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# Sport for the Subjective Dimensions of Quality of Life

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## Abstract

Sport is a social phenomenon. The positive influence of sport helps improve the quality of life of a person. Subjective dimensions of quality of life can be perceived as person's individual perception of his/her life experience with all the influences he/she encounters and how they affect him or her. The aim of this chapter will be to broaden the knowledge with regards to effects of sport on subjective dimensions of quality of life. 196 (sport active) and 149 (sport inactive) adolescents were the research sample for questionnaire research (Q-LES-Q, SWLS). Two subjective dimensions of quality of life gave evidence that sporting activity positively influenced the perception of dimension of quality of life enjoyment and satisfaction and the dimension of global satisfaction with life among adolescents. Sport active boys are statistically significantly more satisfied with the domain quality of life enjoyment and satisfaction in comparison to sport inactive boys ( $p = 0.027$ ). No statistical difference was found in domain quality of life enjoyment and satisfaction between sport active girls and sport inactive girls. In the global satisfaction with life we found out the statistical difference between sport active boys and sport inactive boys ( $p < 0.001$ ) and sport active girls and sport inactive girls ( $p = 0.026$ ).

**Keywords:** sporting activity, boys, girls, adolescents, quality of life enjoyment, satisfaction with life

## 1. Introduction

Sociology of sport focuses on the research in the regularity of human social behavior, and sport is such a regular behavior, when applied. Sporting activities and exercising are significant factors for a person's development and his/her integration in the society. Sport, in this way of meaning, is the phenomenon that influences the society. The positive effects of sport improve the quality of life of an individual and fulfill all the human needs on the five-stage pyramid of needs. When sport behavior will convert into practicing sport activities, then the sport will benefit the physical and psychological health, as it is known. We were interested in the topic of how sport can benefit the subjective dimensions of the quality of life. We focus on the dimension of the quality of life enjoyment and satisfaction and the dimension of the global satisfaction with life. We present a general subject area, quality of life, and we lead the context of the research to the topic of the research—subjective dimensions of the quality of life in dependence of gender and activity in sport and exercising. With the help of selected research papers from this field of study, we summarize the background knowledge about the research topic (subjective

dimensions of the quality of life) and topic areas, which was created within the quality of life enjoyment and satisfaction (physical health and physical activities, leisure time activities, school environment and school duties, emotions and feelings, taking care of yourself) and global satisfaction with life (satisfaction with life and subjective well-being), for understanding the research problem and offering the readers the introduction to this topic. We know about the lack and insufficient amount of the research papers upon this topic, and we want that our study widens the existing knowledge and brings the results from the small country in the middle of the Europe—the Slovak Republic. We used the quality of life enjoyment and satisfaction questionnaire not for psychiatric patients, as it used to be common, but for the intact school sport active and sport inactive adolescent boys and girls.

The purpose of this chapter was to broaden the knowledge in this area of research. And the following research questions arose:

What effect do sporting activity and exercising have on the perception of the selected areas of quality of life enjoyment and satisfaction (physical health and physical activity, leisure time activities, school environment and school duties, feelings) as part of the subjective dimension of the quality of life in adolescent girls and boys?

What effect do sporting activity and exercising have on the perception of the global satisfaction with life in adolescent girls and boys?

The beginning of adolescence is associated with the first signs of sexual maturity until complete maturation. Adolescence is a period of transition from childhood to adulthood. Adolescence is also associated with complete mental and physical development, which varies for everyone. An adolescent can recognize and can decide if he/she wants to participate in some kinds of sports. Adolescents possess well-developed physical and motor capabilities. The movements of the adolescents are well coordinated, harmonious, and graceful, and they are at the top of their physical performance. They are in a developed cognitive, social, and emotional state. With adolescence increasing the levels of independence, adolescents are capable of taking responsibility for themselves and presenting the solution of ideas as the results of critical thinking. Some may finish their maturation before 18 years of age, but others may not. The statutory maturity is in 18 years of age, but this does not mean that the individual has reached maturity even mentally.

The research about the organization of the adolescents in some forms of sporting activity in the Slovak Republic [1] presented the sample, which consists of 5300 secondary school students of which 2154 were boys and 3146 were girls. A total of 597 male students are said to be organized in some form of exercising or sporting activity (27.7%), and the rest of 1557 male students were not organized in any form of exercising or sporting activity (72.3%) except the school subject physical and sport education. Among female students there were 459 (14.6%) organized, and 2687 (85.4%) were not organized in any extracurricular form of exercising or sporting activity. This research of [1] shows that the organization of male students in some form of exercising activity in Bratislava reached 38%, and 62% male students ( $n = 1990$ ) were not organized. Among female secondary school students from Bratislava ( $n = 2646$ ), 21% were organized in some form of exercising or sporting activity, and 79% were not organized.

In this research, which we write on these pages, we realized the questionnaire research in Slovak secondary school, mostly from the capital city Bratislava. The questionnaire for this research content consists of several sample introduction questions (4) and then 50 items from quality of life enjoyment and satisfaction questionnaire (Q-LES-Q) and 5 items from satisfaction with life scale (SWLS). The findings revealed that making and playing sports, realizing sporting activities, and exercising bring benefits to the subjective dimensions of quality of life—the dimension of the global satisfaction with life and the dimension of the quality of life enjoyment

and satisfaction, where physical health and physical activities, leisure time activities, social relations, feelings, school environment and school duties, and taking care of yourself were considered. In the introduction part, we present the background of the selected areas of quality of life from the literature review, and then we described the school system in Slovak Republic that concerns physical and sport education, which is for somebody only one possible sporting activity or exercising in a week.

The importance of this research is that we present our research ideas and opinions and we find out new information about life enjoyment and satisfaction and global satisfaction with life among sport active and sport inactive male and female high school students. We feel the shortage of such kind of research, and we present the findings from Slovakia, which can be useful for future scholarly works.

## **1.1 Quality of life**

Quality of life is a social indicator, which affects the whole life of a man. The importance of this field of study is given with the establishment of the global organization International Society for Quality of Life Studies in 1995, with the mission to promote and encourage research in the field of quality of life (QOL), happiness, and well-being studies. Quality of life is the field of study of sociology, and how sport can influence the quality of life is part of the study for sport sociology. Quality of life is a valued societal outcome, and its growing recognition is for the subjective dimensions of the quality of life. An intensive progress of research on quality of life can be observed, not only in health-related issues but in other very specific areas of the research, and sport involvement and participation can be those issues.

There are many definitions and conceptualization of the quality of life (QOL). “Quality of life is multidimensional and influenced by personal and environmental factors and their interaction, and has the same components for all people, and is enhanced by self-determination, resources, purpose in life and a sense of belonging” [2]. The quality of life of an individual depends on many factors. In several explanations of quality of life, we found the emphasis on satisfaction with life [3–8]. According to this understanding, one who is satisfied with his/her life lives better quality of life. The higher the quality of life, the higher is the life satisfaction of the person. The study of [9] has given a theory, which suggests that happiness is primarily a product of the positive assessments of life situations and favorable comparisons of these life situations with those of others and in the past. The concept of quality of life is used in all areas of human existence and all fields of knowledge, including the sport sciences. The quality of life is an open concept, and it changes with the society development.

Three rounds of proposals, comments, and drafts were conducted, to adopt 14 criteria for evaluating quality of life by the policy makers. The criteria for evaluating quality of life indexes for use in public policy are presented [10]. It is worth mentioning the seventh index, which talks that “the domains in aggregate must encompass the totality of life experience.” The ninth index presents the requirement that “each domain must have the potential to be measured in both objective and subjective dimension.” And the 14th index presents that “the subjective dimension of each domains has both a cognitive and affective component and are measured by the question concerning satisfaction.”

Main debates at the core of quality of life definitions are presented [11]. Definitions varied a lot, but they found some consensus within the literature reviews. There are two main approaches to quality of life: objective and subjective. Both subjective and objective information [12] are necessary to assess when considering the quality of life (QOL) even if subjective and objective data are distinct types of information. The authors [13] reported correlation coefficients ranging from 0.04 to 0.57 between objective and subjective indicators suggesting



to, although associated, measure different aspects of quality of life. It depends on researchers which perspective (domains, dimensions, aspects, indicators) he/she considers in his/her research and from which point of view he/she looks at the investigated problem. When he/she writes a study only from one side of the problem, it does not mean that he/she does not accept the other side of the problem. The question is also on how many domains can the quality of life concept be divided. The [14] produces a multidimensional profile of scores across 6 domains and 24 sub-domains of quality of life. The main six domains can be listed as physical domain, environmental domain, domain of social relationships, psychological domain, domain for level of independence, and spiritual domain. Based on 16 reviewed publications [15], 19 domains are presented, with the most referenced domain, interpersonal relations (15 times), and the least referenced domain, civic responsibility (once). In the same study [15], core quality of life domains are presented: emotional well-being, interpersonal relations, material well-being, personal development, physical well-being, self-determination, social inclusion, and rights. And accordingly, among all core quality of life domains, indicators and descriptors are presented too. The Eurostat quality of life framework focuses on quality of life and [16] presented the following dimensions: material living conditions (income, wealth, and consumption), education, natural and living environment, productive and valued activities (including work), health, leisure and social interactions (inclusion, exclusion), overall experience of life, governance and basic rights, and economic and physical insecurity. All supposed domains are very close each to other and may be the same, because they are presented with synonyms.

The authors [17] subsequently propose a new definition in which quality of life is defined as “the gap between what a person is capable of doing and being, and what they would like to do and be; in essence it is the gap between capability reality and expectations.” Quality of life is enhanced when the distance between the individual’s attained and desired goals is less [18]. For [19], a person’s well-being can be assessed in terms of his/her capability to achieve personally and socially valued functioning. Quality of life has become the crucial determination of the life cycle [11]. The quality of life is perceived differently in a different life stage of age. The quality of life is taken as the degree of satisfaction in life. The term quality of life [20] is a manifestation of self-realization within the framework of contemporary civilizational development. Quality of life from the psychological side is, according to [21], “an expression of the feeling of life happiness.”

The concept of quality of life records the growing interest in the recent time. It questions what quality of life is. For some scholars it is the measure of subjective well-being; for some others, it is the indicator of physical health. The statement of [7] is that quality of life takes under the umbrella a variety of concepts such as life conditions, health status, lifestyle, happiness, or behavior. The quality of life, as [4] said, reflects the harmonious satisfaction of personal goals and desires. The subjective side of quality of life has important dimensions of happiness and life satisfaction. Someone gives the equal mark between quality of life and life satisfaction.

The quality of life should be measured in physical function, mental status, and ability to engage in normative social interaction, wrote [22].

The quality of life presents several dimensions of physical, psychological, social, and cultural identifications. Quality of life is a complex, multifaceted construct that requires multiple approaches from different theoretical angles [23]. The attributes of quality of life acquired increased importance in research of psychologists, sociologists, educators, physicians, mental coaches, architects, environmentalists, and many others. Authors [24] integrated the multidisciplinary fields of quality of life and viewed quality of life as a multidimensional rather than unidimensional

concept. The model of quality of life integrates objective and subjective indicators of several life domains and individual values of that [25]. An overall understanding of subjective well-being requires knowledge of how objective conditions can influence the individual's evaluation of the people's lives, values, experience, and wisdom. The consideration of [7] thought about the quality of life as a subjective evaluation of one's personal life and satisfaction with life. Quality of life seems to be subjective and that it can only be understood from an individual perspective. It would have been easier if researchers could have agreed that the quality of life is taken into consideration and refers only to subjective well-being, said [8]. Strong formulation of [26] is the request of a comprehensive definition with the acknowledgement of the strengths of each position and the agreement that any general definition must include both dimensions.

If quality of life had to comprehend whole human life, then both objective and subjective dimensions must surely be included. Objective dimension refers to resources of included objective external life conditions, and subjective dimension refers to individual's subjective assessment of life. The significance of objective or subjective evaluation of life domain is in relationship to the value that an individual gives to it. The individual with relatively the same objective domains of quality of life can report the different subjective perceptions of quality of life.

A team of authors [6] suggest their own definition of quality of life. "Quality of life is the extent to which objective human needs are fulfilled in relation to personal or group perceptions of subjective well-being. Subjective well-being is assessed by responses to questions about happiness, life satisfaction, utility, or welfare, and the relation between specific human needs and perceived satisfaction is influenced by mental capacity, cultural context, information, education, temperament. In addition, the relation between the fulfilment of human needs and overall subjective well-being is affected by the weights that individuals, groups, and cultures give to fulfilling each of the human needs relative to the others."

The definition stated by the World Health Organization [14] said that the "quality of life is an individuals' perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. It is a broad ranging concept affected in a complex way by the person's physical health, psychological state, personal beliefs, level of independence, social relationships, and their relationship to salient features of their environment." In the social area of researching the quality of life, the quality of life takes the increasingly acknowledged place for measurement as a valid and appropriate indicator of social needs and possible interventions for the individuals and the groups when needed.

Although the quality of life is the socioeconomic concept, it has been given increasing importance to the individual subjective side of quality of life. Authors [27] present evidence suggesting that subjective dimension of quality of life is a cherished societal goal worthy of attention and has utility as a predictor of important life outcomes such as health and longevity, social relationships, and positive work outcomes. Quality of life is the term, which is analyzed in the literature as two major dimensions—objective and subjective dimension [28]. Objective dimension of quality of life focuses on external, quantifiable conditions of life, such as housing, economic situation of a person or a family, access to medical resources, family income level, living environment, climate and subjective approaches, and focus on individual internal evaluations of life conditions (degree of problems, satisfaction, and happiness) [29].

We agree with this statement, and these will be the content of our research in this chapter, in which we focus how sport can affect the subjective dimensions of quality of life.

## **1.2 Sport for the quality of life**

We have recorded that there is a lack of the research unifying people involved in sport, physical activity, exercise with the measurements of their enjoyment, life satisfaction, and the quality of life.

The [30] defines sport as “a game, competition, or activity needing physical effort and skill that is played or done according to the rules, for enjoyment and/or as a job, or all types of physical activity that people do to keep healthy or for enjoyment. Reasons for engagement in sport differ by participants in it. It should be health, pleasure, competition, challenge, weight management, motor performance, skills acquiring, motor ability and capability and some societal motives, and/or financial reward.”

Movement determines life, develops physical fitness, but also has a positive impact on the psychological well-being of a man and hence the quality of his/her life. Sport as an important part of quality of life can bring people the feeling of self-fulfillment. There are few social influences in the world that can equal sports. Sport can be a unifying or sharing power, which reflects development of society, and, in the case where there will be changes in society development, there will be changes in sport too. Sport is an indispensable and universal element of life improvement. The growth of leisure time will offer the occasions for spending time with exercise and sport to secure the positive health.

Sport and exercise are important contributors to the quality of life for everyone. Exercise can be associated with a wide variety of benefits related to the quality of life [31]. In another research of [32], they set the idea that the exercise can influence the participants' quality of life in desirable and undesirable ways: enhanced physical functioning, subjective well-being, exercise enjoyment and peak moments, exercise taxonomy, diverse personal meaning, stress management, opportunities for socialization, delaying the aging process, and enhancement of self-esteem and self-efficacy.

Sporting activities play a crucial role in subjective well-being. Sporting activities provide occasion to meet values and needs of an individual. The thoughts of [11] noted that, if they accept that exercise is a key part of sport and that psychological well-being is a key part of quality of life, then it can be argued that sport has a role to play in the concept of quality of life, and they highlight the lack of research on the benefits of sport and exercise to the quality of life and well-being.

Physical functioning is a main component of the quality of life. Physical functioning is the essence of all daily human activities. Movement is the life. Sport can be performed collectively or individually. Sport can be performed regularly or irregularly. Sport can be performed with or without club membership (professionally or recreationally). Performance and top elite sports are rule-defined activities that are acquired and learned in the training process led by a trainer, coach, or instructor (an authorized person), conducted in competitions and organized on a voluntary basis. Sport for all—recreational or amateur sport—is a recreational activity carried out by various forms of physical exercise, and other movement activities of interest can be sometimes be also as a competition. Sport is the phenomenon of sociocultural life. Sport affects all the social areas, and sport has grown into a phenomenon in the business too, and that is why we can say that it creates the sport sector [33].

In various parts of the world, the authors have shown significantly higher life satisfaction in people participating in physical and sporting activities than in people who did not practice physical and sporting activities [in Turkey and in Germany [34]; in Turkey [35]; in Slovakia [36, 37]; in Sweden [38]; in Taiwan [39]; in America [40, 41]; in Poland [42]; in Spain [43]].

In the research of [44], the quality of life of sporting individuals was investigated. They investigated quantitative and qualitative analysis of overall quality of life according to gender and sport practiced (individual or team sport) for the 16



life domains. The intrinsic value of exercising and sporting activities presents the relation to quality of life and good health.

### **1.3 Sport for the subjective dimensions of quality of life**

The importance of subjectivity in the definition of what quality of life is emerges as a key aspect [45]. The personal and subjective dimension of quality of life could be the basis for a more understanding of person's evaluation of quality of life. For the person it is related to the extent of which the life aims are reached.

For us, each person is individuality and each is different in what he/she considers important and what he/she considers to be an influence on its subjective quality of life. In our opinion the subjective quality of life is the individual's perception followed by the assessment of things, situations, relations, and all the positive, neutral, and negative matters that affect a person's life. Subjective well-being is an appreciation of these matters in a positive way when expectations are fulfilled or achievements are better than expectations. The measurable domains of subjective quality of life are directly proportional to life satisfaction, and when the level of satisfaction is in a positive manner, then it is presented in the happiness of a person. Bear in the mind is needed when thinking about the weight of the importance of life domains in accordance with the person's own values and standards. The personal perception of life values differs a lot among people. Some positive subjective experiences of well-being could be assessed as neutral or even negative for another one person. It depends mainly on personality dispositions, recognition of the inner state of emotions, self-perception of emotions, and then their display in the external world. The aspects of the model of emotion continuance are perception, regulation, and expression of emotions. The emotions play a crucial role in the life of all of us. It is how people feel and how they can function in the family and society; in terms of emotions, a man evaluates his/her life and transforms them into living through subjective well-being.

The subjective meaning of good living is a person's own experience of his/her positive feelings, and [46] spoke about perceptual aspects of quality of life. The report of [47] presents the subjective well-being as a broad category of phenomena that includes people's emotional responses, domain satisfactions, global judgment of life satisfaction, and the personality considered as one of the strongest and most consistent predictors of subjective well-being.

Given the concern for improving subjective dimension of quality of life, many researchers turn the attention to the benefits of physical activity. The research of quality of life with the physical activity are evident in many investigations [48, 49, 32, 36, 37, 50–53]. Sports are the happiest experience of active leisure category reported in the research of [54], where 828 students were participating. Relative declines in physical activity were found to be associated with low life satisfaction among 4025 persons in the study of [40].

Our opinion is that satisfaction in individual areas of life is also closely related to overall person's satisfaction. The quality of life is the result of the interaction of social, health, economic, and environmental conditions relating to personal and social development. Although quality of life (life satisfaction) may be satisfactory in one area, it may be insufficient in other areas. The components of quality of life change over time. The quality of life is also influenced by subjective well-being, which is strongly dependent on the actual emotional state and can fluctuate rapidly.

Sport has positive effects on psychological and physical characteristics of a man. Sport, exercise, and physical activity are central to health and serve as the prevention to illness. Over the past 40–50 years, the young people have become increasingly less physically active, and this behavior can cause some irreversible outcomes. The evidences brought with the Institute of Medicine [55] show that regular physical activity



promotes growth and development and has multiple benefits for physical, mental, and psychosocial health. Motion is a valuable activity for all people not only for young people. Everyone has the opportunity to take chances and face the challenges to move and perform some kinds of exercising and sporting activities. Exercising and making and playing sports will guarantee the lifelong benefits, which will be given to their lives and will be converted to higher quality of life and life satisfaction.

### *1.3.1 The dimension: quality of life enjoyment and satisfaction*

Enjoyment is defined as an optimal psychological state that leads to performing an activity for its own sake and is associated with a positive feeling state [56]. Participation in sporting activity depends also from the feelings of enjoyment. A man lives for emotions and, we can say, for positive emotions, which a man searches more. A man exists to be happy, and the purpose of life, for somebody, is to find this happiness with the means of life enjoyment and satisfaction.

By presenting happiness a man considers various factors of his/her life situations and conditions and the feelings from these situations and conditions in comparison and accordance with prior expectations. Happiness according to the consideration of [57] is defined as the moment-to-moment people's feelings and does not always tell how people evaluate their lives or how they function in the world. However, they admit the positive feelings like happiness can lead to better overall well-being. Finding the opportunities to be happy is also one kind of way of increasing people's potential in finding well-being. The author [58] explains the term life enjoyment as a mental happiness from life and the success in it. We support the concept of [54] that enjoyment is pleasure, affect, attitude, intrinsic motivation, and flow. The author [59] considers the quality of life satisfaction as an evaluation of the life with individuals. The parts of life satisfaction are the satisfaction in these areas, for example, family, peers, friends, and mental and physical health.

People who are happy also tend to be satisfied with their lives [26]. If a person experiences his/her life as good and desirable [60], it is assumed to be so. In this approach, factors such as feelings of joy, pleasure, and life satisfaction are paramount. Such measures, while subjective, are a useful complement to objective data to compare the quality of life.

The quality of life satisfaction can be defined by the assessment of the life by individuals or by a one-sided, extensive human satisfaction ratio. Life satisfaction is related to the parts of the life. Parts of the life satisfaction compound the global life satisfaction. Everyone has their own criteria, and they create the quality of life enjoyment for themselves, but everyone looks at the standards of others, which can also affect oneself. For adolescents the quality of life is joined with solving and mastering the problems that life brings.

#### *1.3.1.1 Physical activity and physical health*

Physical activity and physical health are hand in hand to better one's life. Health is one of the most important factors affecting an individual's quality of life. In good health, one feels comfortable and well, and at the same time, nothing restrains him/her from doing what he/she wants and what is important for him/her. But health cannot be understood only from a physical point of view but also from a mental and social point of view. For a healthy life, the World Health Organization (WHO) recommended 30 min of moderate physical activity each day [61]. When people highlight the good physical and mental health, they are more likely to highlight also their overall well-being. Improvement in health has an immediate influence on an individual's quality of life. Young people are mostly satisfied with their health.

Regular physical activity boosts the health. In the article of [62], the literature review of the benefits of physical activity is evaluated. In the summary of studies, there is compelling evidence that regular physical activity and a high fitness level are associated with reduced risk of premature death from any cause and from cardiovascular disease among asymptomatic men and women. The people who have the highest level of physical activity and fitness are at lowest risk of premature death. The health-related quality of life (HRQOL) was developed by the Center for Disease Control, Health Care, and Aging Branch [63].

The importance of physical activity is for the primary prevention of type 2 diabetes. Exercise interventions for patients with diabetes are beneficial in improving glucose homeostasis. Physical activity can be helping in the fight with the cancer and osteoporosis. Physical activity need not to be vigorously intense. Every increase in activity adds some benefit to physical health. People of both genders and of all ages benefited from regular physical activity. Most people do not engage in regular sporting activities and exercising despite the indisputable effect of these activities on physical and psychological health. Exercising and making and playing sports for every stage of life are the important strategies for preventing diseases.

To make exercising and sporting activities as a habit, it is needed to build the knowledge and the practices of exercising and sporting activities in the school environment, because these activities can bring positive attitude to school-aged population. This habit can last for an entire life, and exercising and sporting activities will be the activities on a daily basis, because physical activity is recognized as a very important factor in a person's health.

#### *1.3.1.2 Leisure time activities*

In order to devote our time to own physical activities, exercise, and sport, it is necessary to have time for these, unless in the case that someone has sport, exercising, and physical activities as a regular job. Time that is devoted to the activities based solely on somebody's own interest decision (I want to do it now) is the leisure time. The leisure time is the time when a person does not perform activities under the pressure of obligations. It is the time that is understood to be the time range that remains for relatively free use after the fulfillment of obligations. The concept of leisure time is to be understood also as a space for self-improvement of the individual and its possibility to fulfill own interests and needs, which can reflect the individual's value system. Sometimes it is defined as a time that remains after school duties and work and nonwork duties; household duties, which must be fulfilled as a member of the family; and satisfaction of the basic biological needs (sleeping, eating). The leisure time should be fulfilled with the leisure time activities, which bring to a person pleasant experience and satisfaction. We can see the leisure time as a time space, with which we can freely dispose of and for an individual it could mean the freedom of decision. It is also a time in which one can freely realize whatever he/she wants, independently of any duty and without subconscious pressure of doing some work and duties. Having the free choices for engagement in leisure time activities, the happiness comes and rises. The research on this matter presented [64] and confirmed that perceived freedom of choice has a major impact on happiness.

Leisure time is a very valuable asset of the nation, and therefore it is important to pay attention to it and create conditions for its active and meaningful fulfillment. To know how to spend the leisure time matters to the families, the school management and the teachers, the social service sector, and the policy makers. Nowadays, it is important that one develops harmoniously, both physically and mentally. Parents, teachers, coaches, and other educators play an important role in this. They all are responsible for leading young people how to spend the leisure time and give the

examples. They can provide the time to experience the opportunities and possibilities of spending leisure time with positive activities, which enrich the person. Many times, a child is raised in a family where sport and movement are strongly supported. This is also the reason why the child is more willing to devote the time to exercising and sporting activities.

Leisure time activities are different, as evidenced by the list of more than 250 different forms of leisure time activities published by the World Leisure and Recreation Association (WLRA). A very good idea is when a man decides that his/her leisure time activities will be fulfilled with the sporting activities and exercising, but the most often excuse of not doing these activities is that a man has not enough time.

#### *1.3.1.3 School environment and school duties*

Attending the school is compulsory for all children who reached 6 years of age and lasts for 10 long years. Children in this age period spend more time in the school environment than in any other places and must fulfill some school requirements, beginning with the homework and then learning knowledge and preparing all for the next day school duties. In the school and after the school time, there are duties that pupils must manage. Someone is excited when going to school, but not all. School activities are rates below average scores in happiness, while social, active, and passive leisure activities are rated above average of personal happiness [54]. The school helps the students improve academically, socially, and individually. Students are happy in school [65] when they are as a team member to the classroom and school activities, when they are appreciated, and when they succeed and had good social relations. They are unhappy when there are exams in school, homework and home projects, syllabi, teachers, pressure, violence, and punishment [ibid]. School is a place, where school climate, with all the staff and pupils, has a considerable mutual influence on the physical and psychological well-being and the quality of life of children, adolescents, and teachers too.

#### *1.3.1.4 Emotions and feelings*

Emotions and feelings influence the behavior. Emotions and feelings should be oriented in a useful manner of behavior. Emotions are important aspects of sporting activities. The emotions occur before, during, or after sporting activities. When these emotions are positive, a man can be keener to realize the activities. Rather than the intensity, the frequency of positive feelings is more important for happiness. It can be said that what a man likes can be made with greater engagement, enjoyment, and satisfaction. If we assume that experience of joy and happiness can improve life, then we can say that sporting activity improves life, because sport brings joy, happiness, and life satisfaction and brings positive feelings to a man. Emotions are also a possible factor of exercising and sporting activities. Exercise reduces stress and increases the feeling of happiness. Measuring feelings is a very subjective matter, which provides an individual evaluation of one's own feelings, education, income, personal fulfillment, family, and other social conditions.

#### *1.3.1.5 Taking care of yourself*

It is important to take care of yourself, because it can make the social life easier and can ensure confidence, social relationships, and happier and healthier life. Taking care of yourself means also the interest of your own physical appearance and personal hygiene, to have better life feelings; to manage the needed matters outside of the home, without the help of somebody else; to be able to cope with the



occurring problems in your life; and to have good feelings because you can manage it all. Taking care of yourself means also regular exercising, whether it can be a daily walk, jogging, home exercising or going to a gym, or regular participation in organized kinds of sports as an athlete. The time of taking care of yourself covers also the time for relaxing (maybe even time to be lazy for a while), time for sleeping, and time with family and friends, because taking care of yourself is important for your own satisfaction of life and well-being.

### *1.3.2 The dimension: global satisfaction with life*

Global satisfaction with life has its part in subjective well-being and subjective quality of life of people. Measurement of the life satisfaction among adolescents is needed. The comparison with adults can bring some new information to social research.

#### *1.3.2.1 Satisfaction with life and subjective well-being*

What is subjective well-being? For one it is only the feeling of positive evaluation of life. For another there are many areas, which influence the life. Areas, which most influence well-being, are in accordance of [66] as follows: physical well-being, economic well-being, social well-being, personal development and development of activities, emotional well-being, psychological well-being, satisfaction with life, specific areas in life and satisfaction within, participation in activities, and participation at work. How man perceives own well-being or lack of well-being accordingly to this he/she evaluates his/her quality of life.

The findings of [48] supported the statement that physical activity can have long-term effects on well-being. Satisfaction with life represents the cognitive dimension of subjective well-being and captures a global sense of well-being from the perspective of the respondent [3, 5]. Subjective well-being is popularly often called happiness. Happiness or subjective well-being is often measured as a part of life satisfaction. In evaluating happiness, it is important to remember that the appreciation and assessment depend on the time of evaluation. If it is evaluated immediately after the experienced situation or after a longer time only as a recall from the memory, there can be some differences in evaluations. The subjective well-being is composed of several separable although somewhat related variables [5]. Measuring national well-being and quality of life [67] in the United Kingdom provides results that younger people (mainly aged 16–24 years) were more likely to report higher ratings of satisfaction with their health and higher ratings of physical activity engagement. Especially the young people in the age range 16–19 years (adolescents) reported a higher level of life satisfaction (9–10 out of 10) than those aged 20–24.

In accordance to [68], well-being is divided into two aspects; these are life satisfaction and personal development. In the year 2015, [69] presented the comparison about the overall quality of life around the world and found out that Northern European nations are at the top of many well-being indicators and many African nations are near the bottom. Life satisfaction is the result of a judgmental process of an individual who assesses the quality of his/her life according to his/her own criteria. In the ideas of [7], the overall satisfaction with life is an indicator of quality of life, because one indicates how satisfied one is with one's life. Subjective well-being comprises people's longer-term levels of pleasant affect, lack of unpleasant affect, and life satisfaction [4]. The report of [70] noticed that satisfaction is an area of psychic phenomena that is classified into the subjective experience sphere of a man. An individual is satisfied when he/she can achieve predetermined goals. The relation between life domain satisfaction and overall life satisfaction, values, and internal/external perceived control has been explored by [71] at the sample of



Spanish adolescents. Individuals having internal perceived control are more likely to report they are satisfied with their overall life.

A large sample of individuals in 21 nations was studied with authors [72] who found that high life satisfaction was associated with not smoking, physical exercise, a healthier diet, and using sun protection, fruit intake, and fat avoidance. The revision of several types of reviewed evidence indicates that higher subjective well-being (such as life satisfaction, absence of negative emotions, optimism, and positive emotions) [73] causes better health and longevity. The study of [74] revealed that participants who were more physically active, than those who were less active, experienced higher levels of mental well-being and were generally more satisfied with their lives. Their findings indicated that participants with a healthy body mass index enjoyed higher levels of life satisfaction than those classified as overweight or obese and showed no significant differences between the gender and age groups. They presented that physical activity strengthens the association with life satisfaction and mental well-being [ibid].

The satisfaction with life is evaluated higher also in physically active disabled people [75, 76] than physically inactive disabled people.

Sport participation may be associated with improved life satisfaction and self-rated health for male and female students from the middle school [41], and the females may view exercise and physical activity as more important contributors to health and well-being as compared to males in the same age of 7 and 8 grades of middle school. Sport, exercise, and physical activity can improve mental health and psychosocial competences and improve mood, happiness, social relations, and other aspects of well-being.

“Global satisfaction with life can be considered to be an indicator of quality of life, because one indicates how satisfied one is with one’s life as a whole” [7]. When one manages to realize his/her own plans [36], a person is satisfied. This means that the level of satisfaction is closely related to the personal understanding of quality of life. Global satisfaction with life measures how people evaluate their life as a whole rather than their current feelings. Life satisfaction is in the article of [77] characterized as the cognitive component of subjective well-being, and the author stated that it plays an important role in a healthy successful youth development as an indicator, a predictor, a mediator/moderator, and an outcome. Whereas high life satisfaction is related to good adaptation and optimal mental health, low life satisfaction is associated with psychological, social, and behavioral problems among youth [ibid].

#### **1.4 Sport as a physical activity in the school system**

Sport as a physical activity has its place in the life of school pupils, pupils in the child and adolescent age. Adolescence is a transitional period between childhood and adulthood. The body changes are rapid and surprising. To adapt to these changes, the body needs movement. Along with the rapid changes that occur in body proportions, especially the increase in body height and body weight, the physical performance and fitness capability are the issues that increase too.

Sport as an exercising activity is provided by the school in a compulsory subject physical education in kindergarten and from the primary school as a subject physical and sport education, in which its most important mission is to create a relationship to regular physical activity as an essential foundation of a healthy lifestyle. In the year 2008 when the curricular transformation was made, the subject physical education was given the new name, physical and sport education, because sport as a social phenomenon should be a part of educational systems. Theoretical knowledge and practical experience from an amount of traditional and nontraditional sporting activities should be presented and learned in school; then the members of our society should know about them and can use and transfer them to leisure time activities while strengthening the health, compensating the workload, and enjoying the life

with the social required and accepted activities. There are more than 55 traditional and nontraditional sporting activities written in curriculum for secondary school that can be selected by the qualified teachers and learned from them during the schooling. The pupils are involved in a year-round sporting competition between classes in the same year of study and classes between different years of study and between local schools in the town, and they can go forward to the school's European championship or school's world championship.

Physical education is a compulsory subject within the educational area "health and movement" from the beginning in the kindergarten International Standard Classification of Education 0 (ISCED 0). The goal of the health and movement educational area is to provide basic health-related information and through appropriate physical exercises lead the child to acquire and improve motor skills and develop motor abilities. The educational area is focused on movement as a means of strengthening health and promoting proper psychosomatic and psychomotor development of preschool children. The child should be motivated to exercise and use it in everyday life without feeling tired or exhausted. An important part of this area is also basic hygiene habits and self-care activities. Physical activities are involved in everyday activities of schooling the kindergarten children.

From the school year 1960/1961 until the end of the school year 1983/1984 had been the schooling at the primary school nine years. From the school year 1984/1985 until the end of school year 1996/1997 had been the schooling at the primary school eight years. Since the school year 1997/1998, primary schools once again have comprised nine grades. These schools consist of two levels, the first level (first–fourth grade) and the second level (fifth–ninth grade), which are usually differentiated according to the interests and skills of students. Students are accepted in the first grade after reaching the sixth year of age. The compulsory education lasts for 10 years. After their graduation from primary schools, students must apply to a secondary school and finish the 10 year compulsory schooling. This means that at least one year must be completed at the selected secondary school.

In the primary education (ISCED 1 and ISCED 2) [78], the educational area health and movement provides pupils with the opportunity to express themselves and acquire basic movement skills that can be used in leisure time activities. The area focuses on basic information related to a healthy way of living, caring for own health, and physical activity. The focus of physical and sport education in primary education is predominantly on physical, functional, and movement enhancement, thus contributing to the strengthening of health, fitness orientation, and motor performance in two 45 min compulsory lessons weekly. Physical and sport education provides elementary theoretical and practical education in the field of movement, exercise, and sport. Physical and sport education significantly contributes to the psychological, social, and moral development of pupils, contributes to the formation of a positive relationship to physical activities, and fulfills a significant compensatory function in the educational process at school.

Physical and sport education uses a wide range of physical means that contribute to the psychological, social and moral development of pupils, with the emphasis on the development of both gross and fine motor skills, and contribute to the formation of a positive relationship to physical activity too, and fulfils a significant compensation function in the process of education. Through movement—movement exercises, games, and competitions—it positively affects the pupils' motor development. Emphasis is placed on the pupils' individual dispositions, which should be considered in content planning and pupil assessment. It is important to motivate pupils to achieve individual improvements in their motor performance while respecting their own individual preconditions. With its focus, physical education has an exceptional and specific position within the education of pupils of the younger school age.

A characteristic feature of the educational area health and movement is the knowledge and practical experience leading to the development of motor skills, improving the pupil's motor performance and acquiring the basics of sports and their use with the prospect of their application in the structure of their own movement regime.

The most important mission is to establish a relationship to regular physical activity as an essential foundation for a healthy lifestyle. The educational area combines knowledge, habits, and skills related to health, healthy lifestyle, and physical and sporting activities not only during schooling but also their use in adulthood. The basic knowledge of the importance of physical and sporting activities for health, disease prevention, proper diet, and sport activities and its evaluation and physical activity means are divided into four modules of education in school: health and its disorders, healthy lifestyle, fitness and motor performance, and sporting activities of movement regime. Pupils finishing study at primary school should have a clear concept of the importance of physical and sport education in strengthening active health; they should know the effect of exercising on the body. They should express their interest in physical activities independently, have a corresponding level of motor abilities in accordance with their motor preconditions, and have acquired physical activities from which they can create movement programs for their own needs.

The secondary education is currently offered within these educational groups: in grammar schools and secondary specialized schools. After the Velvet Revolution in 1989, grammar schools were transformed into a modern type of secondary schools offering general education, which prepares students especially to study at universities and higher forms of education. Subject to the current School Act, the mission of secondary specialized schools is to prepare industrial and technical employees at a secondary educational level for the needs of the labor market and practical life and at the same time, also for their subsequent university or further education. Secondary specialized schools educate specialists for individual industries, such as the construction, transportation, agriculture, food industry, services, economics, financial sector, culture, state administration, and other areas of social life. Secondary specialized schools thus provide education at the third educational level (ISCED 3) for the school-leaving examination but also at the fourth educational level (ISCED 4)—higher vocational education received during further studies leading to a certificate or diploma.

In the secondary education (ISCED 3) [78], the educational area health and movement creates a space of realization and awareness of the need for lifelong care of pupils for their health. The pupils recognize the quality of movement as an important part of his/her general development, and they can choose the movement in terms of occurrence of the needs (for enjoyment, for improving physical fitness, for compensation to work or school duties load). The complex subject and key competences obtained in schooling, with acquired sport skills, should ultimately become part of his/her lifestyle and attitude to life philosophy. Pupils should understand health as a subjective and objective value category; take responsibility for their health; acquire knowledge and skills related to care for their body, active movement regime, movement literacy, personal sport performance, and healthy lifestyle; and learn that prevention is a major tool for health protection.

Physical and sport education is a compulsory subject in both primary and secondary schools. There are two physical and sport education lessons each week. Swimming courses, skiing, snowboard courses, and courses for protecting the life and health are also the basic parts of physical and sport education. One aspect of the school physical education and sport delivery system in Slovakia, which has been in the past years envied by some other countries, is the comprehensive program of extracurricular activity, traditionally serviced by physical and sport education teacher on a voluntary basis. In addition to the compulsory physical and sport education lessons, pupils may attend non-compulsory lessons after school—extracurricular sporting activity.



## 2. Methods

### 2.1 Study design and data collection

#### 2.1.1 Participants

A total of 345 adolescents (151 boys and 194 girls) in the decimal age ranging from 15.38 to 19.60 years (whole sample age mean was  $17.13 \pm 0.92$ ; boys  $17.14 \pm 0.98$ ; girls  $17.12 \pm 0.87$ ) were included in the research sample. A total of 196 were labeled as sport active (sample age was  $17.10 \pm 0.95$ ) and 149 as sport inactive (sample age was  $17.16 \pm 0.87$ ). Sport active boys were 105 (with age  $17.13 \pm 1.00$ ); sport inactive boys were 46 (with age  $17.16 \pm 0.92$ ); sport active girls were 91 (with age  $17.07 \pm 0.88$ ); and sport inactive girls were 103 (with age  $17.16 \pm 0.86$ ). Sport active respondents were those who exercised regularly, at least twice a week (at least 120 min) of extracurricular physical activity, and sport inactive respondents were those who exercised less than 2 extracurricular hours in a week. They all attended two compulsory physical and sport education lessons in school weekly. Four main items were included in the questionnaire to gain the additional data about the research sample.

A questionnaire survey was conducted during the physical and sport education lessons. We used questionnaires quality of life enjoyment and satisfaction questionnaire and satisfaction with life scale. The procedures of the research were in accordance with the ethical standards of the ethics committee and with the Helsinki Declaration of 1975, as revised in 2000.

Student's t-test, Mann-Whitney U Test, and Kruskal-Wallis H test were taken into consideration in finding statistical differences according to test of normality. Pearson's correlation was run, and we calculated Hedges'  $g$  and Cohen's  $d$  for calculating effect size.

We used the statistical program IBM SPSS Statistics (Version 17 for Windows; SPSS, Chicago, IL, USA). Significance was considered at  $p < 0.05$ .

The importance of preselected domains of subjective quality of life (quality of life enjoyment and satisfaction and global satisfaction with life) was investigated individually. The levels of satisfaction with each of these domains were assessed. We hypothesized that the mean values of the domains would differ as a function of gender (boys and girls) and gender and sporting activity (sport active boys, sport inactive boys, sport active girls, and sport inactive girls).

#### 2.1.2 Q-LES-Q

The quality of life enjoyment and satisfaction questionnaire (Q-LES-Q) is a self-reported measure designed by [79] to obtain sensitive measures of the degree of enjoyment and satisfaction in various areas of daily functioning. The Q-LES-Q is a multidimensional measure of life satisfaction also for healthy people [80].

From the original questionnaire, we selected 50 items from 93-item self-reported measure asking about satisfaction on items over the past week from the areas physical health and physical activity, leisure time activities, social relations, feelings, taking care of yourself, and school environment and school duties, and we put them into one domain—quality of life enjoyment and satisfaction. That is why we present the mean of the scores from selected areas rather than the total scores for each area as a summary score. The higher the score is, the greater the satisfaction indicated for these selected areas.

Respondents indicate on a five-point scale how much of the time they have agreed or disagreed with regard to the statement presented in questionnaire during the past week. The five-point scale ranges from 1 not at all or never, 2 rarely, 3 sometimes, 4 often or most of the time to 5 frequently or all of the time.



2.1.3 SWLS

To measure the global life satisfaction, [81] developed and validated the satisfaction with life scale (SWLS). This scale is used worldwide and has shown to have favorable psychometric properties, including high internal consistency and high temporal reliability. The SWLS is suitable for use with different age groups. The SWLS can assess the respondent's life and the positive side of the individual's experience rather than focusing on unpleasant emotions. The SWLS has potential as a cross-cultural index of life satisfaction. SWLS is a five-item scale designed to measure global cognitive judgements of one's life satisfaction (not a measure of either positive or negative effect). Respondents indicate how much they agree or disagree with each of the five items using a 7-point scale that ranges from 1 strongly disagree, 2 disagree, 3 slightly disagree, 4 neither agree nor disagree, 5 slightly agree, 6 agree to 7 strongly agree, with higher scores representing greater life satisfaction. The highest amount of points in global satisfaction with life is 35 (**Table 1**).

The satisfaction with life scale (SWLS) was developed to assess satisfaction with the respondent's life. It assesses an individual's conscious evaluative judgment of his or her life by using his/her own criteria [82]. Reviews of research using the SWLS suggest that it is sensitive enough to detect changes in life satisfaction over time.

The five items are:

- 1. In most ways my life is close to my ideal.
- 2. The conditions of my life are excellent.
- 3. I am satisfied with my life.
- 4. So far, I have gotten the important things I want in life.
- 5. If I could live my life over, I would change almost nothing.

By measuring the different aspects of people's lives differentiated according to sport, exercise and physical activity participation, we can gather and find information as the evidences, which can be used to improve the circumstances of living active and valuable life, when they need it. Then we can tailor suitable leisure time sporting activities for those who want it and most need it, because of the desire to have a better life. Because we know that the sporting activities bring indisputable benefits to the life of people.

In this study that we are presenting here, we examined some important issues.

Summed score	The mean score	Statement	SWLS category
31–35	6.00–7.00	Extremely satisfied	Satisfied
26–30	5.00–5.99	Satisfied	
21–25	4.01–4.99	Slightly satisfied	
20	4.00	Neutral	Neutral attitude
15–19	3.00–3.99	Slightly dissatisfied	Dissatisfied
10–14	2.00–2.99	Dissatisfied	
5–9	1.00–1.99	Extremely dissatisfied	

**Table 1.**  
*The points of global satisfaction with life, which constitute seven benchmark statements and three SWLS categories in satisfaction.*

The aim of the research was to extend the knowledge about the quality of life enjoyment and satisfaction and about global satisfaction with life of secondary school pupils in terms of their level of extracurricular physical activity, to compare the results among different areas of the domain of quality of life enjoyment and satisfaction and the items of global satisfaction with life, and to find out the differences between the areas and items of the domains among sport active and sport inactive boys and girls.

### 3. Results

#### 3.1 The dimension quality of life enjoyment and satisfaction

Investigation of quality of life enjoyment and satisfaction in selected areas (Table 2)—physical health and activity, leisure time activities, social relations, emotions and feelings, taking care of yourself, and school environment and school duties between girls and boys—revealed more areas where the boys indicated higher scores, which means they have more often been or felt in positive statements (physical health and activities, leisure activities, emotions and feelings, taking care of yourself) than girls have been or felt in.

The girls more often felt better in the statements from the school area and social relation area.

We found statistical significance  $p < 0.001$  for boys in comparison of the responses between boys and girls in the areas: physical health and activity, leisure time activities, and feelings. We found statistical significance  $p = 0.002$  in the area taking care of yourself (in favor of boys). And we found statistical significance  $p = 0.040$  for girls in the area school environment and school duties. There was no statistical significance in the area social relations in comparison between girls and boys.

The domain quality of life enjoyment and satisfaction is valued statistically and significantly better in boys than in girls ( $p < 0.001$ ). The mean 3.51 for the whole sample of adolescents presented 70.2% quality of life enjoyment and satisfaction from all the possible time of life enjoyment and satisfaction.

Table 3 shows the highest score attributed to some statements (items) from the domain quality of life enjoyment and satisfaction in boys and girls. Neither the score nor the order is the same to each other between boys and girls.

	Gender					
	Boys (n = 151)		Girls (n = 194)		Total (n = 345)	
	Mean	Std. deviation	Mean	Std. deviation	Mean	Std. deviation
Physical health and activity	3.57	0.59	3.23	0.64	3.38	0.64
Leisure time activities	3.98	0.57	3.60	0.76	3.77	0.71
Social relations	3.78	0.55	3.79	0.57	3.79	0.56
Emotions and feelings	3.71	0.74	3.14	0.77	3.40	0.81
Taking care of yourself	4.02	0.67	3.72	0.68	3.85	0.69
School	2.79	0.54	2.97	0.47	2.89	0.51
Quality of life enjoyment and satisfaction	3.64	0.49	3.41	0.48	3.51	0.50

Table 2.  
Quality of life enjoyment and satisfaction and its areas of research in adolescent boys and girls.

The statement that reached the lowest score in both girls (2.23) and boys (1.98) was the frequency of joy when being in the school.

Kruskal-Wallis H test was used to compare four groups of research sample: sport active and sport inactive boys and sport active and sport inactive girls. We found statistical significance  $p < 0.001$  in the areas physical health and activity, leisure time activities, emotions and feelings, taking care of yourself, and the domain quality of life enjoyment and satisfaction. The significance  $p = 0.018$  was detected in the area school environment and school duties. No statistical significance was found in the area social relations. Sport active boys have the highest score in all areas except school environment and school duties and social relations. In comparison of the area social relations, sport active boys are at the same level as the sport inactive girls (both 3.82) (**Table 4**). The highest score in the area school (school environment and school duties) have the sport inactive girls and the sport inactive boys (both 3.04) (**Table 4**). The area taking care of yourself is valued at most in three groups, sport active boys, sport inactive boys, and sport active girls, in comparison to other investigated areas.

When we compared results of the sport active boys to the results of the sport inactive boys from the **Table 4** we found statistical significance for sport active boys in the areas: leisure time activities  $U = 1623.50$ ,  $p = 0.001$ , taking care of yourself  $U = 548.50$ ,  $p = 0.004$ , and emotions and feelings  $U = 562.00$ ,  $p = 0.005$ . The area school environment and school duties was significant for sport inactive boys in comparison to sport active boys ( $U = 237.50$ ,  $p = 0.027$ ). No statistical differences were in the areas physical health and activity and social relations. Sport active boys are statistically and significantly more satisfied with the domain quality of life enjoyment and satisfaction than sport inactive boys ( $U = 1868.50$ ,  $p = 0.027$ ).

When we compared sport active girls and sport inactive girls, the statistical significance was found only in the area leisure time activities ( $U = 3279.00$ ,  $p < 0.001$ ). No statistical difference was found in domain quality of life enjoyment and satisfaction.

In comparison of sport active boys and sport active girls, statistical significances were found for boys in the areas physical health and activity ( $U = 3387.00$ ,  $p < 0.001$ ), emotions and feelings ( $U = 783.50$ ,  $p < 0.001$ ), taking care of yourself ( $U = 982.50$ ,  $p < 0.001$ ), and leisure time activities ( $U = 3706$ ,  $p = 0.007$ ). No statistical significances were found in the areas social relations and school environment and school duties. The domain quality of life enjoyment and satisfaction reached statistical significance for sport active boys ( $U = 3604.50$ ,  $p = 0.003$ ).

Significant differences between sport inactive boys and sport inactive girls were found in the areas of physical health and activity ( $U = 1864.00$ ,  $p = 0.038$ ) and leisure time activities ( $U = 1747.50$ ,  $p = 0.010$ ), and the statistical significance is in favor of sport inactive boys. The domain quality of life enjoyment did not reach statistical significance in comparison of sport inactive boys and sport inactive girls.

Boys' score	Statements	Girls' score	Statements
4.37	Joking, laughing with other people	4.40	Be interested about own appearance and hygiene
4.30	Frequency of hobby's joy	4.38	Looking forward to getting together
4.27	Looking forward to getting together	4.30	Joking, laughing with other people
4.26	Ability to take care of yourself	4.26	Enjoyed talking with friends
4.23	Keeping interest in hobbies	4.08	Looking forward in advance for hobbies

**Table 3.**  
*The highest score attributed to some statements (items) from the domain quality of life enjoyment and satisfaction in boys and girls.*

**Table 5** shows the highest score attributed to some statements from the domain quality of life enjoyment and satisfaction in sport active boys and sport inactive boys. Neither the score nor the order is the same to each other between sport active boys and sport inactive boys.

**Table 6** shows the highest score attributed to some statements (items) from the domain quality of life enjoyment and satisfaction in sport active girls and sport inactive girls. Neither the score nor the order is the same to each other between sport active girls and sport inactive girls.

The statement that reached the lowest score in all four compared groups—sport active boys (1.89), sport inactive boys (2.24), sport active girls (2.03), and sport inactive girls (2.39)—was the frequency of joy when being in the school.

Pearson’s correlation was run to assess the relationship between domain quality of life enjoyment and satisfaction and the selected areas of the domain in 345 adolescents.

	Sport active boys (n = 105)		Sport inactive boys (n = 46)		Sport active girls (n = 91)		Sport inactive girls (n = 103)	
	Mean	Std. dev.	Mean	Std. dev.	Mean	Std. dev.	Mean	Std. dev.
Physical health and activity	3.61	0.59	3.42	0.58	3.30	0.65	3.17	0.63
Leisure time activities	4.09	0.52	3.74	0.60	3.77	0.79	3.45	0.70
Social relations	3.82	0.54	3.69	0.58	3.75	0.64	3.82	0.51
Emotions and feelings	3.84	0.74	3.42	0.67	3.15	0.75	3.13	0.78
Taking care of yourself	4.14	0.67	3.77	0.61	3.79	0.54	3.65	0.79
School	2.69	0.57	3.04	0.37	2.88	0.44	3.04	0.48
Quality of life enjoyment and satisfaction	3.69	0.51	3.51	0.42	3.45	0.48	3.37	0.48

**Table 4.**  
*Quality of life enjoyment and satisfaction and its areas of research among adolescent sport active and sport inactive boys and girls.*

Sport active boys’ score	Statement	Sport inactive boys’ score	Statement
4.43	Enjoying the leisure activities	4.39	Joking, laughing with other people
4.36	Joking, laughing with other people	4.22	Looking forward to getting together
4.33	Keeping interest in hobbies	4.21	Ability to take care of yourself
4.29	Looking forward to getting together	4.12	Satisfaction with the schoolmate’s communication
4.28	Ability to take care of yourself	4.09	Enjoying talking with friends

**Table 5.**  
*The highest score attributed to some statements from the domain quality of life enjoyment and satisfaction in sport active boys and sport inactive boys.*



Sport active girls' score	Statement	Sport inactive girls' score	Statement
4.41	Looking forward to getting together	4.45	Joking, laughing with other people
4.36	Be interested about own appearance and hygiene	4.44	Be interested about own appearance and hygiene
4.23	Enjoying talking with friends	4.35	Looking forward to getting together
4.20	Enjoying the leisure activities	4.29	Enjoying talking with friends
4.20	Looking forward in advance for hobbies	3.98	Ability to take care of yourself

**Table 6.**  
*The highest score attributed to some statements from the domain quality of life enjoyment and satisfaction in sport active girls and sport inactive girls.*

There was a strong positive correlation between:  
Emotions and feelings and quality of life enjoyment and satisfaction,  $r = 0.902$ ,  $p < 0.001$ , with the emotions and feelings explaining 81% of the variation in quality of life enjoyment and satisfaction.  
Taking care of yourself and quality of life enjoyment and satisfaction,  $r = 0.808$ ,  $p < 0.001$ , with taking care of yourself explaining 65% of the variation in quality of life enjoyment and satisfaction.  
Physical health and activity and quality of life enjoyment and satisfaction,  $r = 0.766$ ,  $p < 0.001$ , with the physical health and activity explaining 59% of the variation in quality of life enjoyment and satisfaction.  
Social relations and quality of life enjoyment and satisfaction,  $r = 0.721$ ,  $p < 0.001$ , with the social relations explaining 52% of the variation in quality of life enjoyment and satisfaction.  
Leisure time activities and quality of life enjoyment and satisfaction,  $r = 0.690$ ,  $p < 0.001$ , with the leisure time activities explaining 48% of the variation in quality of life enjoyment and satisfaction.

School environment and school duties and quality of life enjoyment and satisfaction,  $r = 0.541$ ,  $p < 0.001$ , with the school environment and school duties explaining 29% of the variation in quality of life enjoyment and satisfaction.

**3.2 The dimension global satisfaction with life**

Investigation of the domain of satisfaction with life in the five given questions in boys and girls revealed that the most scored item was “The conditions of my life are excellent” (for both girls 5.41 and boys 5.51) with no statistical significance in comparison.

The next items (**Table 7**) with significant differences between boys and girls were: “I am satisfied with my life” (for both girls 4.49 and boys 4.88) with statistical significance in comparison  $t(2.276) = 326.96$ ,  $p = 0.023$ . Boys, from the research sample, were significantly more satisfied with their life than girls.

“In most ways my life is close to my ideal” (for both girls 4.23 and boys 4.71) with statistical significance in comparison  $t(3.109) = 327.21$ ,  $p = 0.002$ . Boys, from the research sample, had in most ways their life significantly closer to their ideal life than girls.

	Gender					
	Boys (n = 151)		Girls (n = 194)		Total (n = 345)	
	Mean	Std. deviation	Mean	Std. deviation	Mean	Std. deviation
In most ways my life is close to my ideal	4.71	1.42	4.23	1.45	4.44	1.45
The conditions of my life are excellent	5.51	1.29	5.41	1.44	5.46	1.38
I am satisfied with my life	4.88	1.56	4.49	1.61	4.66	1.60
So far, I have gotten the important things I want in life	4.56	1.46	4.09	1.55	4.29	1.53
If I could live my life over I would change almost nothing in my life	3.82	1.99	3.44	1.94	3.61	1.97
SWLS mean of five items	4.70	1.21	4.33	1.18	4.49	1.21

**Table 7.**  
*Satisfaction with life and its items of research in adolescent boys and girls.*

“So far, I have gotten the important things I want in life” (for both girls 4.09 and boys 4.56) with statistical significance in comparison  $t(2.877) = 331.10$ ,  $p = 0.004$ . Boys, from the research sample, significantly have gotten more important things they wanted in their life than girls.

There was no significant difference in the item “If I could live my life over, I would change almost nothing in my life” between the score for the item in boys (3.82) and girls (3.44).

Comparing the mean of the domain satisfaction with life among the boys and the girls, we found out that boys were significantly more satisfied with their life than girls ( $t(2.801) = 319.71$ ,  $p = 0.005$ ). The boys are satisfied with their life at 67.14%, girls at 61.86%, and adolescents (both girls and boys together) at 64.14% from the possible highest measured score of satisfaction with life (7 points are 100%).

Pearson’s correlation was used to assess the relationship between domain global satisfaction with life and the selected items of the domain in 345 adolescents.

There was a strong positive correlation between:  
I am satisfied with my life and global satisfaction with life,  $r = 0.839$ ,  $p < 0.001$ , with the statement “I am satisfied with my life” explaining 70% of the variation in global satisfaction with life.

In most ways my life is close to my ideal and global satisfaction with life,  $r = 0.818$ ,  $p < 0.001$ , with the statement “In most ways my life is close to my ideal” explaining 67% of the variation in global satisfaction with life.

If I could live my life over, I would change almost nothing in my life and global satisfaction with life,  $r = 0.751$ ,  $p < 0.001$ , with the statement “If I could live my life over, I would change almost nothing in my life” explaining 56% of the variation in global satisfaction with life.

So far, I have gotten the important things I want in life and global satisfaction with life,  $r = 0.730$ ,  $p < 0.001$ , with the statement “So far, I have gotten the important things I want in life” explaining 53% of the variation in global satisfaction with life.

The conditions of my life are excellent and global satisfaction with life,  $r = 0.656$ ,  $p < 0.001$ , with the statement “The conditions of my life are excellent” explaining 43% of the variation in global satisfaction with life.

The global satisfaction with life (**Table 8**) presented that boys, girls, and adolescents are in the category as slightly satisfied within the domain satisfaction with the life.

**Table 9** shows the mean and standard deviation of the items of global satisfaction with life and SWLS mean of the five items in sport active boys and sport active and sport inactive girls.

Kruskal-Wallis H test was used to find out the statistical significance of differences in comparison of four selected groups from the sample (sport active boys, sport inactive boys, sport active girls, and sport inactive girls). We found out in all items the significant differences in comparison of these groups ( $p < 0.001$ ) except one “The conditions of my life are excellent.” All compared groups perceived this item at a very similar level of strength of agreement (5.22–5.64 from the seven-point scale), and we did not find out statistical differences in crisscross comparison.

We search for the answer how much one group differs from another, so we used the calculation of effect size. The Hedges’  $g$  for calculating effect size with the different sample sizes (sport active boys and sport inactive boys) when comparing SWLS mean of the five items (from **Table 9**) revealed the number 0.63, and it means medium effect. Cohen’s  $d$  was calculated for the girls’ groups (sport active and sport inactive for comparison), because the sample size is more than 50 girls. And we found out the effect size 0.35, and this is a small effect. Sport active boys differ more to sport inactive boys than sport active girls differ to sport inactive girls in global satisfaction with life.

No statistical significance was found out in comparison of two independent groups (**Table 9**):

1. Between sport active boys and sport inactive boys in the item: “The conditions of my life are excellent”
2. Between sport active girls and sport inactive girls in the items: “The conditions of my life are excellent”; “In most ways my life is close to my ideal”; and “I am satisfied with my life”
3. Between sport active boys and sport active girls in the items: “The conditions of my life are excellent”; “So far, I have gotten the important things I want in life”; and “If I could live my life over, I would change almost nothing in my life”
4. Between sport inactive boys and sport inactive girls in all five items and the global satisfaction with life presented as SWLS mean of five items

Statistical significance was found out in comparison of two independent groups (**Table 9**):

1. Between sport active boys and sport inactive boys in the items: “In most ways my life is close to my ideal” ( $U = 1849.00$ ,  $p = 0.018$ ); “I am satisfied with my life” ( $U = 1596.00$ ,  $p = 0.001$ ); “So far, I have gotten the important things I want in life” ( $U = 1806.00$ ,  $p = 0.012$ ); and “If I could live my life over, I would change almost nothing in my life” ( $U = 1601.50$ ,  $p = 0.001$ ). And in the global satisfaction with life presented in **Table 9** as SWLS mean of five items ( $U = 1536.00$ ,  $p < 0.001$ )
2. Between sport active girls and sport inactive girls in the items: “So far, I have gotten the important things I want in life” ( $U = 3767.50$ ,  $p = 0.016$ ) and “If I could live my life over, I would change almost nothing in my life”  $U = 3806.50$ ,

p = 0.022). And in the global satisfaction with life presented in **Table 9** as SWLS mean of five items (U = 3818.50, p = 0.026)

3. Between sport active boys and sport active girls in the items: “In most ways my life is close to my ideal” (U = 3839.50, p = 0.015) and “I am satisfied with my life” (U = 3948.00, p = 0.032). And in the global satisfaction with life presented in **Table 9** as SWLS mean of five items (U = 3851.50, p = 0.019)

	Gender					
	Boys (n = 151)		Girls (n = 194)		Total (n = 345)	
	Mean	Std. deviation	Mean	Std. deviation	Mean	Std. deviation
Global satisfaction with life	23.48	6.03	21.66	5.92	22.46	6.02
Category of global satisfaction with life	Slightly satisfied		Slightly satisfied		Slightly satisfied	

**Table 8.**  
*Global satisfaction with life in adolescent boys and girls.*

	Sport active boys (n = 105)		Sport inactive boys (n = 46)		Sport active girls (n = 91)		Sport inactive girls (n = 103)	
	Mean	Std. dev.	Mean	Std. dev.	Mean	Std. dev.	Mean	Std. dev.
In most ways my life is close to my ideal	4.89	1.34	4.30	1.49	4.41	1.48	4.07	1.42
The conditions of my life are excellent	5.64	1.24	5.22	1.37	5.53	1.43	5.31	1.45
I am satisfied with my life	5.16	1.49	4.24	1.54	4.67	1.63	4.33	1.59
So far, I have gotten the important things I want in life	4.73	1.51	4.15	1.26	4.35	1.64	3.85	1.44
If I could live my life over I would change almost nothing in my life	4.17	1.96	3.03	1.83	3.78	1.97	3.15	1.87
SWLS mean of five items	4.92	1.18	4.19	1.12	4.55	1.18	4.14	1.16

**Table 9.**  
*Satisfaction with life and its items of research in adolescent sport active and sport inactive boys and girls.*

Sport active boys	The order of the items of satisfaction with life in sport active boys and girls in dependence on the score	Sport active girls
5.64	1. The conditions of my life are excellent	5.53
5.16	2. I am satisfied with my life	4.67
4.89	3. In most ways my life is close to my ideal	4.41
4.73	4. So far, I have gotten the important things I want in life	4.35
4.17	5. If I could live my life over I would change almost nothing in my life	3.78

**Table 10.**  
*The order of the items of satisfaction with life in sport active boys and girls in dependence on the score.*



The order of the items of satisfaction with life in sport active boys and girls in dependence on the score is the same for sport active boys and sport active girls (**Table 10**).

The order of the items of satisfaction with life in sport inactive boys and girls in dependence on the score is the same for sport inactive boys and sport inactive girls (**Table 11**).

All selected groups evaluated the domain global satisfaction with their life (from the mean of the total sum) as slightly satisfied (**Table 12**).

**Table 13** presents the detailed percentage of sport active and sport inactive boys and girls classified according to the statements of satisfaction degree (from extremely satisfied to extremely dissatisfied). Sport active boys scored the highest percentage of extreme satisfaction, followed by sport active girls, sport inactive girls, and sport inactive boys.

Sport inactive girls scored the highest percentage of extreme dissatisfaction followed by sport active boys and sport active girls, and no one among the sport inactive boys scored the points from 5 to 9, which mean extreme dissatisfaction in the global satisfaction with life.

The sample of sport active boys consists of 79.05% sport active boys who were satisfied, 15.24% who were dissatisfied, and 5.71% who presented neutral attitude to global satisfaction with life.

The sample of sport inactive boys consists of 52.17% sport inactive boys who were satisfied, 34.78% who were dissatisfied, and 13.04% who presented neutral attitude to global satisfaction with life.

The sample of sport active girls consists of 64.83% sport active girls who were satisfied, 29.67% who were dissatisfied, and 5.49% who presented neutral attitude to global satisfaction with life.

Sport inactive boys	The order of the items of satisfaction with life in sport inactive boys and girls in dependence on the score	Sport inactive girls
5.22	1. The conditions of my life are excellent	5.31
4.30	2. In most ways my life is close to my ideal	4.33
4.24	3. I am satisfied with my life	4.07
4.15	4. So far, I have gotten the important things I want in life	3.85
3.03	5. If I could live my life over I would change almost nothing in my life	3.15

**Table 11.**  
*The order of the items of satisfaction with life in sport inactive boys and girls in dependence on the score.*

	Sport active boys (n = 105)		Sport inactive boys (n = 46)		Sport active girls (n = 91)		Sport inactive girl (n = 103)	
	Mean	Std. dev.	Mean	Std. dev.	Mean	Std. dev.	Mean	Std. dev.
Global satisfaction with life	24.59	5.88	20.94	5.61	22.74	5.89	20.71	5.81
Category of global satisfaction with life	Slightly satisfied		Slightly satisfied		Slightly satisfied		Slightly satisfied	

**Table 12.**  
*Global satisfaction with life in adolescent sport active and sport inactive boys and girls.*

The sample of sport inactive girls consists of 57.28% sport inactive girls who were satisfied, 37.87% who were dissatisfied, and 4.85% who presented neutral attitude to global satisfaction with life.

We created three SWLS category (satisfied, neutral, and dissatisfied) from the seven benchmarks of statements (see in methods of **Table 1**). We put together all the statements with word satisfied (extremely satisfied, satisfied, slightly satisfied – statements with the points 21–35) in one criterion and all the boys and girls, who reached the points in this range, we classified as satisfied. Neutral statement (with the points 20) remains neutral. All the statements with the word dissatisfied (extremely dissatisfied, dissatisfied, slightly dissatisfied – statements with the points 5–19) we put together in one criterion and all the boys and girls who reached the points in this range, we classified as dissatisfied.

In **Table 14**, we present how many sport active boys and sport inactive boys from the entire sample of boys (n = 151) answered dissatisfied, neutral attitude, and satisfied. In **Table 15**, we present the same for sport active girls and sport inactive girls (n = 194).

Summed score	Statement	Sport active boys (n = 105) (%)	Sport inactive boys (n = 46) (%)	Sport active girls (n = 91) (%)	Sport inactive girls (n = 103) (%)	Total (n = 345) (%)
31–35	Extremely satisfied	17.15	2.17	8.79	2.91	8.70
26–30	Satisfied	28.57	21.74	28.57	19.41	24.93
21–25	Slightly satisfied	33.33	28.26	27.47	34.96	31.59
20	Neutral	5.71	13.04	5.49	4.85	6.38
15–19	Slightly dissatisfied	9.52	17.39	20.88	23.30	17.68
10–14	Dissatisfied	3.81	17.39	7.69	11.66	8.99
5–9	Extremely dissatisfied	1.91	0	1.10	2.91	1.74

**Table 13.**  
*The percentage (%) of sport active and sport inactive boys and girls in seven SWLS benchmarks of statements.*

Sport active and sport inactive boys (n = 151) and the SWLS category: satisfied, neutral attitude, dissatisfied	Frequency (n)	Percent (%)
Sport active boy satisfied	84	55.63
Sport inactive boy satisfied	24	15.89
Sport inactive boy dissatisfied	16	10.60
Sport active boy dissatisfied	15	9.94
Sport active boy neutral attitude	6	3.97
Sport inactive boy neutral attitude	6	3.97
Total	151	100

**Table 14.**  
*The frequency (n) and the percentage (%) of sport active and sport inactive boys in SWLS categories.*

Sport active and sport inactive girls and the SWLS category: satisfied, neutral attitude, dissatisfied	Frequency (n)	Percent (%)
Sport inactive girl satisfied	60	30.93
Sport active girl satisfied	59	30.41
Sport inactive girl dissatisfied	38	19.58
Sport active girl dissatisfied	27	13.92
Sport active girl neutral attitude	5	2.58
Sport inactive girl neutral attitude	5	2.58
Total	194	100

**Table 15.**  
*The frequency (n) and the percentage (%) of sport active and sport inactive girls in SWLS categories.*

The largest number of satisfied boys was sport active boys. They were 39.74% more satisfied than sport inactive boys. Slightly more dissatisfied (0.66%) were sport inactive boys than sport active boys. Sport active and sport inactive boys had the same number in terms of neutral attitude to global satisfaction with life.

Sport inactive girls took the first place in satisfaction with life (**Table 15**). They were slightly more satisfied than sport active girls (0.52%). More dissatisfied were sport inactive girls (5.66%) than sport active girls. Sport active and sport inactive girls had the same number in terms of neutral attitude to global satisfaction with life.

Pearson's correlation was run to assess the relationship between domain global satisfaction with life and the domain quality of life enjoyment and satisfaction and its areas in 345 adolescents.

There was a strong positive correlation between:

Emotions and feelings and the domain global satisfaction with life,  $r = 0.739$ ,  $p < 0.001$ , with emotions and feelings—explaining 55% of the variation in the domain global satisfaction with life.

The domain quality of life enjoyment and satisfaction and the domain global satisfaction with life,  $r = 0.657$ ,  $p < 0.001$ , with the domain quality of life enjoyment and satisfaction explaining 43% of the variation in the domain global satisfaction with life.

Taking care of yourself and the domain global satisfaction with life,  $r = 0.680$ ,  $p < 0.001$ , with taking care of yourself—explaining 46% of the variation in the domain global satisfaction with life.

Physical health and activity and the domain global satisfaction with life,  $r = 0.543$ ,  $p < 0.001$ , with the physical health and activity explaining 30% of the variation in the domain global satisfaction with life.

Social relations and the domain global satisfaction with life,  $r = 0.463$ ,  $p < 0.001$ , with the social relations explaining 21% of the variation in the domain global satisfaction with life.

Leisure time activities and the domain global satisfaction with life,  $r = 0.423$ ,  $p < 0.001$ , with the leisure time activities explaining 18% of the variation in the domain global satisfaction with life.

School environment and school duties and the domain global satisfaction with life,  $r = 0.259$ ,  $p < 0.001$ , with the school environment and school duties explaining 7% of the variation in the domain global satisfaction with life.

## 4. Discussion

This study examined the domain quality of life enjoyment and satisfaction with its areas and the domain global satisfaction with life with its items in sport active and sport inactive adolescent boys and girls. It is very important to measure the subjective dimensions of the quality of children's lives. Children and youth are the future of all nations. There are more than 3.2 billion of the world population under 24 years of age (about 42%; 26% children in the age 0–14 and 16% children and youth in the age 15–24) [83].

Emotional well-being in [57] publication shows the overall balance between frequency of experienced positive and negative emotions, with higher scores presented for positive emotions. Positive emotions are felt more often than negative ones. Exercising brings positive emotions, provides serious benefits in mental health, and leads to a happier life. Exercise releases endorphins, and because of them the feelings of happiness occur. There is growing recognition in society presented by [27] that measures of subjective well-being directly index evaluations and feelings associated with the quality of life, and we have confirmed this in our research with the correlation coefficient, which shows that the emotions and feelings explained 81% of the variation in quality of life enjoyment and satisfaction.

The specific aspects of adolescents' health-related quality of life were acknowledged by [84], such as physical maturation and body image, peer relationships, intimacy and sexuality, and autonomy. We considered health as a universal value, independent of the sociocultural context. Health is one of the most important aspects of the quality of life and to some extent affects other aspects. Slovakia, according to the United Nations, is one of the advanced countries of the world, but the overall health of the Slovak population has hardly improved in the last decades. The health of the Slovak population is not only a reflection of the level and quality of national health services but also, and above all, the responsibility of citizens for their health. Health is one of the most important manifested values, but it is surprising how little attendance devotes man to both prevention and treatment of diseases.

Young people in Slovakia presented the main motives for being active with sport—the positive health. It is very encouraging information for the researchers in the field of sport sciences. We found out in our research that the physical health and activity explained 59% of the variation in quality of life enjoyment and satisfaction, and taking care of yourself explained 65% of the variation in quality of life enjoyment and satisfaction. A total of 160 high school students (80 of them were sport active and 80 were sport inactive) were the research sample for the investigation of subjective quality of life (SQUALA) [85] in the research of [37]. This research has confirmed that health clearly dominates all high school students, whether they are sport active or not. The mean for the valued score for sport active was 4.72 of the five-point scale and for sport inactive was 4.61. People in Singapore attached great importance to being healthy and having a happy family life, and they were very satisfied with the various domains of life [86]. The former study of 175,850 adults [87] was based on the recommended guideline of 30 min of moderate exercise daily on most days of the week, or 20 min of intense exercise on at least 3 days of the week revealed that if somebody exercises, according to the recommended guidelines, he/she will have twice as many days when he/she feels physically and mentally healthy compared to a person who does not exercise.

If there are good social relations in the framework of participating in sporting activities, then it is easier for the individuals to stay with some regular sporting activity if supported by their families and other acquaintances. Our research



concluded that with the social relations, 52% of the variation in quality of life enjoyment and satisfaction are explained.

The results of [88] investigation is increased level of life satisfaction in the group with higher level of leisure participation. The results of [39] also showed that significant differences existed between college rank and leisure participation, as well as between gender and leisure participation. Results of [54] showed that those participants who reported higher leisure time physical activity levels also reported a significantly higher life satisfaction ( $M = 41.9$ ,  $SD = 35.0$ ) relative to participants with lower levels ( $M = 37.6$ ,  $SD = 34.2$ ,  $t(1532) = -2.36$ ,  $p < 0.01$ ). There were no statistical differences in the perception of health-related quality of life (HRQOL) and leisure time physical activity ( $t(1532) = -1.03$ ,  $p = 0.30$ ), although active people had higher scores. Both HRQOL and life satisfaction scores were higher in individuals who were participating in Recreovía ( $p < 0.001$ ). Higher life satisfaction scores were found in the group with higher leisure time physical activities, while HRQOL showed no differences. Better psychological well-being indices were found in the Recreovía group. The results of this study supported other research on the relationship of leisure participation and leisure satisfaction to other facets of life. In our research we found out that with the leisure time activities, we can explain 48% of the variation in quality of life enjoyment and satisfaction.

School activities rated below average scores in happiness in the research of [54]. In our research there was a statement that reached the lowest score in all four compared groups—sport active boys (1.89), sport inactive boys (2.24), sport active girls (2.03), and sport inactive girls (2.39); and it was the frequency of joy when being in the school. With the school environment and school duties, we can explain 29% of the variation in quality of life enjoyment and satisfaction.

The results of [52] did not show differences between groups of adolescents with various sporting levels of sport performance in the level of quality of life, respectively, its individual areas. The research of [36] found out that significantly reduced life satisfaction was detected for the university students who reported not participating in physical activity. The previous findings [36] suggest physical activity participation is associated with improved life satisfaction for university students. Those students who were more active in physical activity reported higher levels ( $p < 0.05$ ) of satisfaction with life as a whole. In the next research of [37], statistically significant differences were not found in the evaluation of selected quality of life factors (health, leisure time, family, and standard of living) between sport active and sport inactive high school students. Health was evaluated as the most important factor of quality of life. Very important was the factor family, and the factors standard of living and leisure time were evaluated at the middle high of importance. The conclusions of the research [89] present that the group of judo participants ( $n = 90$ ) had significantly higher well-being and life satisfaction scores than normative sample. The investigation of the relationship between involvement in physical activity (sports) and satisfaction with life among 100 ball game participants [90] indicated that there was a significant influence ( $p < 0.05$ ) on satisfaction with life in ball game participants. The findings from the study of [91] showed that the participants in football sample, in particular girls, reported a higher level of moderate-to-vigorous leisure time physical activity than those in the reference sample and they also rated their life satisfaction and subjective health more favorable than reference sample.

The participation in sporting activity as a variable of higher level of psychological well-being is consistent with the authors [92, 93]. High school learners from the South Africa perceived that increasing exercising and sporting activities in sport participation resulted in significantly positive responses of physical health, mental health, happiness, and well-being [94].

The implication of the study [77] is that life satisfaction and positive affect mitigate the negative effects of stressful life events and work against the development of psychological and behavioral problems among youth. And we gave evidence to this; on these pages research presented that exercising and sporting activities should be such a positive affect for positive youth development. The article of [94] talks about the factors, including individual differences in physical and psychosocial development, which can contribute to the way in which adolescents experience the impact of sport participation. Participation in exercising or sporting activities on any level can be enjoyed by all adolescents and can bring the results as in [95, 96].

A total of 1671 Danish adolescents were taken in investigation on physical activity and several psychosocial questions [97]. The most important motives for physical activity for them were improvement of health, to get in good shape, to have fun, and to make new friends. High intensity of physical activity was associated with high social class, strong social interaction in peer group, easy contact with parents and friends, physical exercise among parents and best friends, good health, and high degree of life satisfaction.

Preliminary findings suggest physical activity and sport participation are associated with improved life satisfaction and self-rated health for middle school students [40]. In addition, although some gender differences were observed, consistent findings for sport participation suggest sport participation may carry multiple social, mental, and physical benefits for youth [ibid].

It was found in the investigation of [86] that there were no significant relationships found between life satisfaction and demographic characteristics. The subjective quality of life domain measures correlated most strongly with general life satisfaction—correlation ranged from 0.16 to 0.65 in the study of [98]. Generally speaking, the findings of [35] study indicated that physical activity has an effect on positive physical self-concept and life satisfaction. The study of [99] revealed relationships between perceived life dissatisfaction and noninvolvement in physical activity. Little research of [41] with 245 students was surveyed about physical activity and life satisfaction. Analysis documented significantly reduced life satisfaction for females who reported not engaging in vigorous physical activity during the past 7 days and for both males and females who reported not playing team sports. Of the demographic variables examined [100], only age was significantly associated with the quality of life scores. Satisfaction with life in Portuguese adolescents was 18 points, and this score is less than the findings in our research for Slovak adolescents (22.46). Life satisfaction acts as a protective factor against risky behavior and mood disorders [101]. The researchers, teachers, and parents should understand the adolescents' view of quality of life, where the adolescents emphasize the importance of social relations and psychosocial health to promote and sustain their quality of life [102]. The data obtained in the research [103] indicate that those who engage in physical sporting activity always have higher psychological well-being levels ( $p < 0.001$ ), experience more positive emotions ( $p < 0.001$ ) and fewer negative ones ( $p < 0.001$ ), and feel more satisfied with their lives ( $p < 0.001$ ), than those who do not. Linear relationship between greater sport participation and happiness were observed in the results of [104]. The results of the [95] study presented an overall prediction of higher health-related quality of life with greater physical activity.

Good thoughts are expressed by [105] that when the professional sport is no longer the future of male and female secondary school students, then organized exercising or sporting activity provides them the benefits that can last for the rest of their lives and hopes that such organized activities will lead to adoption of an active lifestyle in the adulthood. Participation in organized sports provides an opportunity for young people to increase their physical activity and develop physical and social skills. And the study of [103] presented the data, which identified that physical

activity can be taken as a variable associated with higher well-being scores and the recommended regular basis for exercising should be at least four times a week.

Positive associations between happiness and engagement in sporting activities are indicated in [5, 9, 27, 54, 104, 106]. Happiness as an equal to subjective well-being can be measured in terms of life satisfaction. It can be concerned with the presence of positive experience and feelings and the absence of negative experience and feelings. Slovak people rank in happiness in 38th place among 156 world countries [107, 108] with 6.192 points from a 10-point scale and with the loss of 1.577 points in comparison to the first country, which was Finland, in World Happiness Report 2019, and rank lower than the OECD average of 6.5. In comparison to the year 2008, 0.933 points of improvement can be found. The Slovak Republic ranks 32nd place among 148 nations and 1 special administrative region of China, Hong Kong, in the overall Prosperity Index rankings [109]. In the Prosperity Pillar rankings, Slovakia performs best on education (access to education, quality of education, and human capital) and safety and security (national security and personal security), where it took 26th place. The Quality of Life Index by Country [110] revealed that the Slovak Republic with 153.10 points is on the 31st place in quality of life when concerning purchasing power index, safety index, healthcare index, cost of living index, property price to income ratio (which is the worse rated from selected factors in Slovakia), traffic commute time index, pollution index, and climate index (which is best rated from selected factors in Slovakia). The model of [9] proposes that “happiness is a concept relative to individuals, their unique needs and resources and to the culture and environment in which they function as social beings,” and we agree with them.

## **5. Conclusion**

A new strategy should take place in the life of all people—creating a physical activity, exercise and sporting habits as a need for life (like needs of eating and sleeping), because the technologies and the current way of working do not secure enough movement for work of human body organs for healthy life and for the subjective quality of life. Starting and continuing with the appropriate compulsory and extracurricular physical and sporting activities during the whole school system should to use physical and sporting activities to become the habits of exercising and should last for the whole life long because of the premise: when you are used to exercise and adapted for doing it as a young person, it is easier to continue with it during adulthood. Or even when there was a break by doing sporting activities, it is easier to start with them again, when you have been used to do it in a previous time. The body can remember the movement and can be prepared to start again. The members of the human race only speak about healthy lifestyle but have to take the initiative steps for doing something for it.

The research was focused on two main dimensions of the quality of life—the life enjoyment and satisfaction and global satisfaction with life.

The researched areas of the dimension of the quality of life enjoyment and satisfaction presented statistical differences between boys and girls ( $p_1$ ), sport active and sport inactive adolescents ( $p_2$ ), and sport active and sport inactive boys and girls ( $p_3$ ) (physical health and activities  $p_1 < 0.001$ ,  $p_2 = 0.001$ ,  $p_3 < 0.001$ ; leisure time activities  $p_1 < 0.001$ ,  $p_2 < 0.001$ ,  $p_3 < 0.001$ ; emotions and feelings  $p_1 < 0.001$ ,  $p_2 = 0.011$ ,  $p_3 < 0.001$ ; taking care of yourself  $p_1 = 0.002$ ,  $p_2 = 0.004$ ,  $p_3 < 0.001$ ). The only one negative statistical difference was found in the area of school environment and school duties, where sport inactive adolescents ( $p = 0.004$ ) and sport inactive boys and girls ( $p = 0.018$ ) valued higher the feelings of the domain life enjoyment and satisfaction from seven items of this area (school environment and



school duties). No statistical differences were found in the area of school environment and school duties in comparison between boys and girls ( $p = 0.086$ ) although the girls reached higher values. No statistical differences were found in the area of social relations in comparison between boys and girls ( $p = 0.726$ ), sport active and sport inactive adolescents ( $p = 0.470$ ), and among sport active and sport inactive boys and girls ( $p = 0.58$ ). The dimension quality of life enjoyment and satisfaction was statistically and significantly better valued by the boys than girls ( $p < 0.001$ ) and by sport active boys than sport inactive boys ( $p = 0.027$ ). No statistical difference was found between sport active girls and sport inactive girls ( $p = 0.200$ ).

In the dimension of global satisfaction with life, we found statistical differences in all compared samples—boys were more satisfied than girls ( $p = 0.004$ ), and sport active adolescents were more satisfied than sport inactive adolescents ( $p < 0.001$ )—and comparison among sport active and sport inactive boys and girls results in the statistical difference  $p < 0.001$ .

The dimension of quality of life enjoyment and satisfaction (in the area of physical health and activities, leisure time activities, feelings, taking care of yourself, school enjoyment and school environment, social relations) was statistically significantly better valued by sport active adolescents than sport inactive adolescents ( $p = 0.002$ ).

These findings serve to extend the knowledge in sport sociology. The research included 55 items differentiated in 7 areas, which were taken in 2 subjective dimensions of quality of life and gave evidence that sport activity positively influenced the perception of dimension of quality of life enjoyment and satisfaction and the dimension of global satisfaction with life among adolescents. Sport as a social phenomenon examines and discusses the positive impact on individuals or social group, and here we discussed the positive impact of sport, exercise, and physical activities on subjective dimensions of the quality of life in sport active and sport inactive adolescent girls and boys, which can serve as an important precondition for making and playing sports and for exercising in general. Exercising and sporting activities serve a positive experience for all, children, adolescents, adults, and seniors too, and should encourage all.

## **6. Limitations of the study**

For the limitation of the study, we considered the sample size, because we did not calculate the expected sample size before beginning the study. We worked only with the sample with which we could realize interview. If we have had the access to a representative sample, then maybe we would have more precise results and we could generalize the results to a larger population. We will continue with this research, and we try to gain more respondents also from other parts of the Slovak Republic, not only from the capital city. The second limitation of the study is the selection of 50 items from the entire 93-item self-reported measure. Maybe for the school practice, also a short form with the 16 items would be appropriate. The third limitation of the study is self-reported data, because we gather the responses at the momentary time, when the person, in any mood, perceives the question and answers the question in a subjective manner. To overcome this, some introductory and motivational parts should be provided by the research leader before respondents start fulfilling the questionnaire. The fourth limitation could be that we did not determine the kind of sport. Maybe we would find several new information and which kind of sport has the greatest effect on the subjective dimensions of the quality of life. This approach would require the larger sample size. The fifth limitation could be the selection of the research papers in the introduction and in the



discussion because of our individual interest in some papers and not in others paper. We will try to make the larger scope of the next research, because this research is also limited in pages for publishing.

## **7. Practical implications**

Our results provide the evidence that sport and exercising positively affect the subjective dimensions of the quality of life more in boys than in girls. The motivation for sport participation should be gender-focused, and the promotion of the higher volume of time should girls devote to sporting activity to acquire better experiencing of subjective dimensions of the quality of life.

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## **Conflict of interest**

There were no conflicts of interest.

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