# HEALTH AND WELLNESS 2/2015 WELLNESS AND SOCIETY

### CHAPTER XXIII

<sup>1</sup>Department of Dental Anatomy Medical University of Wrocław Zakład Anatomii Stomatologicznej Uniwersytetu Medycznego we Wrocławiu

<sup>2</sup>Department of Tourism and Recreation WSB of Wrocław Zakład Turystyki i Rekreacji WSB we Wrocławiu

<sup>3</sup>University of Life Sciences of Wrocław Uniwersytet Przyrodniczy we Wrocławiu

KATARZYNA STASZAK<sup>1</sup>, WIESŁAW KURLEJ<sup>1</sup>, BARBARA KWIATKOWSKA<sup>3</sup>, KAMIL NELKE<sup>1</sup>, JACEK ZBOROWSKI<sup>1</sup>, ADAM MANIAK<sup>2</sup>, NATALIA MANDZIOS<sup>1</sup>

# Lifestyle of a skydiver in range of physical recreation

Styl życia skoczków spadochronowych w zakresie rekreacji ruchowej

Key words: life style, skydiver

Słowa kluczowe: styl życia, skoczkowie spadochronowi

Due to the various risks related to skydiving this type of sport is generally recognized as extreme [6, 10]. Extreme sports are not necessarily a form of competition, but pure recreation related to interesting and active lifestyle. The factor that makes studies in the area of parachuting interesting is insignificant number of (mostly instructional) studies, that have been conducted so far [2, 7, 8].

This study aims at presentation of skydiving as an exciting, but safe form of spending leisure time, as well as motivation related to this sport. It aims additionally at describing a skydiver as a person who responsibly and intentionally takes risk possible to occur while jumping. Outcomes of the given study may help at elimination of people posing risk to their health, lives, as well to other co-participants of skydiving. Another aim of the given thesis is drawing attention to a number of external factors that have a direct relation to safety, but are not always properly implemented.

#### MATERIAL AND METHODS

A study has been conducted in form of anonymous questionnaire among 60 adult and self-reliant skydivers, aged 20-50. The majority of respondents was not interested in the extreme character of this discipline, contrary to its recreational character. There are many young respondents who are willing to exploit their skills and experience in the professional, competitive form of skydiving. In addition, they can work in the future in the field of defense, or lifesaving. Acquired abilities are connected with various kinds of air force recruiting members out of skydivers.

#### **RESULTS**

The vast majority of those engaged in recreational skydiving is in 20-40 age range. People who are younger constitute insignificant percentage of the whole. Males (56 individuals out of 60) are mostly interested in this type of physical activity.

About 90% of skydivers has graduated secondary technical school (50%), or a university (40%). It can be said, that those people are completely aware of the risk connected with this sport discipline. Their educational background can indicate the responsibility related to risk taking.

Table I. Professions and financial status of skydivers

Profession	N/%	Financial status	N/%
Student	5/8,3	Assessed as very good	2/3,3
Employed	48/80,0	Assessed as good	23/38,3
Unemployed	2/3,3	Assessed as satisfactory	29/48,3
Retired	5,8,3	Assessed as bad	6/10,0

Skydiving is popular mainly among those currently employed. That is related to heavy costs of this discipline – the purchase of required equipment, courses, participation in renting of aircraft and drop zones. The increase of expenses is necessary, despite the fact that all respondents all members of aero clubs. This corresponds with a subjective assessment of one's financial status. Respondents mainly evaluate their financial status as good, or satisfactory. It can be believed, that skydivers are sometimes wealthy, but never poor. The majority (75%) of those surveyed is married. Those unmarried to the greatest extent are still studying. On the basis of the given study it can be stated, that skydivers are very responsible. Starting the family obliges (at least theoretically) its members to mutual care of finances, psychical comfort, and realization of plans for the future.

Table II. Number of jumps

Number of single jumps	N/%	Number of tandem jumps	N/%
<10	5/8,3	<5	37/61,7
>10<20	23/38,3	>5<10	5/8,3
>20	32/53,3	>10	18/30,0

On the basis of the analysis conducted in the field of parachuting, the number of single and tandem jumps may indicate, that respondents are experienced, even that contrary to professional divers, these numbers are incomparable. In accordance to common standards (in Polish Army), 5 jumps in various (especially weather) conditions are enough to obtain a title of paratrooper.

So called tandem jumps inform about relationship between young skydivers and their instructors, who after completing training on a ground are obliged to jump with novices. Usually those trainings are finished with a decision of an adept to discontinue skydiving. This is related with the care of instructors for appropriate and safe performance of proceedings while parachuting. Preventing novices from jumping is also strictly connected with their excessive urge for risk taking which threaten their and other skydivers' lives.

Table III. Feelings related to skydiving and its source of interest

Feelings related to skydiving	N/%	Source of interest	N/%	
So called "increased adrenaline"	42/70,0	Friends	53/88,3	
Feeling of joy	5/8,3	Military service	1/1,7	
Overcoming one's weaknesses	7/11,7	Media	2/3,3	
Feeling of freedom	6/10,0	Other sources	4/6,7	
Feelings related to accomplishment of successful jump				
Feeling of satisfaction	36/60,0	Overcoming one's fear	2/3,3	
Dream come true	11/18,3	Feeling of superiority	3/5,0	
Feeling of freedom	6/10,0	So called "increased adrenaline"	2/3,3	

Majority of skydivers reported, that a trigger to start skydiving is an urge to feel so called "increased adrenaline". After having a successful jump, a person feels mainly a satisfaction, whereas so called "increased adrenaline" is being encountered sporadically. Thus, the excitement of skydivers is different in its nature before and just after a successful jump.

Skydiving is dependent on various factors that are not always skydivers-dependent. This constitute a diversified, however crucial regularity of doing this sport. Respondents parachuting very often (few times a week) comprise just 2% of the whole, those parachuting few times a month constitute 88%, whereas 10% of respondents does it sporadically few times a year. A factor that restricts recreational skydivers from jumping is its expensive cost that can be refunded, or decreased due to high demand.

Respondents stated, that their interest in this dangerous sport has been raised due to numerous conversations with friends keen on this discipline, who enticed them to try parachuting. Their encouragements embraced mainly a description of feelings related to this sport, and clarification of numerous doubts arousing in field of safety. So called "other sources" of interest in parachuting embraced subjective evaluation of passive skydiving (observing with the feeling of admiration and jealousy). Beginners are prone to borrow sport equipment from rental places. More than 75% of respondents has their own equipment, what indicate their engagement in this area of interests.

### HEALTH AND WELLNESS 2/2015 Wellness and society

Investing in essential equipment (the main parachute, reserve parachute and additional gadgets) is very expensive, and indicates that a person is willing to continue parachuting in a long term.

Table IV. Risk awareness related to the given sport type; a fear of skydiving and its sources

Risk awareness	N/%	Fear of skydiving	N/%		
Aware	59/98,3	Afraid	56/93,3		
Not aware	1/1,7	Not afraid	4/6,7		
Causes related to the fear of skydiving					
Insecurity	17/28,3	Possibility of injuries	43/71,7		
Fear alternation with regards to further attempts of parachuting					
Decreased	5/8,3	I have no opinion	1/1,7		
Unchanged	51/85,0	Depends on other circumstances	3/5,0		

Risk awareness related to such a dangerous sport discipline is relatively high among surveyed skydivers, similarly to their fear of parachuting. Respondents state, that the fear of parachuting occurs in the moment of boarding aircraft and is mainly increased while noticing an old biplane.

The most safe and trustworthy for skydivers are helicopters, from which they jump by side or back hatch. All respondents claimed, that after completed jump the taken risk was adequate to feelings experienced while parachuting. Aero clubs dealing with training skydivers should encourage their future novices through offering services on the highest technical level. Statements made by numerous skydivers indicate, that those technical requirements are not often met, and correlate with numerous accidents. The recreational training of skydivers often leads to their professional (also of military character) interest in this sport discipline, so it should not be marginalized. This mainly regards all kind of equipment on each level of training. Recreational skydiving is hazardous, so posing risk while doing this sport is a huge negligence. Parachuting is perceived as elite, not only due to its expensiveness, but mainly because of the great courage of its enthusiasts. Fears connected to doing this sport can be successfully eliminated, however it requires considerable financial funds.

The vast amount of respondents stated, that the fear of further jumps is not diminishing. Only 10% of those surveyed reported, that each completed jump increases their risk awareness, as well as a belief in their possibilities before further skydiving attempts. Nonetheless, respondents said, that they are still aware of risk exposure related to parachuting. Another jumps embrace often the change of technique involved i.e., high of a jump, time of opening the parachute, landing accuracy etc. That is also connected with increasing the level of risk, taken during further skydiving attempts.

Table V. An influence of skydiving on a quality and value of one's lifestyle; broadening the scope of interest in skydiving

Influence on lifestyle	N/%	Theory enhancement N/9		
Positive	40/66,7	Skydiving courses	12/20,0	
Negative	5/8,3	Media (press, the Internet etc.)	23/38,3	
Neutral	15/25,0	Parties	25/41/7	
Lifestyle		Other disciplines		
Smoking	11/16,7	Swimming	15/25,0	
Alcohol abuse	9/15,0	Jogging	30/50,0	
Physical activity	59/98,3	Cycling	5/8,3	
Balanced diet	54/90,0	Skiing	5/8,3	
Sleep		Other 5,8		
Assessed as appropriate	48/80,0	Life value assessment		
Up to 8 hours	36/60,0	It is everything for me	54/90,0	
Less than 8 hours	24/40,0	It is just an episode for me	30/50,0	
Sleeping disorder	6/10,0	It is transitory state for me	30/50,0	
Sleeping-up during a day	3/5,0	I have never thought it over	6/10,0	

Majority of respondents claim that parachuting positively influences their quality of life and allows them to overcome the difficulties arising from everyday responsibilities. Taking up such a serious challenge as parachuting makes everyday life's problems seem banal and petty. Most of people facing life threatening situations (their own or their loved ones' life), and parachuting is undoubtedly in that category, belittle any other problems. Only a few respondents stated that parachuting does not influence significantly their everyday life.

One may assume, that the personality of the respondents predisposes them to lead pro-healthy lifestyle. The lifestyle of most of the respondents in terms of sleeping is correct - there are of course "overuses" in the scope of sleep which are a result of a very active lifestyle of the respondents.

The respondents' attitude towards the evaluation of life's worth is interesting - because they take up such a risky sport, they expose themselves to death, or unfavorable consequences. This question was not asked in an alternative form, therefore one may see some inconsistency in this evaluation - on one hand the affirmation of life, and on the other hand its trivialization. However, one has to consider that all respondents are young, have an outstanding well-being, therefore, their views in this area are often very optimistic. The variability of the answers depends on the current changing circumstances - exaggerated failures, tragic accidents of the loved ones etc.

The respondents have stated that the experiences resulting from parachuting are incomparable with other pleasures of the everyday life. Those in relationships compared parachuting with pleasures resulting from the relationships (not only of the sexual kind).

### HEALTH AND WELLNESS 2/2015 Wellness and society

The respondents are very fit and of very good health. Before they can join the parachute aero club, they go through tests and medical examination which verify their fitness. The state of their fitness and health is being verified on a regular basis. It is the parachutist's duty to keep a required fitness and a good health condition. Negligence of parachutists' fitness may lead to injuries and contusions. Moreover, the so called healthy lifestyle of parachutists has an essential influence on success in this sport discipline. Therefore, the lifestyle of parachutists stands out very positively. Every respondent demonstrates additional, practiced regularly, recreational activities and movement. Among which jogging and swimming dominate.

All respondents are not only extremely fit, but also care about expanding their knowledge on chosen sport discipline. Most often, they use various means of communication (media) and participate in organized courses, or aeronautical events. Another interest declared by the parachutists is aeronautics which becomes more and more accessible due to organizational reasons; however, due to financial reasons the private form of this discipline is limited for the individuals.

Table VI. An attitude of close persons to skydivers towards skydiving

In general	N/%	Before competitions	N/%
Acceptation	42/70,0	Wish luck	34/56,7
Lack of acceptation	9/15,0	Wish happy homecoming	11/18,3
Ambivalence	6/10,0	Discourage from participation	11/18,3
Disinterest	3/5,0	Other advice	4/6,7

Closest persons to skydivers (spouses, children and parents) mainly accept their fondness of such a dangerous sport. They wish them luck and happy homecoming just before parachuting attempts. There is also another group of relatives that discourages them from participation in this activity. The family structure of those who skydive does not differ from the average one, as the majority of them (90%) come from the complete family. Some skydivers have founded their own families and have children.

The time devoted to parachuting is related with the travel to the airport, which is often located outside towns. This makes the systematic performance of this sport much more expensive, thus carpooling is being organized very often. Despite the fact that skydivers are very individual in their nature, they can create very friendly atmosphere inside their membership groups. They compete with each other only during organized competitions, not on the daily basis. As stated before, this form of interest is very marginal among those who parachute.

Table VII. The family structure of those who skydive, along with injuries possible to occur while doing this type of sport

The family structure	N/%	Injuries	N/%
Complete (just parents)	24/40,0	Lower limbs	57/95,0
Complete (more than 1 child)	24/40,0	Other	3/5,0
Incomplete	6/10,0	None	48/80,0
Multigenerational family	6/10,0	Occasionally	5/8,3

Respondents reported the number of their injuries as insignificant (20%) and occasional. Injuries that occurred while parachuting involved mainly lower limbs, thus the physical activity among parachutists should be directed to improvement of their training efficiency.

#### DISCUSSION

There are numerous papers in psychology and sociology which strive to characterize a person taking up extreme sport in terms of their psychological and personal traits. There are various reasons to take up extreme sporting. Despite the dangers connected with injuries and even life-threatening situations, there is a certain group of people willing to go the extra mile. The stabilization within society leads to assurance of various kinds of security (material, freedom). Some persons want to break free from this stagnation on account of some personality traits, which are also exposed to peer pressure. With some people auto-expression is the reason behind the will to be different from the people around them [9]. Some claim [1], that extreme sports are a form of deviation, because they differ from the established norms in terms of higher degree of risk, seeking intense emotions, excessive self-concentration, "wasting" above average skills on complying to the extreme conditions of the environment. Therefore, it is important that some control over extreme sports exists in terms of legislature and that they are always performed in an organized form. Extreme sports should not only evoke media sensation because of the existing danger and publicizing the accidents that had happened. Most definitely, appropriate preventive safety measures should occur [5].

Statistically speaking, the number of injuries within competitive parachuting is miniscule, in comparison to the number of people involved in this discipline and the frequency of performances. The most common are lower limb injuries (over 50% of the injuries) [3, 11]

In the analyzed material, a low injury rate has been noted - more serious contusions are probably the reason behind the discontinuance in performing this sport discipline.

Unfortunately, recreational form of parachuting is not popular and performing this discipline is connected with very high expenses. Keeping up the interest in parachuting as recreational form is very important because of the future use of parachutists' potential in various professional disciplines [4].

### **CONCLUSIONS**

- 1. Skydivers stand out positively in relation to other populations in terms of education, wealth, as well as mental and physical health. In majority, they realize risks associated with the practice of this sport.
- 2. The majority of respondents claims, that parachuting positively influences their healthy lifestyle.
- 3. Regardless the duration and number of successful parachuting attempts, respondents are respectful towards this sport discipline, which have a mobilizing influence on compliance with safety procedures.

### HEALTH AND WELLNESS 2/2015 Wellness and society

- 4. The condition of devices necessary to skydive is alarming obsolete aircraft.
- 5. Organizational and financial assistance of this sport discipline is important, as it facilities professional parachuting in range of various services.
- 6. Parachuting helps to encounter experiences and feelings unobtainable in other sport disciplines.

#### REFERENCES

- Becker H. S.: Outsiderzy, studia z socjologii dewiacji. Wydawnictwo Naukowe PWN Warszawa 2009, 8.
- 2. Dzieciaszek B.: Skoki spadochronowe. Szkolenie podstawowe. Poznań 2009.
- 3. Ellitsgaard N.: Parachuting injuries, a study of 110.000 sports jumps. Br. J. of Sports Med. 1987, 21(1) 13-17.
- 4. Kaganek K.: Pozytywne aspekty uprawiania spadochroniarstwa. W: Dodatnie i ujemne aspekty aktywności ruchowej. Uniwersytet Szczeciński. Szczecin 2004.
- 5. Kalina R. M.: Definition and criteria of the identification of extreme sports research and educational perspectives. Wychowanie Fizyczne i Sport. 2002, 11(6).
- 6. Pertyński W.: Jeszcze raz o tzw. sportach ekstremalnych. Sport Wyczynowy. 2006, 3-4, 1007.
- 7. Pomietlak S.: Spadochroniarstwo. Graphium. Poznań 1998.
- 8. Poynter D., Turoff M.: Parachuting: The Skydiver`s Handbook. Para Pub., Santa Barbara 2007, 4008.
- 9. Sahaj T,: Homo transgressivus czyli o sportach ekstremalnych. Sport wyczynowy 11-12, 2005.
- Tomlinson J.: Encyklopedia ekstremalnych sportów: sporty które mrożą krew w żyłach - ilustrowany przewodnik. Oficyna Panda 1997.
- 11. Whitting J. W.: Parachute landing fall characteristics at three realistic vertical descent velocities. Aviation, Space and Environmental Medicine 2007, 78(12), 1135-1142.

### ABSTRACT

Parachuting requires specific psycho-physical predispositions. This paper aimed at assessment of lifestyle in respect to physical activity. The obtained results can contribute to the creation of skydiver's portrayal and enhance the process of elimination of those who do not fit in (i.e., may pose risk to their live, or health). The purpose of this research was also to draw attention to external factors that have direct relationship with parachutist's safety, but are often neglected. The research was conducted on the basis of anonymous questionnaire among 60 male parachutists aged 20-30 and living in Wroclaw. It has been stated, that skydivers are characterized by specific psychophysical qualities, which predispose them to perform this kind of sport discipline.

## Katarzyna Staszak, Wiesław Kurlej, Barbara Kwiatkowska, Kamil Nelke, Jacek Zborowski, Adam Maniak, Natalia Mandzios Lifestyle of a skydiver in range of physical recreation

Mainly, they have secondary or high education, and come from families which stand out in terms of wealth and structure from these average ones. Standards related to skydivers and their skydiving requirements are very difficult to be met. Due to health and life threats, parachuting is perceived as an extreme discipline. It is also said to be an elite and prestigious sport, which delights teenagers and consequently, leads them to start performing it. The character of parachuting enhances the physical ability of parachutists. They are motivated by the need to improve their psycho-physical traits to ensure safety while parachuting. The tendency of individuality in one's physical and recreational activity has been also observed among surveyed skydivers.

#### **STRESZCZENIE**

Do uprawiania spadochroniarstwa wymagane są specyficzne predyspozycje psychofizyczne. Celem pracy jest ocena stylu życia w odniesieniu do aktywności ruchowej. Uzyskane rezultaty mogą się przyczynić do utworzenia sylwetki skoczka spadochronowego i możliwości eliminacji z tej dyscypliny osób zagrażających swojemu zdrowiu i życiu. Celem badań jest również zwrócenie uwagi na liczne czynniki zewnętrzne, które mają bezpośredni związek z bezpieczeństwem uprawiania skoków spadochronowych i nie zawsze są odpowiednio realizowane. Badania przeprowadzono na podstawie anonimowego kwestionariusza badawczego, który skierowano do 60 skoczków spadochronowych (mężczyzn) w wieku 20-30 lat, mieszkających we Wrocławiu. Stwierdzono, że skoczkowie spadochronowi odznaczaja się specyficznymi cechami psychofizycznymi, które predysponuja ich do uprawiania tej dyscypliny sportowej. Skoczkowie spadochronowi posiadają najczęściej średnie i wyższe wykształcenie, wywodzą się z rodzin odbiegających pozytywnie od standardowych w zakresie zamożności i struktury. Standardy związane z uprawianiem skoków spadochronowych w zakresie wymagań stawianych skoczkom są bardzo wysokie. Skoki spadochronowe można zaliczyć do sportów ekstremalnych ze względu na występujące z ich uprawianiem zagrożenie zdrowia i życia. Można zaliczyć je również do sportów elitarnych, które cieszą się dużym prestiżem w społeczeństwie i wzbudzają zachwyt wśród młodzieży - prowadzący w konsekwencji do ich uprawiania. Charakter tego sportu powoduje, że sprawność fizyczna skoczków spadochronowych jest bardzo wysoka. Motywacją do aktywności ruchowej wśród skoczków spadochronowych jest podnoszenie odpowiednich walorów psychofizycznych, które zapewniają bezpieczne uprawianie tej dyscypliny sportowej. Zaobserwowano tendencję do dużej indywidualności w zakresie rekreacyjnej aktywności ruchowej wśród skoczków spadochronowych.

Artykuł zawiera 23000 znaków ze spacjami