# RISK TAKING PROPENSITY AMONG PEOPLE INVOLVED IN VARIOUS FORMS OF WINTER RECREATION ON THE EXAMPLE OF SKIING

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**Alisiract.** Nowadays, recreational activity is not only the general tendency to improve physical function, but is also associated with increased physical effort and risk. For example, there has been the development of more sophisticated and dangerous forms of skiing. Today, skiing can be divided into downhill skiing, practiced in ski resorts, and freeskiing. The freeskiing forms include ski-touring and freeride, considered as extreme. The extreme forms are characterized by high risk as the main motive for their practice. The most important predisposition to engage in those activities is the courage expressed in risk taking propensity. Risk taking propensity is a personality trait that affects human decisions in risky situations. Depending on its severity, more or less risky behavior can be observed. The aim of the study was to determine the level of propensity to risk behaviors of people involved in forms of activity associated with a higher risk in comparison with other participants, on the example of recreational skiing. The questionnaire constructed by Ryszard Studenski was used to measure the risk taking propensity and frequency of risky behavior. The research was carried out on 40 persons classified on the basis of the declaration of preferred form of skiing. People practicing extreme forms of winter activity (ski touring, ski-mountaineering) showed lower level of risk taking propensity than a group of downhill skiers. It was found that the preference of risky sports is not definitely related to the higher propensity to risk-taking behavior.

Key words: risk, extreme sports, winter recreation, skiing, safety

# Introduction

A man seeking compensation for the difficulties of modern life, consciously chooses voluntary physical activity in the natural environment as the way to meet the needs of health and leisure. Winter recreation is a source of positive emotions provided by physical contact with the environment and the mountains. Being surrounded by the cold, snowy winter in the midst of the characteristic features of the landscape, such as clean air, open mountain slopes and forest glades, skiing helps to improve health, and has a positive effect on the psyche (Krasicki 2001).

Changes in the present human reality are reflected in the field of tourism and recreational activity. Skiing – a form of activity with a long tradition, also subjected to these changes. One of the trends in the development of

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modern recreation is a search for new, spectacular and attractive ways of spending free time. The phenomenon of human's lifestyle changes, like increasing range of leisure time and minimization of physical activity, are the main causes of rapid development in extreme forms of physical recreation that meet the need to experience the exciting, intense and emotional experience associated with taking up risky activities (Mynarski and Veltze 2008). Physical activities carry potential health and life risks, especially ones that are practiced in the mountains, and those which are generally dangerous for humans. However, the attitude towards the risk of outdoor activities has changed and it is the most important difference between traditional and modern forms of leisure and active tourism. In traditional forms of activity an element of risk is necessary to accept, but in extreme sports it is desired (Zdebski and Kozicka 2007). Nowadays, the way of understanding the term "recreation" is changing. Classical recreation evolves in the direction of progressive and creational forms. The characteristic features of those forms are the increased physical effort and the risk associated with practicing physical activity, which leads to extreme emotional stress and excitement. Recreation in the classical meaning is a general tendency to improve physical function. The hone of physical capacity and skills beyond the genetically inherited conditions are called the progressive or creative recreation. If these limits are exceeded radically the recreation becomes extreme (Gracz and Sankowski 2001; Gracz and Bronikowski et al. 2004).

The extreme forms of recreational activity can be divided into extreme tourism and extreme sports. Extreme tourism includes adventure, "hyperactive", unconventional tourism or outdoor adventure recreation and extreme recreation. Extreme sports include adventure, risky, dangerous, or unconventional sports. (Mynarski and Veltze 2008).

The term "extreme sports" is used for a wide variety of behaviors in the field of physical activity which require certain determinants, both physical and mental (Muszkieta and Gembiak 2004), with the risk as an essential factor and eligibility criterion (Ławniczak 2011). These sports are practiced due to the desire to overcome difficulties, experience new strong sensations, get unusual experiences, give one's best (Ławniczak 2011), test the possibilities of participants in conditions of increased risk, and finally, to feel a sense of achieving something special, even when treated as an ordinary fun (Muszkieta and Gembiak 2004). Every recreational activity taking place in the outdoor centers, containing element of real or conscious risk, is called the adventure tourism and outdoor adventurous recreation. Its result is unknown and determined by both the participant and the environmental conditions (Łobożewicz and Bieńczyk 2001).

Extreme forms of physical activity, associated with both sport and tourism, have common features such as the extreme intensity of a physical effort, the adventurous character of an activity and the risk of injury or death (Mynarski and Veltze 2008).

The development of more sophisticated and dangerous forms of skiing came with the advent of many new types of outdoor recreation activities. They represent forms of communing with the wildlife and dangerous, harsh climate of the mountains. High risk, total isolation, overcoming barriers of the extreme environment and the body's own limitations are the main goals of this activity. The unusual strong feelings connected with practicing, for example freeride or heliskiing, provide physiological stimulation of the body, because of the presence of numerous and very serious threats to life and health, which an extreme skier is exposed to (Wojtyczek and Pasławska 2012). Modern forms of skiing, such as ski touring, off-piste skiing and freestyle, are termed freeskiing by Philip (2010). Assuming completion of the infrastructure criterion, he distinguishes freeskiing from skiing practiced in organized ski areas only around ski lifts, in an atmosphere of general consumption and safety. Extreme skiing, i.e. ski-mountaineering,

freeride, is indicated among the basic activities of adventure tourism (recreation outdoor adventure recreation) and extreme tourism (Łobożewicz and Bieńczyk 2001). Nowadays, the development and growing popularity of unconventional forms of recreational activity is associated with intense experiences, variety of threats and high risk occurrence. We also observe the evolvement of skiing as a form of winter recreation.

Risk is an ambiguous term, and there is a variety of its definitions, depending on the field of knowledge and theoretical concepts based on it (Makarowski 2010). Generally "risk" is conceived as a probability that something would not work, or as an activity that involves threat of something of value (Szymczak 1981; Kurcz and Skarżyńska 2010). In psychology, risk is treated as experienced under the influence of impressions generated by the incentives, informing about the risks and characteristics of the situations in which hazards occur. Perceived risk is a single, coherent and subjective picture of oneself or others in relation to the threat. This image influences the preferences and the choices in decision-making situations (Studenski 2004).

Personality trait that affects human decisions in risky circumstances is called a risk taking propensity. Depending on its severity, different humans behaviors can be observed. Risk has a positive value for daredevils, so they prefer to act with a hazard of high level. A person representing low level of risk taking propensity avoids risky activities in all circumstances (Goszczyńska 1983).

We can distinguish the tendency to seek or take the risk, defined as the risk taking propensity and tendency to avoid risky situations and behaviors, called risk aversion. In psychology, a common position on the generalized tendency to take risks has not been formulated. There are three views on the existence of a tendency to risky behavior. One of these states that risk behaviors are conditioned by the characteristics of the situation. Others scientists are of the opinion that the propensity for risky behavior is a personality trait, or a trait of stabilizing level when the initial tendency to risk stabilizes with the acquisition of experience. In this study, it is assumed that the risk taking propensity is a relatively permanent characteristic of behavior and its level observed and specific to the individuals is related to the tendency to risky behavior (Studenski 2004; Makarowski 2010).

Taking risks, always connected with physical activity in the environment, became the goal of participation in forms of activities which carry very strong impressions and a real possibility of injury or even death. The purpose of the following research is to measure the level of propensity for risky behavior of people engaged in forms of activity associated with a higher risk compared to other participants, on the example of recreational skiing.

### **Methods**

To fulfill the aims of the study, the method of diagnostic survey was used. One of the methods of risk assessment based on the assumption is that the perception of risk and risk taking propensity are relatively stable individual traits (Zaleśkiewicz 2005). The research tool used for data collection was the questionnaire constructed by Ryszard Studenski (pol. *Test Zachowań Ryzykownych*), which measures the declared rate of participation in high-risk situations and experiencing the satisfaction of risking. The questionnaire consists of 25 general statements depicting risky activities or designs making risky behaviors. The subjects make self-assessment on a 5 point scale (Studenski 2004). For the purpose of classification we also used a questionnaire survey about the skiing preferences. The study was carried out on 40 recreational skiers, among which 21 persons indicated downhill skiing on organized ski areas and 19 persons indicated skitouring, as the preferred forms of winter recreation.

# Results

Alpine skiers group consisted of 17 men and 4 women, with the average of 36 years of age. Among the respondents practicing skiing in the organized areas there were 11 women and 8 men whose average age was 29 years of age. In both groups the majority of skiers had a higher education degree – 14 among ski-alpinists, 15 among downhill skiers (Table 1).

 Table 1. Gender, age, education of questioned skiers

		Skialpinists	Downhill skiers
Gender	number of women	4	11
	number of men	17	8
Average age		36	29
Education	university	15	14
	secondary	1	5
	professional	2	0
	other	3	0

Respondents were asked how many years they have been practicing skiing for and what level of skiing skills they represent. In the group of ski-alpinists the majority (8) have been practicing this type of activity from 2 to 4 years, 6 persons for more than 10 years, 1 - less than 1 year, 2 people – from 6 to 8 years, 4 people – from 4 to 6 years. Among recreational downhill skiers 13 people declared that their period of skiing is longer than 10 years (3 persons – 4 to 6 years, 2 persons – from 2 to 4 years, 1 - 6 to 8 years) (Figure 1).

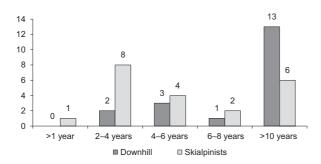


Figure 1. Length of practicing skiing by questioned groups

In both researched groups, the largest number of people pointed to the advanced level of their skiing skills (ski-alpinists – 9 people, downhill skiers – 10 people). There were 2 beginners in each group. The intermediate level was indicated by 7 ski-alpinists and 6 skiers riding on the prepared slopes. One person among downhill skiers and three ski-alpinists represented the "expert" level (Figure 2).

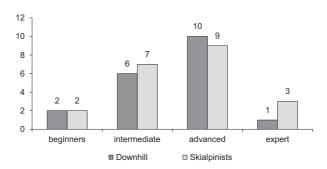


Figure 2. The level of skills presented in preferred form of skiing

The measurements of risk taking propensity as a trait, researched with Studenski's questionnaire, were examined. People practicing skiing in organized recreational ski areas have obtained higher arithmetical averages in the risk taking propensity measurements (41.19). Ski-mountaineers have obtained an average measurement of 48.74 (Table 2).

 Table 2. Arithmetical averages in the risk taking propensity measurements in downhill skiers and ski-alpinists

	Arithmetical averages in the risk taking propensity		
Skialpinists	41,19		
Downhill skiers	48,74		

Evaluation of the test results is made on the basis of standards scale (Studenski 2004). Most individuals in both groups showed an average tendency to take risks. Among downhill skiers it was a total of 10 people, among ski-alpinists – 17 people. The result indicates a very strong risk propensity gained by 6 persons engaged in skiing on organized ski areas. A strong tendency to risky behavior was observed in the case of 2 downhill skiers and 4 ski-alpinists (Figure 3).

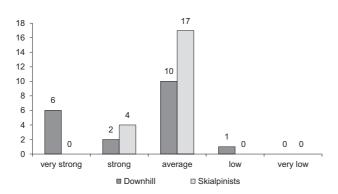


Figure 3. The risk taking propensity in downhill skiers and ski-alpinists

We analyzed the percentage of persons with different measurements of risk taking propensity. There are 81% of people with an average tendency to risky behavior, and 19% with a strong tendency to risky behavior in the group of ski-alpinists (Figure 4).

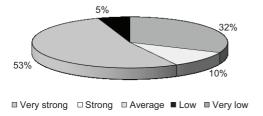


Figure 4. Percentage of risk taking propensity measurements in ski-alpinists

53% of downhill skiers showed the average risk taking propensity, 32% of those – very strong, 10% – strong, and 5% – low (Figure 5).

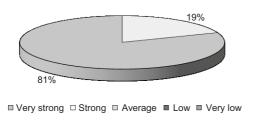


Figure 5. Percentage of risk taking propensity measurements in downhill skiers

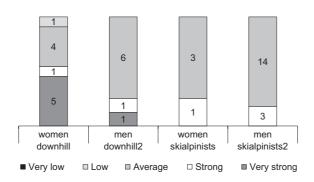


Figure 6. Percentage of risk taking propensity measurements in men and women practicing downhill skiing and ski-mountaineering

Among the surveyed women 5 downhill skiers showed a very strong, 4 average, 1 low and 1 strong risk taking propensity. Only 1 woman practicing ski touring has a strong risk taking propensity and 3 have an average tendency to risky behavior. Men, with a preference for both ski-mountaineering and downhill skiing, most often obtained an average measurement in the test of risk taking propensity. Strong risk taking propensity characterized 3 downhill skiers and 1 ski-alpinists. Only one man from the group of downhill skiers showed a very strong tendency to take risks (Figure 6).

# Discussion

One of the most popular winter recreational activities is downhill skiing, but its alternative forms, such as ski-alpinism, gain more popularity. Risk is present in every human physical activity and risk factors are variously determined. Hence, there is a necessity to investigate skiing safety issue, taking place both on organized ski areas and undeveloped mountain areas. The issue of perception and risk analysis is particularly important in the case of recreational sport whose participants do not have wide general sport knowledge, professional advice and care, which takes place in professional sport (Gracz and Sankowski 2001; Merski and Warecka 2009).

Such activities as ski-mountaineering are the example of extreme sport forms, which gain popularity as recreational sports. According to Andrzejewska (2007), extreme sports are inseparable with the risk of death and fear, and the consequences of a mistake can result in serious injuries, permanent disability or death. However, the fact that an individual does not avoid the risks interrelated with practiced discipline, it does not mean that the risk is the only really desired factor. Moreover, if the risk taking had been the only purpose of an activity, such a long time would not have been intended for preparing to the attempt (Andrzejewska 2007).

However, the propensity to risk has a variety of determinants related to individual's characteristics, but also situational factors, which include the type of an activity. The results of the presented research confirm the reports on the characteristics of the ski-alpinists' population. The vast majority of respondents (70%) obtained a university degree, and mostly came from cities (about 90%). These are mostly men around the age of 35, who are professionally active (Bielański 2010). According to collected data, the prevalence of men in the group of ski tourers has been noticed (Table 1).

Research viewing the correlation of gender and individual personality traits and propensity to take risk behaviors is carried out mainly in the field of psychology. The higher measurements of risk taking propensity and frequency of risky behaviors are obtained by men. What is more, its relationship with personality traits correlated with gender is confirmed (Studenski 2004). One of the psychological features correlated with gender is the sensation seeking. The intensity of sensation seeking in males involved in recreational high risk sports is stronger in comparison to control group of non-sport men (Guszkowska and Bołdak 2010). The result of comparing risk taking propensity level of ski-alpinists and downhill skiers does not seem to be similar. The group of women practicing skiing in the organized areas have obtained the measurements indicating for a very strong risk taking propensity. The majority of questioned male skiers have gained the moderate measurements of risk taking propensity (Figure 6).

Our results partially confirm the scientific reports regarding the tendency to risky behavior of people involved in 4 different sports containing a significant element of risk.

The research conducted on aerial sports' participants shows that only parachutists and paragliders are the risk takers. However, the glider pilots, both sport and professional, regardless of aviation specialties, have obtained

moderate results in the tests of risk. These results did not differ significantly from the results obtained by the engineers and aircraft mechanics, which demonstrate that pilots are unwilling to take risk (Makarowski 2010).

The study of personality traits associated with the willingness to take risks among mountaineers, climbers and ski-alpinists showed no difference between the mountaineers and people involved in the activity with the same level of risk and occurring in similar environmental conditions. However, compared to the control group consisting of people who do not practice any risky activities, climbers, skiers and mountaineers achieved higher scores in the Total Sensation Seeking scale and the Experience Seeking scale. Also, they were more willing to seek for an adventure or thrill. The results obtained in the next research confirmed the connection between sensation seeking and practicing risky sports or engaging in other risky activities (Goma and Freixanet 2004).

The presented study showed that skiers, considered as extreme, do not show a higher level of risk taking propensity (Figures 3–5). Accordingly, spending leisure time in the winter time in the mountains, skiing in undeveloped area, is probably not motivated by the need to risk only. Extreme sports are not practiced only by individuals who take unnecessary risk for stimulation and pleasure. Extreme sports' participants are fully aware of the dangers. Participation in this kind of activity brings one in contact with nature at its most extreme and involves real fear. Nature is experienced as being powerful and central. Far from taking unnecessary risk and having "no fear" in their battle against the nature, these factors trigger positive, lasting changes such as courage and humility (Brymer 2009). The psychological characteristic of ski tourism understood as a recreational activity Gracz (1992) considers this type of an activity as a source of meeting the complex needs of human beings and factors ensuring mental health and mental toughness, as well as the development of selected personality traits and some human cognitive functions.

Risk and emotions are not only sought in the dangerous forms of physical activity. Recreational skiing may be an example of the search for a method to combine both recreation and excitation. The research of Gracz et al. (2004) showed the significant correlation among emotional, social and active aspects, what generally points to the basic meaning of the emotional aspect in motivation. Research results suggest that people who prefer downhill skiing as a form of winter recreation have a stronger tendency to risk taking than people involved in adventurous activities such as ski-mountaineering (Figures 3–5).

#### Conclusions

- 1. People practicing extreme forms of an activity present lower measurements of risk taking propensity than those who participate, in the theoretically less hazardous, typically recreational forms of activities.
- 2. The choice of extreme sport as a leisure activity is not the evidence for underestimating the risks and the strong willingness to participate in hazardous situations.
- 3. The issue of risky behaviors associated with recreational activities in the mountains necessitates further research on a bigger research sample in people involved in various recreational activities, aimed at investigating the correlation between risk taking propensity and e.g. age, gender.

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