Abstract

The purpose of this article was to present awareness of extreme and adventure tourism among Polish people. A diagnostic survey was performed in order to determine the actual state of understanding of leisure activities and preferences of the people regarding adventure tourism using online social networking sites like Facebook in July 2021. A total of 1080 Polish respondents participated in the study, and the data were analysed descriptively. In this study, we found that leisure tourism is mostly practiced (41%) among the respondents, and the extreme and adventure tourism market share is 14%. Around 40% of respondents said they never practiced adventure tourism, and 26% said they hardly practice once a year. This demands additional efforts to increase the market share for
extreme and adventure tourism. Thus, tourism entrepreneurs and policymakers can promote extreme and adventure tourism in the country, focusing on young people. Similarly, 31% said adventure and extreme tourism are dangerous. This means people must first overcome their psychological fear of participating in such activities. Thus, to encourage people in adventure and extreme tourism, the tourists' fears should be removed and psychologically motivated. Then, ensuring safety measures, short training, and awareness campaigns focusing on the young increases their participation in adventure and extreme tourism. The safety measures and positive psychology in younger people increase the adventure and extreme tourism market.

Introduction

Leisure is a broad term and does not necessarily mean time not occupied by work, but this is how leisure is often assumed in definitions and life to be time away from work. The important thing is that it is an activity we enjoy, and here we can mention entertainment, gaining knowledge or learning unselfishly, and voluntary participation in a chosen environment. Leisure time can be considered as time away from work or study, the weekend, the daily time after work or study, and the annual longer time off, i.e., vacation or vacations. The time pool into paid time, time for household duties, personal time (sleep, eating, hygiene), and free time, which remains after subtracting working time, tasks, and personal time, after removing transport and commuting time is leisure time. To be specific, leisure time is the time left after work and household duties and is a component of human life that has supported humans since the beginning. Leisure time can be used in a variety of ways. In the past, leisure time was considered to be only the time for voluntary activity but nowadays, leisure time is synonymous with fun, relaxation, festivity, and leisure in the broadest sense. Further, it also includes time for self-improvement (Roman et al., 2020).

People who have leisure time spend time on recreation and relaxation through tourism. Out of many types, extreme and adventure tourism are growing interests in the young generation. Extreme tourism is perceived as very difficult and often even impossible to practice, but the number of its enthusiasts and participants is constantly growing. More and more people are looking for thrills, which, as the research shows, are the answer to a faster and more stressful life. As we live in a hectic and stressful world, we need more and more stimuli that will allow us to take a break from everyday life, turn our thoughts to other directions, and engage in physical activity, which will enable us to relax. Adventure tourism is much easier, but it allows people to calm down, slow down and contemplate nature. This type of tourism verifies preparation for life outside the system, outside agglomerations. It is based on physical and mental satisfaction with one's abilities (Stankiewicz and Nurkowanie, 2021). Adventure tourism, on the other hand, is active recreation in nature. It is not only relaxing, but it is also communing with nature, physically challenging, and educational. The approximate terminology was proposed by Bentley
et al. (2001), which refers to classic approaches to adventure tourism, i.e., those based on the natural environment.

Adventure tourism and extreme tourism are ways to spend leisure time, even though the types of sports can also be practiced during leisure time. Adventure tourism is tourism that involves any kind of activity or adventure, particularly refers to those that involve risk or require extensive planning. Extremes can cause loss of health or even life. Motivations given by participants include ambition, wanting to stand out, being better, or showing individuality. As a result of the development of modern technology, there is a chance to improve your performance and explore new interesting places or completely new activities. Increasingly better equipment and facilities make it possible to reach areas previously impossible to explore. Usually, these places are not new; progress and new technologies allow us to conquer what has already been discovered faster, differently, or more unusual. Extreme tourism is not the practice of typical, traditional sports or sports competitions. Still, the realization of individual performance is the transition from an ordinary sport in such a way that it will require extreme ability or endurance.

The adventure, in this case, will involve visiting specific, unvisited, or unknown places for a particular reason. Important in this type of tourism are the emotionality, satisfaction, joy, and pleasure of communing with nature, the satisfaction of being able to cope with difficult conditions and using one’s skills. The determinant of adventure tourism is the level of risk. The literature on the subject emphasizes that risk plays a major role in deciding to participate in an adventure trip. For example, the desire to participate in the expedition may often decrease if the risk element is missing (Fennell, 2000). The risk component accompanying such expeditions makes it possible to divide this activity into low-risk and high-risk. The former is characterized by easy exploration and friendly places and doesn’t require advanced skills or equipment. The second one needs much more specific equipment, knowledge, and abilities. This kind of tourism is actually available to everyone; it has no fundamental limitations (Roman et al., 2022). These two types of tourism are a part of a large branch of the economy, tourism, which is the whole phenomenon of movement and staying for leisure purposes of the participants. Tourism is an intensively developing branch of the economy; more and more people are resting, but the number of people directly and indirectly connected with it is also increasing. Tourist activity is not only to hotels and other accommodations. It includes banking, trade, restaurants, municipal economy, and transport (Roman and Bury, 2022).

People prefer adventure, and there are different types of adventure and extreme tourism activities practiced throughout the world for centuries (see next section). Regarding the literature on adventure tourism, many scholars focused on defining adventure tourism. For instance, adventure tourism (Weber, 2001; Buckley, 2006;
Swarbrooke et al., 2012), mountaineering adventure (Pomfret, 2006), and water-related adventure tourism (Rulal, 2014) provide insights into different types of adventure tourism. Some other literature on adventure tourism focused on motivation and perceived risks (Mason et al., 2016), risk and management implication (Carter, 2006), and motivation and loyalty of the demand (Carvahe-Franco et al., 2022). Adventure and extreme tourism are considered niche markets, and it is crucial to explore people’s awareness and preferences and other related factors for both extreme and adventure tourism combined. Since individuals’ subjective experience and perception of adventure also need to be considered for a complete understanding of adventure and extreme tourism (Weber, 2001), we aim to explore these factors using a questionnaire survey.

In this study, we selected Poland for the survey to explore the Polish people’s perceptions related to adventure and extreme tourism. We chose Poland because extreme and adventure tourism is increasing among young people, and many types of adventure tourism are not only popular but also originated in Poland, such as ballooning (Opublikowano, 2017). We focused more on these types of tourism because we explored tourists’ perceptions, specifically how they spend their leisure time, the desire to explore, information collection sources, discovery, and experience to test themselves to help discuss the industry’s policy implication. Based on the study results, we can predict how we relax and spend our free time at a higher level of emotions and sensations, in this case, choosing extreme and adventure tourism.

**Extreme tourism**

**Essence of extreme tourism**

Extreme tourism is a trip to engage in extreme sports. Many authors point to the belonging of extreme tourism to adventure tourism, which is so diverse that it also includes “hard” forms with a high level of risk (Fennell, 2007). The characteristic of this form is a high risk, which often involves physical exhaustion, injury, and even loss of life (Pomfret, 2006). Those who practice this form of recreation face their mental and physical limits, and the motives for practicing it are self-realization, the need to impress, individualism, and the need to break away from the monotony of everyday life (Management Encyclopedia, 2021). Such forms of recreation are sought because of the need to relieve stress, “get out,” and change the environment from the view of everyday concrete and asphalt cities (Sekida and Malchrowicz-Mośko, 2016). This form of recreation began to flourish in the 1970s and continues to grow. Extreme tourism is about the places where it is practiced, these are strictly defined places, so there is a need to travel to these areas. Usually, these are mountainous coastal countries and regions - the most popular European country for extreme tourism is Montenegro, which combines these landscapes. The most popular non-European
country is New Zealand; even though it is small, it has excellent resources for extreme tourism enthusiasts. Travel agencies prepare and offer more and more professionally, including the employment of properly prepared professional trainers and instructors to increase safety and avoid unnecessary risks of accidents.

**Types of extreme tourism**

The phenomenon of extreme tourism is controversial, and this is how the social perception of the mentioned branch of tourism presents itself. The discussed type of tourist activity may also be associated with extreme sports, minimizing the risk and maximizing the experience. One of the main features of extreme tourism is its focus on finding unusual, niche forms of entertainment.

One of the types of extreme tourism is water tourism related to water bodies. We include cannoning, an activity created by alpine hikers and consists of climbing with equipment up mountain rivers and rafting down such a river, not excluding rafting down a waterfall, to a body of water near the waterfall. The route is picturesque but dangerous - it has various obstacles, such as narrow passages, waterfalls, and caves. It requires excellent physical condition and no fear of heights. The most popular areas for this sport are the Alps and Slovenia - they have the most attractive terrain for cannoning. In developing countries like Nepal, which have a terrain landscape and strong currents in rivers, white-water adventures such as cannoning, canoeing, and rafting are popular (Rulal, 2014).

Mountain kayaking is another form of extreme tourism, where tourists canoe down a mountain river in a single-person kayak. There are several varieties of this kind of kayaking: river running, flowing down the mountain rivers, creaking, which is flowing down narrow streams, which have a large drop.

Extreme water tourism is not only swimming underwater but also swimming in the water, moving on a board powered by a kite. This type of extreme tourism is called Kiteboarding. The history of using a kite for propulsion, and consequently for movement, goes back very far because the first records were found in China in the 5th century; further records date back to 1826, when George Pocock, an English explorer, used a kite to propel a carriage. This power was used in various ways throughout the following years, but only in 1977 was it given its present form. In Poland, this sport appeared only in 1999; the development of this discipline at the beginning was slow, but with time it accelerated and now enjoys great popularity. The most popular place where it is possible to practice this sport is the Hel Peninsula (PZKite, 2022).

Hydro speeding is based on rafting down a mountain river on a dedicated plastic board, and the whole body is used to steer and fins. This sport originated in France and derived from rafting and requires courage, physical strength, and the ability to swim. Hydro speeding is most prevalent in France. In Poland, the Dunajec river
has a hydro-speeding route where tourists can participate under the supervision of experienced and qualified coaches (Mcanoe, 2022).

Diving/Freediving is a sport where no equipment is used. The equipment for such diving is only a mask, wetsuit, and fins. This is a demanding and dangerous sport because many irreversible changes occur in an oxygen-depleted body. There are also variations of this sport, such as depth diving, where the task is to reach the maximum depth of diving in one breath (Kursy, 2022; Nurkomania, 2022). There are different types of diving as follows:

- Night diving: in night diving, the emphasis is on navigation skills and proper lighting.
- Cave diving: diving into bodies of water hidden under the earth's surface. This sport comes from France, and there it is prevalent, but in Poland, there are also many objects to explore.
- Ice diving: diving in the ice.
- Skydiving: a jump from an airplane, from an appropriate height, at first participants free-fall, and at the right moment, one should open the parachute and safely land on the ground. Free flight is the time to perform various acrobatics, arrangements, or tasks.

When talking about extreme tourism, we should also mention adventure racing. Adventure racing in the extreme terrestrial tourism zone, adventure racing combines several types of activities. Usually, these are orienteering marathons with trekking, mountain biking, swimming, and cross-country skiing. It might be cycling with climbing, kayaking, or rollerblading elements in another setting. The time that adventure racing takes place is specified for each event, ranging from a few hours to even a few days. No GPS or other electronics are used during the event, and the route is planned and executed using maps and a compass (Frańczek-Bogacka, 2021). As with most extreme sports, motivation is the need to test yourself and your abilities.

Mountain biking should also be mentioned among the types of extreme tourism. It is not only about mountains. It includes all difficult terrains, with the difficult ground and natural obstacles. The cradle of this sport is the United States, and its origin dates back to the 1970s. Nowadays, there are several varieties of mountain biking, including a free ride on a natural trail with additional obstacles, steam or quad races, downhill, endure (rider rides on a designated route of different construction), trial (a ride on a bike, overcoming various obstacles, and not touching the ground with foot). Many different competitions are organized in this discipline, and the most popular are cross-country and marathons. A marathon in mountain biking is a long-distance ride, from 50 to even 200 kilometers (National Geographic, 2021).

Motocross is another extreme land sport designed for people eager for a powerful and spectacular experience. This sport is based on racing motorcycles on gravel, grass,
or mud tracks. It usually takes place on a modified track, with hills and mountains added for variety and to increase the level of difficulty.

Mountain boarding is a combination of skateboarding and snowboarding. It is a ride on a snowboard attached to the pumped wheels, and people can ride almost everywhere, so it is not a sport that requires high financial investments. A similar sport is street luge, identical in that it also depends on a board, but the board and its wheels are completely different. Street luge is a crazy downhill ride on the road and dodging between vehicles; speeds reached during this ride are 100-140 km/h (Rozrywka, n.d.).

Climbing does not require any special qualifications or very sophisticated or expensive equipment. The types of climbing are climbing on artificial walls, rock climbing and climbing at heights, bouldering, ice climbing, etc. Climbing is done mainly in two ways. The top rope or rod belay consists of attaching oneself to the rope attached to the summit, to which one climbs, and the other end of the rope is attached to the belayer. The second type of climbing is bottom belaying, which means that the climber clips to the belaying devices one by one so that in case of falling off the wall, they fall as far as the distance from the subsequent belaying devices. The last type is climbing without a belay, a hazardous form.

Speleo or caving is another extreme sport in the mountains. Speleology is a typically scientific exploration of caves. In contrast, a speleologist is a person who is passionate about caves as a tourist and sport.

Base jumping is considered one of the most dangerous sports globally. This extreme sport has three variations: base jumping, wingsuit base jumping, and proximity. Bungee jumping is a safer and more adrenaline-pumping activity. A similar discipline is dream jumping, but longer and more effective, and the technique of this jump allows you to jump from any chosen object.

Parkour is a training method that relies on natural human abilities such as running, climbing, lifting, and jumping, but it can also be swimming. The main goal is to overcome the obstacles encountered on the road in the easiest, safest, and fastest way possible, but the way to overcome them depends only on the practitioner of this sport.

Paintball is also an extreme sport in the land group and involves surviving unshot on the playing field. This sport can be played by anyone, regardless of age or social status, let alone gender. Strength, agility, and speed are not important in this game; what counts most are determination, quick thinking, and sharpness (Paintball, 2021).

Paragliding is an air activity and free flight using a hang glider. As with most sports, it is necessary to go through a preparation course in order to enjoy the pleasures of
flying safely. The location is not a limitation either; a small hill is enough to get into the air. Paragliding is an extreme sport, but the risks are small with common sense and safety rules (Szczypczyńska, 2021).

Hang gliding is a discipline similar to paragliding, but the difference is that people fly with a rigid wing, which is the main difference from paragliding. This kind of flying does not require an airport or other infrastructure or high costs.

Skysurfing is a hybrid of parachuting and surfing. In addition to standard equipment, the jumper also has a surfboard, on which one performs stunts in the air. Skysurfing is a discipline for experienced skydivers because the board is additional resistance in the air and can cause uncontrolled movements of the jumper. In the case of competitions, there is also a cameraman with the jumper, who captures the flight, and later it is evaluated (Skykrawiec, 2021).

Cemetery is another type of tourism, which can be classified as extreme, only in a different aspect, allowing you to visit different cemeteries. It is not only seeing tombstones differentiated by the religion of the people resting there. It is also visiting non-religious cemeteries, where famous people from different spheres of life are buried (Gostkiewicz, 2012).

The mentioned types of extreme tourism have not fully exhausted the range of available types of such tourism. In the current world, only imagination limits the creation and practice of sports and tourism.

**Adventure tourism**

**The essence of adventure tourism**

One of the more and more popular forms of contemporary tourism is adventure tourism. According to the Canadian Tourism Commission (Fennell, 2000), it is associated with a greater or lesser level of activity. Thus, it constitutes “active leisure in the open air, which takes place in unusual, exotic, remote or wild terrain” (Fennell, 2000).

Adventure tourism is an active type of tourism that must have at least two features out of three: interaction with nature, physical activity, and cultural exchange. Adventure is the very argument that motivates a tourist to take a trip; these are often distant and exotic places. Adventure tourism is outdoor recreation, and the location of the performance is non-trivial, even exotic (Durydiwka, 2003). Buckley (2006) describes adventure tourism as commercial, organized guided expeditions, during which the main attraction is an outdoor activity, strongly dependent on natural terrain conditions, requiring sports equipment, and providing excitement to the participants of the escapade. In the literature on the subject, the emotional aspect of adventure tourism, spiritual and aesthetic experiences, insight, and deepening of knowledge (insight) and skills are increasingly emphasized (Weber, 2001).
Adventure tourism is distinguished because it has a risk component in the tourist’s perception, the level of effort incurred by the expedition’s participants is raised, and the participants must have certain skills to make the expedition successful (Weber, 2001). Some researchers argue that it is not the risk that is the goal of adventurers but the thrill of emotions. Carter (2006) argues that adventure activity attracts people more to the search for a sense of fear than risk. Adventure tourists consciously play with their fear, engaging in forms of activity that are almost risk-free and completely safe.

Adventure tourism can be divided into active and qualified tourism. The first is a low-risk, enjoyable leisure activity that does not require special skills to practice. The latter requires appropriate skills and preparation, the ability to use tourist facilities, and behave in a natural environment. The tourist must be psychophysically strong and resistant to hardships; often, he must also have qualifications confirmed by training. There is also a division according to tourism’s difficulty, and three levels of problem can be distinguished here. The first one is low-risk tourism and includes backpacking, tourist tramping, Nordic walking, and diving. The second one is medium-risk tourism, which includes skiing and snowboarding, mountain biking, longboarding, rock climbing, speleology, slackline, and motocross. The third group is high-risk or extreme sports - base jumping, downhill, mountaineering, skydiving, urban climbing, and freeriding.

Nowadays, the share of tourism as an economic branch is increasing. People still feel the need to spend time actively; they need a change from everyday life, but they also perceive the need to take care of their health, and such values have active leisure. Active leisure in nature has a positive effect on physical health and a significant effect on mental health. As the research shows, the reasons prompting tourist and leisure trips are various, but the main ones are the need to experience something different, the need to change the environment and to rest outside the place of residence, to get to know nature and to observe its natural beauty. The reasons given are also resting from the noise and pollution of the city, meeting new people and developing social contacts, changing this everyday environment, and meeting the same people. The need to improve physical condition and general health is also a goal, and these reasons are often referred to as the so-called need for a reset. Preferences are slowly changing. More and more people are replacing static leisure, with the horizon observed from the position of a deck chair, with active leisure and an escape from monotony (Durydiwka, 2003).

**Types of adventure tourism**

The most popular types of adventure tourism in Poland include tramping, tourist trekking, and survival (Kurek et al., 2007).
Tramping is known as “cheap travel” and is most often done in small, informal groups. In English-language literature, tramping is also referred to as backpacking. The participant of which (a backpacker) usually travels individually to remote areas and uses local infrastructure.

Tourist trekking is, in turn, trips to remote, often sparsely populated areas of the world. These types of trips are more and more often the commercial offer of travel agencies, where hiking takes place under the care of specialized guides or mountaineers (Globe, 2019). On the other hand, survival is a form of adventure tourism that means a school of survival in difficult conditions of the natural environment, which has a significant educational or psychological aspect.

Ballooning is adventure tourism with a low level of difficulty and risk. It can often be a romantic trip, and an adventure trip, allowing tourists to observe nature from a different, higher perspective. Ballooning started a long time ago, on June 5, 1783, in France, by brothers Joseph and Jacques Montgolfier. The second country was Poland. On January 17, 1784, in Krakow, Cracow, scientists built a balloon that rose into the air (Opublikowano, 2017).

If safari, only Africa and the most popular countries are Tanzania and Kenya. Safari can be two versions travel by car and travel alone. During the safari, tourists can enjoy wild nature or animals in their native habitat and the beauty of nature. Tourists can also meet the people living there and see how they live (Planet Escape, 2021).

Birdwatching is a kind of tourism that does not require significant expenditure, just good binoculars, a telescope, and possibly a camera. The best places for wildlife peepers are floodplains, water bodies, agricultural areas, forest edges and woodlands, and mountainous areas. In some places, there are hiding places where one can hide and thus limit interference in the environment, resulting in excellent observations. In Poland, there are many places where people can watch the birds, like nature reserves (Polish Tourism Organization, 2021).

Backpacking is a cheap form of travel, independent of commercial tourism. Backpacking is nothing but traveling on one’s own; it is appreciated by people who prefer to walk their own paths rather than submit to the plan of an organized tour.

Travelers in this way only take a backpack with them because it is very convenient with their way of traveling. The most popular destinations are India, Georgia, Uganda, Argentina, Ireland, and Bolivia are appealing countries because of their wonderful views, delicious food, and friendly locals.

Rafting is a little more demanding and no longer available to everyone, but thanks to its six difficulty levels, it can also be classified as adventure tourism. It is a rafting trip down a rushing mountain river in a pontoon or a raft, and a group of several
people can take part in it. In Poland, rafting on the Dunajec River dates back more than 200 years. The whole family can participate in such an attraction, there are no age limits here, and during the relaxation, you can admire the beauty of Podhale nature (Rivent, 2021).

The main difference between water skiing and wakeboarding is the number of boards one swims on. The first one, water skiing, is swimming on two boards using a particular lift or a motorboat pulling the skier, and equipment is needed to set it in motion. The same equipment sets in motion and allows you to stay on the water in wakeboarding, but the difference is that you float on one board. Water skiing has its own competitions - we can mention slalom, figure skating, and distance jumping here. The first of them consists in avoiding the buoys until you make a mistake, and with each pass, you shorten the pull line and speed up the ride. The second competition is figure skating, which involves performing acrobatic figures, usually in the form of a choreography, which the judges score. As for the distance jumping, meters of the jump length is counted (C&A, 2021).

Ski touring in a mountain setting combines skiing and mountain winter tourism - a great way to travel in the mountains in winter. This field is distinguished by its equipment: skis here are with skis and specific bindings adapted for walking. They allow you to move quickly and approach and descend a hill or mountain. This sport can be practiced in the mountains and the country, but there are also slopes in various locations and equipment rental shops. Regardless of the chosen terrain, taking advantage of training with an instructor at the beginning of the adventure with downhill skiing is worthwhile because it can prevent unnecessary injuries (Dąbrowski, 2012).

In snowboarding, the difference is that instead of two skis, you use one board. The shape and use depend on what you want to do on the board, as well as the predisposition of the athlete. The sport originated in the U.S. in the 1960s, the shape of the boards has evolved over the years, and it's still going on because everyone selects their board. Nowadays, snowboarding is a trendy sport; practically, you can find such equipment in every rental shop.

Mountain adventure tourism can also include caving. Amateurs of this kind of tourism can choose advanced caving as extreme tourism or less advanced caving in easier caves. Those who seek wonderful views and the power of nature will surely be satisfied. Children can participate in exploring caves with low difficulty; advanced equipment is not needed, as in the case of cave mountaineering or the exploration of caves that have not been completely explored. With the increasing level of difficulty of the caves, it is necessary to invest in equipment and training to ensure the expedition's safety (Szozda, 2019).
The urbex comes from the English language and combines two words, urban and exploration. Urbex is a type of activity that involves exploring and discovering dilapidated, empty places that have been forgotten or hidden but were created by man.

In skateboarding and longboarding, the difference between the two is the board’s construction and, thus, the riding capabilities. The longboard is longer and adjusts to a person’s height, allowing for a better and faster ride. A longboard also must taper at the wheels, allowing for better steering; it also has larger wheels than a skateboard, contributing to cushioning and better vibration absorption. A skateboard is a better choice for freestyle riders who want to perform various tricks - a small, lightweight, and agile skateboard is good for the skate park. Slackline is walking on a rope. Slackline, a firm, reasonably comprehensive, and springy webbing, is fastened between two points.

**Methods**

We used the snowball questionnaire survey in the study. The questionnaire was prepared in google forms and distributed through different SNSs, emails, and other networking sites. The questionnaire contained questions about the dominant form of practicing adventure and extreme tourism, the level of interest, and the possibility of practicing it in Poland among the respondents. The survey also explored the opinions and perceptions of extreme and adventure tourism. In total, opinions were collected from 1080 anonymous respondents from various regions who declared they actively engaged in adventure tourism in and outside Poland.

**Table 1: Characteristics of the study sample**

<table>
<thead>
<tr>
<th>Items</th>
<th>Percentage</th>
<th>Items</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td>Income (PLN)</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>58.1</td>
<td>500-1000</td>
<td>12</td>
</tr>
<tr>
<td>Female</td>
<td>41.9</td>
<td>1001-1500</td>
<td>11.1</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td>1501-2500</td>
<td>43.5</td>
</tr>
<tr>
<td>Up to 25</td>
<td>64.8</td>
<td>2501-3500</td>
<td>22.2</td>
</tr>
<tr>
<td>26-30</td>
<td>30.6</td>
<td>Higher</td>
<td>77.8</td>
</tr>
<tr>
<td>31-40</td>
<td>3.5</td>
<td>Secondary</td>
<td>17.6</td>
</tr>
<tr>
<td>41-50</td>
<td>0.9</td>
<td>Basic vocational</td>
<td>2.6</td>
</tr>
<tr>
<td>51 and over</td>
<td>0.2</td>
<td>Primary</td>
<td>2.0</td>
</tr>
</tbody>
</table>

*Sources: Authors survey. n=1080 Note: 1 USD= 4.25 PLN*

The authors conducted a diagnostic survey to determine the actual state of awareness of leisure activities and people’s preferences regarding adventure tourism
using online social networking sites like Facebook (July 2021). Details are in Table 1. Not limiting the surveyed group in any way resulted in a wide coverage of the topic of extreme and adventure tourism and allowed learning about the opinions of customers of different ages, education, and financial status.

The majority of the respondents in this survey are young, less than 40 years of age, and 43.5% of respondents earn between 1500 to 2500 PLN monthly. Secondary and more-educated people majorly participated in the survey. During the online SNSs surveys, young and educated participants were frequently observed more than any others (Bhatta et al., 2022).

Results

Manners of spending leisure time by people

We asked people what types of tourism activities they participated in most (Figure 1). The results showed that leisure tourism is the most popular (41%), followed by active tourism (20%). This type of tourism was, therefore, the primary form of recreation. It allows both physical and mental relaxation without unnecessary effort. Cycling (13%), hiking (10%), adventure tourism (9%), and extreme tourism (5%) were the subsequent choices of Polish people. Altogether, extreme and adventure tourism was chosen by 14%.

Figure 1: Types of tourism practiced by respondents.

<table>
<thead>
<tr>
<th>Tourism Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leisure tourism</td>
<td>41%</td>
</tr>
<tr>
<td>Active tourism</td>
<td>20%</td>
</tr>
<tr>
<td>Cycling</td>
<td>13%</td>
</tr>
<tr>
<td>Hiking</td>
<td>10%</td>
</tr>
<tr>
<td>Adventure tourism</td>
<td>9%</td>
</tr>
<tr>
<td>Extreme tourism</td>
<td>5%</td>
</tr>
<tr>
<td>Others</td>
<td>2%</td>
</tr>
</tbody>
</table>

Regarding the travel modes for travel, Figure 2 shows that the majority of respondents chose coach (41%), car (26%), train (15%), and aircraft (14%) for their movement. This clarifies that the bus was the primary mode of travel. A similar result was explored in Nepal, where people use coaches to travel during COVID-19 because it is cheaper and easy to travel in a group (Bhatta et al., 2022).
The organizing trips show the current trends and expectations of travelers. The vast majority of respondents (88%) answered that they organize their leisure time themselves, and 9% of people used the services of professional travel agencies (Figure 3). The remaining used other ways of organizing free time.

Figure 3: Ways to organize trips (overall).

Respondents’ knowledge of extreme and adventure tourism

The definition of the term extreme tourism was asked, and the results are presented in Figure 4. A total of 37% of respondents identified extreme tourism with intense emotional experiences. Slightly fewer people (25%), think that extreme tourism requires special skills and extreme mental toughness, and 23% express that this type of activity requires taking great risks. Only 10% considered extreme tourism as a journey to practice sports.
Survey participants were also asked what adventure tourism is for them (Figure 5). The opinions were not very divided. The largest portion of the participants (34%) associated with adventure tourism trips to nature, where they actively spend time. One in four respondents identified adventure tourism as a trip to experience adventure, while 22% believed that these are trips to exotic, hard-to-reach, dangerous places. The last group of respondents, accounting for 20%, saw adventure tourism as virgin exploration, exploratory journeys to undiscovered places.

Regarding the knowledge checking of adventure and extreme tourism, we asked for the source of information (Figure 6). The most source of information was friends and acquaintances because they usually provide news from their experience in the survey. This form was indicated by 54% of the respondents. The next source of information was the Internet (26%). The third most frequently indicated source was television programs (14%). Besides the journalistic programs that show these types of tourism, there were also programs and even thematic channels from which to get knowledge. The rest of the information sources were books and magazines.
Figure 6. Sources of information when choosing a tourist destination for adventure and extreme tourism

We also asked which extreme tourism sports are known to the respondents. This question directly shows how familiar the topic of this type of tourism is to the respondents (Figure 7). We found that respondents were very knowledgeable about extreme sports, despite the multiplicity of their types. The most familiar were climbing (15%), scuba diving (13%), skydiving (13%), paintball (12%), bungee jumping (9%) and survival (8%). Overall, these are the most popular sports among extreme sports and the most frequently chosen to practice and explore.

Figure 7: Knowledge of listed extreme tourism sports among respondents. (*Respondents could indicate more than one response.)

For completeness, the next question is whether the respondent knows these sports from experience, or only theoretically, or only knows of their existence. As the results show, a little over half of the respondents (52%) have done any extreme sports (Figure 8). This shows that knowledge about these sports is not only theoretical.
Figure 8: Practicing extreme sports among respondents.

| Yes | 52% |
| No  | 48% |

About the reliability of the research is the information on how often extreme tourism is practiced by the respondents (Figure 9). It is important to show how popular extreme tourism is, and how often it fills one’s free time.

Figure 9: Frequency of extreme tourism by respondents.

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>40%</td>
</tr>
<tr>
<td>Occasionally (once a year or less frequently)</td>
<td>26%</td>
</tr>
<tr>
<td>Rare (up to three times a year)</td>
<td>24%</td>
</tr>
<tr>
<td>Common (once a month/once every 2</td>
<td>7%</td>
</tr>
<tr>
<td>Regularly (2 times a month or more often)</td>
<td>3%</td>
</tr>
</tbody>
</table>

We found that most of the respondents did not use this form of activity (40%). Another part of the respondents practiced these kinds of sports occasionally (26%), quite rarely - once a year or even less. At the same time, 24% of respondents practiced extreme sports up to three times a year. The rest were people who enjoyed these sports quite regularly, it is quite often, even twice a month or more often. These data show that regular practices are only 10%.

Regarding personal feelings on the degrees of danger associated with extreme tourism (Figure 9), we found three types of opinions. The indications of those responding were very clear, and the majority, 83% of those asked, described it as a dangerous sport, with 20% describing the danger as definitely and 63% indicating rather dangerous. Only 17% indicated feeling negative but not definitely.

Figure 10: Recognition of extreme tourism as a dangerous type of tourism among respondents.

<table>
<thead>
<tr>
<th>Recognition</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rather yes</td>
<td>63%</td>
</tr>
<tr>
<td>Definitely yes</td>
<td>20%</td>
</tr>
<tr>
<td>Rather not</td>
<td>17%</td>
</tr>
</tbody>
</table>
Motives and barriers to extreme sports participation of the surveyed people

Respondents cited the arguments in Figure 11 as their motives for engaging in extreme sports.

**Figure 11: Motives for participating in extreme sports. (Could indicate more than one response.)**

<table>
<thead>
<tr>
<th>Motive</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A source of unprecedented sensations</td>
<td>23%</td>
</tr>
<tr>
<td>Curiosity</td>
<td>15%</td>
</tr>
<tr>
<td>Communing with nature</td>
<td>13%</td>
</tr>
<tr>
<td>Willingness to go to places not yet visited</td>
<td>13%</td>
</tr>
<tr>
<td>Overcoming Your Own Weaknesses</td>
<td>11%</td>
</tr>
<tr>
<td>Relieving the stresses of everyday life</td>
<td>10%</td>
</tr>
<tr>
<td>Improving physical condition</td>
<td>5%</td>
</tr>
<tr>
<td>Detachment from household chores</td>
<td>5%</td>
</tr>
<tr>
<td>Possibility to meet other people</td>
<td>5%</td>
</tr>
</tbody>
</table>

The most common reason, the motive that initiates the interest in extreme tourism, was chosen by 23% of respondents. Further, motives were curiosity (15%), communing with nature, and willingness to visit new destinations (13%). Other motives included: overcoming one's weaknesses (11%) and the desire to relieve the stress of everyday life (10%). The same number of responses (5% each) answered getting away from daily activities, improving physical condition, and the opportunity to meet other people, including those who share a passion.

**Figure 12: The barriers of adventure travel**

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental (fear, fear of such trips)</td>
<td>31%</td>
</tr>
<tr>
<td>Financial</td>
<td>19%</td>
</tr>
<tr>
<td>Lack of free time</td>
<td>17%</td>
</tr>
<tr>
<td>Fitness</td>
<td>15%</td>
</tr>
<tr>
<td>Fear of loved ones for me</td>
<td>10%</td>
</tr>
<tr>
<td>Lack of information/poor advertising</td>
<td>5%</td>
</tr>
<tr>
<td>Lack of adequate infrastructure</td>
<td>4%</td>
</tr>
</tbody>
</table>

Discussions and conclusions

According to the research, extreme and adventure tourism are gaining more and more fans. They are more often chosen forms of activity, a form of spending free time.
The number of fans of this type of activity is growing thanks to the development of equipment, and the bases available for practicing this discipline without significance is the information that is increasingly available on the Internet. Information is also the reason why the awareness of tourists about the possibility of choosing various types of activity is growing. Based on the survey in Poland, we found that leisure tourism is mostly practiced (41%), and the extreme and adventure tourism market is 14%. Although extreme tourism has excessive potential, it is less practiced. Around 40% of respondents said they never practiced adventure tourism, and 26% said that they hardly practice once a year. Thus, tourism entrepreneurs and policymakers can promote extreme and adventure tourism in the country, focusing on young people.

The most common motive for choosing extreme and adventure tourism is curiosity and seeing these disciplines as a source of unprecedented experiences. It is also a chance for original and unforgettable experiences and individualization. As a result, extreme sports are increasingly regarded as a beautiful way of spending free time. More and more people take advantage of such an opportunity to experience the thrill. In our survey, 31% said adventure and extreme tourism are dangerous. This means people must first overcome their fear of participating in extreme and adventure tourism. Thus, the first barrier, i.e., mental fear, should be removed and ensure safety measures, short training, and awareness among the tourists. The easy equipment makes it possible for younger people to practice these kinds of tourism, and preparation of bases is also of great importance in this matter.

More and more activities are available for whole families, and the instructor’s background contributes significantly to popularization. There is also a growing awareness of the fact that not much money is needed to practice these activities. While extreme tourism usually requires specific equipment, adventure tourism does not require much specific or specialized equipment. The emergence of more and different types of equipment on the market has also influenced its price, which can be found in a large range, and this allows more people to purchase it. The number of equipment rentals has also increased, which is also useful if someone wants to try different activities and choose the most suitable one.

The number of people taking advantage of this wide range of activities is growing every year, which is also a form of investment in this branch of the economy. Poland, as a country, also has a lot to offer. Thanks to its structure and the fact that it has such a diversified area, it is attractive to amateurs in many different activities. It has a base of excursions, accommodation, technical facilities, and instructors necessary for most activities. In response to demand, there are more and more places where you can indulge in your favorite activity and try completely new forms.
In this study, we are fully based on the data of young people from Poland collected through SNSs and snowball sampling from the developed countries’ perspectives, and it could be more interesting if we compare the data from developed countries as well. Further, studies in different destinations would bring more significant results. These points should be considered in further studies.

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**Data availability:** Only integrated data will be available on request to the first author.

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