sports travel along with Yoga practices (Pop, et al., 2023).

The quantity of quality the tourists perceive from and associated websites can also be influenced by functional and technical characteristics (Vassiliadis1, et al., 2013). The challenges pertaining to the area with infrastructure, technological and innovative features, management of the use of space and its sustainability, and the geographic arrangement of these activities are taken into consideration. It will operate as a foundation and vital resource for leisure and outdoor enjoyment on the property, as well as the practices of adventurous activities as vectors of tourism goods. But the most identifies factors ware there were least average as the improved technology used for the reduced risk with 3.67% of the total variables. The study of the Arie also found that poor technological support also reduces foreign tourists' attraction due to lack of information and poor safety (Reichel, et al., 2001).

### IV. CONCLUSION

Sri Lanka has a unique tourism-based economic culture and needs to promote sustainable tourism for environment protection. Adventure tourism is mostly based on nature and leisure activities and these are based on physical activities with intensity, risk, pleasure and motivation. After the pandemic period, it was important to conduct the study for identifying demand and motivations factors for sustainable development in the tourism field. Adventure tourism revealed that fun and adventure, thrill and stress bursting were the major motivational factors to engage. But the technical application was indigent level and it discouraged the tourists from active participation. These findings can use adventure park owners/managers to implement their development plans to provide better service to increase tourist attraction. They should pay attention to the development of technical aspects to increase attraction in this technical era. Future research

could be beneficial when exploring the connection between travel goals and spending in adventure locations. It will be important to strengthen the adventure tourism attractions by offering tourist protection and building locations where adventurous activities like paragliding, snorkeling, trekking, and parasailing. It may be carried out in order to increase the competence mastery dimension.

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