

Czestochowa University of Technology

Joanna Rosak-Szyrocka

MODERN QUALITY MANAGEMENT IN SPORT

Częstochowa 2021

I dedicate this book to my son, Hubert

Czestochowa University of Technology

Joanna Rosak-Szyrocka

Modern Quality Management in Sport

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Reviewers

assoc prof. Jana Šujanová

Proofreading

Zdzisława Tasarz

Make-up

Marcin Pilarski

Cover design

Dorota Boratyńska

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Editorial Team, phone 34 325 04 80, Distribution, phone 34 325 03 93
E-mail: wydawnictwo@pcz.pl, www.wydawnictwo.pcz.pl

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Introduction

*The meaning of life is all about enjoying it
and making it more beautiful for each human being.*

D. Ben-Gurion

*The appropriate quality of life can be reached
when you do what you have a calling for
with commitment
and the conviction that what you do
is right, when get satisfaction
out of the results, when what you do
bears fruit which lasts
and multiplies. This is true about all the people
who perform their duty diligently.*

E. Skrzypek

*The quality of life depends more on
the person's internal activity and spirituality
than on the material possessions which are external.*

E. Wawak

The world is changing really fast. This speed is caused by urbanization, technological development and the increasing demand for energy. Such changes have a direct impact on enterprises which function in the world of VUCA (volatility, uncertainty, complexity and ambiguity) with numerous surprises in the form of “black swans”, i.e. rare and unpredictable events. Norms constitute the consolidated knowledge about management oriented towards the aspects of quality and help enterprises face the challenges that the future will bring. Companies can cope with changes on the basis of the PDCA cycle. By using the Quality Management System, entrepreneurs can promptly detect and react to new threats. They can also use the available tools to generate models of the future.

At present, customers are extremely demanding and focused on quality. They know very well what they expect from any given product. The future of quality is a smart world driven by information and communications technologies (ICT). Artificial intelligence will develop considerably, enabling the mass-scale use of computers, also for the purpose of operating robots that will replace people in many work environments.

Health is the highest value: it is an integral part of human development, it is the condition of satisfaction and happiness in life, it helps to fulfil other needs as well. We shape our health throughout the entire lifetime. Physical activity is one of the components which define health and positive ageing. If physical activity is regular and adapted to older age, it improves the walking balance and speed, it enhances the functional ability and aerobic efficiency, and it reduces the risk of becoming dependent on the help of other people.

We live through our activity. It shapes us and directs our development by enriching our relationships with other people. The need for activity is the basis for our experiences which, in turn, allow us to make changes in the world around us and within ourselves (Pieszak 2012, p. 135). Łuszczyńska (2011) argues that the satisfaction from physical activity and sports is one of the determinants of the quality of life for people engaged in doing sports regularly or occasionally. The programs promoting an active lifestyle bring results which are beyond all expectations. It is observed that regular exercises improve the general mood of program participants. It can be compared to **the tip-of-the-iceberg effect**, where the high level of vigour is closely related to the low levels of anxiety, depression and enmity, which improves well-being and self-perception (Argyle 2005; Derbis, Jędreka 2010; Łuszczyńska 2011; Tomaszewski 1982). The “sporty” meaning of life as an important motivational factor drives the development of a personality which is much more capable of creating positive interpersonal relationships and the extension of the support network, which translates into the easy performance of everyday duties and the general improvement in the perceived quality of life (Łuszczyńska, 2011). The studies by E. Pieszak (2012, p. 136) have shown a connection between physical activity and the quality of life. The author has demonstrated that people who are physically active feel more life satisfaction. Furthermore, another research (Walczak, Tomczak 2011) has shown that, in contradistinction to women, men who engage in physical activity experience a distinctly stronger sense of the quality of their lives, which is accompanied with the feeling of joy related to doing sports.

In the context of sport, the quality of life is as important as the health aspects. As put by the World Health Organization: “Your health is in your hands”. Good health is the essential foundation for getting more joy out of life as well as achieving success and personal happiness. Nowadays, healthy behaviours are on the rise,

which is reflected in the spreading promotion of health oriented towards preventive activities as well as all kinds of guides propagating healthy diet, relaxation, healthy lifestyle and physical activity (Maszczak 2005, pp. 73-81). Lifestyle, including physical activity, proper nutrition, avoiding alcohol, nicotine and stimulants as well as avoiding mental and emotional strain have an effect on our life (Bejnarowicz 1995; Pomerlau 1997; Steptoe et al. 1997).

It is estimated that these factors account for 50% of our health, while the remaining factors include the environment (25-35%), biology (10-15%) and the healthcare system (10-20%) (Sadowski 1995). Therefore, the level of physical activity is a positive measure of health (Bouchard et al. 1994).

Reports of the World Health Organization (WHO) accentuate the impact of lifestyle on the quality of life. They assert that caring for one's health (including prophylaxis) is more significant in terms of maintaining good health than professional health services. One of the activities which improve health is doing sports, as it can be defined as the area of human life which is imbued with specific values. Doing sports can have a positive effect on lifestyle. Sport perfects the body and the spirit and they satisfy the need to compete and win, doing it in a noble way. Another determinant of health is the natural environment, especially the ecological threats resulting from industrialization and urbanization. An effective antidote to contemporary threats and a way to improve the quality of life is physical recreation (Goranczewski, Puciato 2010, p. 6).

People perceive and understand reality, they represent it in signs, they use language for the aggregation of knowledge, mental self-regulation and communication with others. The better the communication, the greater the change of improving interpersonal interactions and the quality of life. When evaluating the quality of life, one should consider the answers to the following questions: what form of life we want for ourselves and for others, and what form of the human world and our own life we want to contribute to (Grzegorzcyk 1993, pp. 69-70).

The quality of life does not result directly from our possessions or from what other people think about us. It depends on our experiences and the control we have over our consciousness determines the quality of our life. Research results in this area show that once basic survival problems have been solved, new needs and expectations emerge. The more riches and comforts one has, the further the sense of satisfaction one expects from such goods is pushed (Csikszentmihalyi 1996, p. 30).

The quality of life demands a new philosophy of organization management based on morality, responsibility and profitability. The result could be a process of quality changes which will ultimately enhance the quality of life (Steers 1991).

The ISO 9000:2005 standard, section 3.2.8, defines “quality management” as “coordinated activities to direct and control an organization with regard to quality”.¹ Adopting this definition in order to outline the concept of managing the quality of life, it can be asserted that the individual management of the quality of one’s own life is the coordinated activity to direct oneself and control one’s life with regard to its quality. “Direction and control with regard to quality generally includes establishment of the quality policy and quality objectives, quality planning, quality control, quality assurance and quality improvement.”² The management of the individual quality of one’s life requires the following:

- identification and stratification of quality-related objectives;
- definition, adoption and consistent implementation of the policy with regard to the quality of life;
- planning and controlling the quality of one’s life;
- constant improvement of the quality of life.

The quality of work should always go hand in hand with the quality of life (Łańcucki 1998, p. 9). The improvement of the quality of life creates favourable conditions for improving the quality of work. People strive to increase the quality of their work which depends on the management quality to a large extent. A human being is always the maker and enabler of quality as well as the ultimate judge of a product quality as the consumer (Lisiecka 1999, pp. 2-8).

Physical activity is connected not only with physical condition as such, but also with the mental condition as well, and it influences the quality of life (Łabuz-Roszak, Roszak 2007, pp. 419-426; Łabuz-Roszak, Roszak 2018; Łabuz-Roszak et al. 2017b, pp. 225-233; Łabuz-Roszak et al. 2011, pp. 99-112; Łabuz-Roszak, et al. 2017a, pp. 231-238). It comprises different kinds of games, exercises or amateur sports done for pleasure or recreation as well as to stay healthy, improve one’s exercise capacity or to learn new physical skills and capabilities. Such healthy behaviours prevent diseases of civilization (Podbielska 2014, pp. 128-132; Barankiewicz 1998; Tammelin et al. 2003, pp. 22-28).

P. Hills and M. Argyle (1998, pp. 525-535) conducted surveys related to the sense of happiness among 275 respondents in four groups: people who did sports in their free time; people who listened to music; people who often went to church; and people who watched entertaining TV programs. Using the Oxford Happiness Inventory (OHI), the authors demonstrated that the people doing sports were the happiest group (Podbielska 2014, pp. 128-132). Such people manifest the highest level of satisfaction with their health, their life and their achievements.

¹ ISO 9000:2005, Quality management systems – Fundamentals and vocabulary, CFN, Ref. EN ISO 9000:2005 E, section 3.2.8.

² Ibidem.

As noted by W. Siwiński and R. Rasińska (2015, p. 181-188), the awareness of the efficiency of physical effort in preventing and treating diseases of civilization heightens the interest in physical activity. It should be pointed out that the knowledge about the impact of sports on health is relatively widespread, but hardly anyone knows that physical activity also improves one's satisfaction with life. Therefore, it could be argued that if one wants to improve the quality of one's life, one should become more active physically.

The objective of this book is to analyse the advanced management of quality in sports. It should be underlined that physical activity has a significant effect on the improvement of the current and future quality of life, which means that it should be a lifelong effort. Therefore, it is important to promote physical culture not only among children, but also adolescents, since that will provide the basis for the continuation of healthy behaviours in adult life. The formation of the physical activity habits in primary school and the further development and improvement of skills in secondary school will be the basis for the continued physical activity later in life. **Moreover, physical activity before the age of 35 has a considerable impact on the quality of life later on** (Marchewka, Jungiewicz 2008, pp. 127-130). The most pertinent conclusion is provided by M. Woźniak et al. (Woźniak et al. 2015): *“Exercise can replace nearly every medication, while no medication can replace exercise.”*

Selected aspects of quality management and its impact on the quality of life

1.1. The essence of contemporary sport

*Each sport opens up
a wealthy treasury of values. You exercise your concentration,
you shape your will, endurance and responsibility,
you learn to bear hardships, you learn renunciation,
solidarity and loyalty in your duties
– all of these are the athlete's virtues.*

A. Gołaś

The life of contemporary people, pervaded with both the benefits of civilisation and its negative consequences, imposes a new style of work (the need for self-fulfilment) and the related and promoted “new art of life”, the new lifestyle, including the preferred models of resting, travelling around the world, high aspirations regarding the material dimensions as well as the consumption of culture etc. In such a reality, good health and physical fitness are treated as the condition for basic professional and social competences as well as the means to achieve a better quality of life (Biernat 2014, pp. 1-4).

The progress in medical sciences has made people live longer, but research shows that the ageing processes begin and earlier and advance faster than in previous generations and the symptoms of the diseases of civilisation start to bother increasingly younger people. The studies (Cordero-MacIntyre et al. 2006, pp. 61-71) indicate that hypokinesia (lack of or insufficient bodily movement) is recognised as one of the causes of the obesity epidemic.

Changes in the sphere of health in the second half of the 20th century have popularized the idea of the common sports, i.e. sports for everyone, and the health-oriented physical activity. Physical activity is seen as one of the key elements of a healthy life style as well as the determinant of the individual's physical and mental health.

The well known dictum that "Sport is health!" expresses the idea of the positive impact of sports on health (Leszczyńska 2013, pp. 179-189).

Sport (Latin: *desportare* – relax, enjoy oneself) is a form of conscious and voluntary human activity intended to improve one's mental and physical force in line with agreed rules (Wiśniewski 2012, pp. 5-9). Sport is also the conscious and voluntary human activity undertaken to satisfy the need for fun, play, fight and the inner self-improvement through systematic development of physical, mental and emotional qualities or properties (Ryba 2004, p. 291). Sport fulfils human needs in the areas of education, health, entertainment, culture, sense of belonging to a group or to society at large, prestige, recognition for achievement in sports, being in a group and shared emotions as well as the active leisure (Izydorzyc 2003, p. 120-122).

Sport was one of the forms of entertainment that started developing at the outset of the 20th century and it has become one of the favourite types of activity for many people from different age groups (Waśkowski, Jasiulewicz 2017).

Sport is also an element in the lifestyle of many people and it considerably improves the quality of life. In general, the notion of the "quality of life" comprises the level of satisfaction that a person feels in terms of consuming the material goods and services available on the market, the public goods, the forms of leisure and other features of the person's environment (Marciszewska 1997, p. 13).

Contemporary sport is the most widespread form of culture (Krawczyk 1983, p. 46) and an important component of the mass culture; it is heterogeneous and comprises different kinds of rivalry, various goals and means of fulfilment (Godlewski 2007, pp. 411-416). It has become a product with high demand for it. In the era of globalisation, sport has a great symbolic meaning – it is one of the ways to cultivate the national or regional identity. It can also be the carrier of specific ideologies and the tool to promote or create images of countries around the globe (Tomlinson, Young 2006, p. 8). It has become a branch of business, expressly connected with economy at various levels. One example could be the Warsaw Stock Exchange General Index (WIG) which broke the record and exceeded 60,000 points when Poland and Ukraine were announced as the organizers of the European Football Championship 2012 on 18 April 2007 (Sznajder 2007, pp. 45-65).

In developed societies, sport has become a public good available in different variants. Sport and recreation are factors which shape health and personality; they develop healthy habits and attitudes and constitute a valuable form of leisure (Waśkowski 2015, pp. 790-798).

The traditional values of sport are usually associated with the efforts of people who strive to improve their physical condition in order to stay healthy, with precious educational aspects, with the ethos of honour and fair play as well as the cultural values and the pursuit of success for commercial purposes (Waśkowski 2015, pp. 790-798).

Sport is the area of human activity which enjoys great popularity among the residents of the European Union and has the enormous potential to bring them together and to reach everyone regardless of age or social background.

For millions of people around the world, sport is a form of leisure, fun, passion and sometimes also a way of life. It gives enjoyment and fulfilment, it is fun and it unites people, it allows to express one's social and national identity, it gives a sense of pride, and it teaches humility and determination (Waśkowski 2015, pp. 790-798).

Sport is also a significant sector of economy, generating around 2% of the gross world product (GWP).³ Moreover, great sport events have a positive impact on tourism and employment. For more than three decades, the sports market in many countries has been one of the most rapidly growing sectors. At present, its value is estimated at USD 411 bn (Greenwell et al. 2014, p. 240).

In developed societies, sport has become a public good available in different variants according to the possibilities and the interests of the citizens. In addition to cultural and social values, sport stimulates growth in many sectors of economy by creating jobs (Waśkowski 2015, pp. 790-798). In the United States, the sports sector employs around 4.5 million people and it is the sixth largest sector in terms of turnover (Pitts 1999, p. 31).

The progressing commercialization of sport has an economic dimension which influences the regional economy and the organization of great sport events is a growth opportunity for cities and regions. Sport is becoming more and more popular and important. As a social phenomenon, sport is extremely diverse and multi-dimensional and it undergoes constant systematic changes resulting from the development of civilisation as well as social, cultural, technological and economic transformations (Sznajder 2007, pp. 45-65).

Owing to specific actions, sports is an effective way of promoting education, health, cross-cultural dialogue, development and peace (*White Paper on Sport*).

Sport stimulates essential values such as the team spirit, solidarity, tolerance and fair play, contributing to the individual growth and self-fulfilment. It propagates the active participation of European citizens in social life and this helps to develop the active civic attitude. Sport reflects contemporary trends such as (Czechowski 2014, pp. 7-19):

³ World Economic Forum, Davos 2009.

- the cult of the body,
 - the significance of the outward appearance,
 - discipline as the form of lay asceticism,
 - the new approach to the relation between work and leisure,
 - the idea of the limitless possibilities of development.
- People who are physically active can enjoy a number of health benefits, including:
- limited risk of cardiovascular diseases;
 - preventing and/or deferring arterial hypertension and better control of blood pressure in the case of persons who suffer from high blood pressure;
 - good functioning of the heart and lungs;
 - maintenance of metabolic functions and lower occurrence rate of Type 2 diabetes;
 - better fat tissue burning which helps to control the body weight and reduces the risk of obesity;
 - lower risk of certain types of cancer, e.g. breast cancer, prostate cancer, colon cancer;
 - better bone mineralization at a young age, preventing osteoporosis and fractures at an older age;
 - better digestion and regulation of the basal electrical rhythm;
 - maintenance and improvement of the strength and endurance of muscles, ensuring better functional capabilities on a daily basis;
 - maintenance of motor functions, including the motor strength and coordination;
 - maintenance of cognitive functions and lower risk of depression and dementia;
 - lower stress levels and better sleep;
 - better self-image and higher self-esteem as well as higher levels of enthusiasm and optimism;
 - lower frequency of absences at work due to sick leaves;
 - lower risk of falls in the case of elderly people as well as preventing or deferring chronic diseases resulting from the process of ageing;
 - improved efficiency of the organism;
 - maintenance of the correct body mass index (BMI) (Rashad 2007, p. 25; Lakdawalla, Philipson 2007, pp. 85-116);
 - lower vulnerability to numerous diseases;
 - enhancement of healing processes (MSiT 2016);
 - help in treating depression (Silveira et al. 2013, pp. 61-68);
 - relieving tension;
 - better well-being (Sahaj 2001, pp. 73-83).

Physical activity contributes to reducing the risk of the circulatory system diseases, diabetes, breast cancer, endometrial cancer and colon cancer. Sport can perform four functions in people's lives: education, recreation, integration and promotion (Table 1) (Waškowski 2011, pp. 23-32).

Table 1. Functions of sport in human life

Function of sports	Description
Education	<p>Doing sports ensures excellent development of mental and physical qualities, which is specifically important in the case of children and adolescents. Regular exercise and recreation lead to balanced physical growth, shape the body and improve physical fitness.</p> <p>Moreover, the aspect of rivalry contributes to the development of volitional properties such as determination, stamina, the fighting spirit, consistency, work discipline etc.</p>
Recreation	<p>One can identify two types of recreation: the regeneration of strength after completing work or family duties, i.e. passive recreation, consisting in cheering one's favourite team or athlete, or active recreation, i.e. doing sports, e.g. riding a bike, jogging, swimming, playing tennis.</p>
Integration	<p>Sport provides an excellent opportunity to build and tighten relationships with other people, between different social strata or classes, as well as to develop patriotic attitudes.</p> <p>The integration through sports in the case of children and adolescents is manifested through attitudes and behaviours of those who do sports and of parents and guardians who cheer the players on during competitions and contribute indirectly to their development of physical and volitional qualities.</p>
Promotion	<p>Owing to its popularity and widespread presence in the media, sport has become one of the most effective form of promotion often used by businesses. Recent observations demonstrate that sport is used as the means of communication by international organisations (UNICEF), cities and regions ("Poznań bets on sport") and countries (e.g. Qatar that will organise two large sport events: the FIFA World Cup and the World Handball Championship).</p>

Source: Own work on the basis of Waškowski (2011, pp. 23-32)

1.2. The significance of quality in sport

The sign of our times is the pronounced increase in the significance of quality. Following Crosby, “the problem with quality is not what we do not know about it. The problem is what we think quality is”. Quality can be defined as the reputation of a company, a brand or a product, the comprehensiveness of an offer, technology, durability, functionality, luxury, the sense of safety and comfort (Rosak-Szyrocka 2019). The first reflection on the term “quality” can be found in the ancient Greek philosophy, specifically in the works of Plato who used the word *poiotes* to refer to quality. He believed that quality belongs to the judgement of the one who makes an assessment and, as such, it depends on the person’s subjective experience (Długosz 2000, p. 44). Plato’s friend and disciple, the Stagirite, made a distinction between *poion* and *teleion*, using the latter to refer to excellence or perfection (Rogoziński 2000, p. 202). Aristotle, another great philosopher of ancient Greece, asserted that quality is a set of specific characteristics which distinguish one object from among other objects of the same kind (Długosz 2000, p. 44). In terms of etymology, “quality” derives from the Latin *qualitas* which was introduced by Cicero who tried to find an equivalent for the Greek *poiotes*. He considered quality to be a property or an attribute of an object (Horbaczewski 2006, pp. 9-12). One should be aware of the necessity to find ways of measuring quality. Kelvin said that if we can measure what we speak of, it means our knowledge is sufficient, and if not, then we know very little about the given problem. Many countries adopt a number of initiatives to improve quality. An example is Great Britain which has implemented such programs as Charter Mark or Best Value, extending the level of awareness. Table 2 presents “quality” as the key word from the philosophical perspective.

Table 2. Philosophical concept of quality

Author	Term	Meaning of the term
Plato	<i>poiotes</i>	Quality is the judging assessment dependent of the subjective experience.
Stagirite	<i>teleion</i>	Quality is excellence.
Aristotle	–	Quality is the basis for a specific definition of objects.
Cicero	<i>qualitas</i>	Quality is a property (an attribute) of an object.
Laozi	<i>tao</i>	Quality which can be defined is not quality in the absolute sense.
	<i>kung fu</i>	Quality is excellence, the perfection of an action.

Source: Horbaczewski (2006, pp. 9-12)

Often quality is presented as a relative notion with different meanings for different people. Some see it as an equivalent of beauty or delicacy, while others perceive it as a degree on the scale of excellence. There exist many definitions of quality and it is impossible to provide one universal and unequivocal definition. The classic approach recognises quality as customer satisfaction and fulfilment of the customer's individual needs. Quality can also be the degree of conformance to a model, a standard or a requirement. Therefore quality as a holistic notion functions at many levels of human activity, covering the quality of a product, a service, work and life. Quality creation is a long-term process comprising many areas, including human awareness, technical aspects, technology, organization and economy. High quality and reliability of products can translate into profits, production cost reduction and, in consequence, the satisfaction and loyalty of customers (Fraś et al. 2017, pp. 175-188). Contemporary views on quality can be divided into two approaches. One is economic (i.e. strictly economic, TQM, ISO, Kaizen, marketing), while the other is technical (the standard is the model, the assessment is made by a team of specialists) (Horbaczewski 2006, pp. 9-12). *Table 3* presents quality from the technical perspective.

Table 3. Technical concept of quality

Author	Definition of quality
B.A. Dubovikov	The quality of an industrial product usually means the complete set of its attributes which define its usability in line with the intended use
S. Dulski	The only rational notion of quality is the technical quality of the product and of production as derived from their properties.
B. Oyrzanowski	Quality is a set of physical, chemical, biological and other attributes of a given product which set it apart from other products.
W. Krencik	Quality is a set of properties of each product, relating to the level of novelty, reliability, efficiency of use, functionality, durability, shape, colour, aesthetics, preferences, fashion etc. All the properties of a product can be regarded from the perspective of construction, technology, raw materials, finishing etc.
R. Chwieduk	The technical quality of a product depends on its properties.
B. Miszewski	Quality is a set of features.

Source: Horbaczewski (2006, pp. 9-12)

Table 4 presents quality from the economic perspective.

Table 4. Economic concept of quality

Author	Definition of quality
B. Oyrzanowski	Quality is the ability of the product to satisfy specific needs of consumers and users.
D. Lwow	Quality of a product is the degree to which it satisfies a specific need in strictly defined conditions of use.
A. Kostrzewa	Quality of production, in economic terms, is the degree of intensification of properties dependent on the use value, manifested in reliability, functionality, durability, innovativeness and aesthetic aspects of products which fulfil human needs.
K. Cholewicka-Goździk	Quality of production is the degree to which the user's needs are satisfied, as determined by the product's properties of usability and production.

Source: Horbaczewski (2006, pp. 9-12)

According to the Japanese, the notion of quality is directly related to the constant improvement and drive towards excellence. In this context, quality is “everything that can be improved” in the pursuit of perfection, it is the ongoing enhancement leading to internal improvements which increase the efficiency of processes and of the use of resources as well as to external improvements leading to better customer service and a higher quality of the product. The result is a reduced number of errors and defects as well as a more satisfied customer (Czubała 2006, p. 16; Hamrol 2008, p. 554). As observed by J. Priede (2012, pp. 1466-1475), quality is a significant and strategic element of competitiveness. The lack of quality generates the largest costs for any entrepreneur. R. Kolman, P. Grudowski, A. Meller, J. Preihs (1996, pp. 9-12) emphasise that low quality means costs and loss of customer trust. K. Korzyńska (2011, pp. 327-338) asserts that quality indicates the direction of changes in an organization and constitutes one of the way to adapt to the mutable market conditions.

The ISO 9000 standards, generally applied in services, define quality as the degree of fulfilment of predetermined requirements by the inherent features of a product (Juran 1992, p. 9). On the free market, everything is for the customer (Kolman 1995, p. 11):

- competition – to win customers,
- quality – to meet customers' expectations,
- price – to make the product affordable to customers,
- delivery method – to make the product quickly accessible to customers,
- advertisement – to attract customers.

Contemporary businesses compete to offer beautiful products and beautifully packaged services in order to satisfy and even to enrapture the customer, which leads straight to success. ***The revolution of quality is happening right now.*** The ongoing improvement of quality is the condition for business survival. In economy, quality results from the market needs and is created by human effort and collaboration. At present, quality is generated by decisions of the customer who dictates and verifies the level of quality. The contemporary world focuses on quantity, on “more”, yet “more” no longer means only the quantity, but quality as well. In the era of globalisation and the Internet, the customers are very demanding prosumers who know their rights perfectly well. They can quickly and easily find information on products/services and choose companies. They assess the quality, the prices and the reliability of products/services. Therefore an organisation needs more than a positive image in order to succeed. Today, organisations focus on quality on a daily basis. Quality assurance is a regular process inscribed into their DNA. Each enterprise should listen to customer needs. It must be emphasised that entrepreneurs generate the largest costs not through quality assurance as such, but when they have quality problems which cause losses to everyone. Low quality or neglecting quality translates into expenses and loss of trust which leads directly to loss of customers. The contemporary quality is one of the attributes of products, constant monitoring of the buyers’ markets and a competitive advantage. The condition for an organisation’s existence in the market and for its growth is the innovative ability to adapt its own flexibility to the surroundings. The growth of an organisation is determined by the implementation of innovations and quality assurance with respect to the designed products, technologies, systems and business models (Rosak-Szyrocka 2019).

At present, enterprises which bet on quality should follow Drucker’s advice: “Yesterday’s big achievement must become today’s minimum, while yesterday’s excellence becomes today’s everyday.” Excellent companies are committed to people and believe in the effectiveness of what they could. They care for the quality of services, they implement practical innovations and they know that success requires engagement of all employees. The awareness of good quality is the first step towards effective quality management. The report titled *Global Most Admired Knowledge Enterprise* indicated that companies which grow through innovativeness and knowledge management create intellectual capital as well as value for their shareholders twice faster than their competitors. Today, enterprises should strive towards constant and systematic improvement of the quality of their products and adopt a dynamic attitude to quality by systematically measuring and reducing any deviations, which requires ongoing and systematic recognition of the causes of such deviations. The working standard should be the “no error” policy instead of saying that “it could not have happened”. One must bear in mind that it

is the managers that are responsible for quality in 80%, while their subordinates cover the remaining 20%, but the process of quality creation belongs to all employees alike (from the senior management down to rank and file employees). Figure 1 presents the differences in the approach to quality in the past and today.

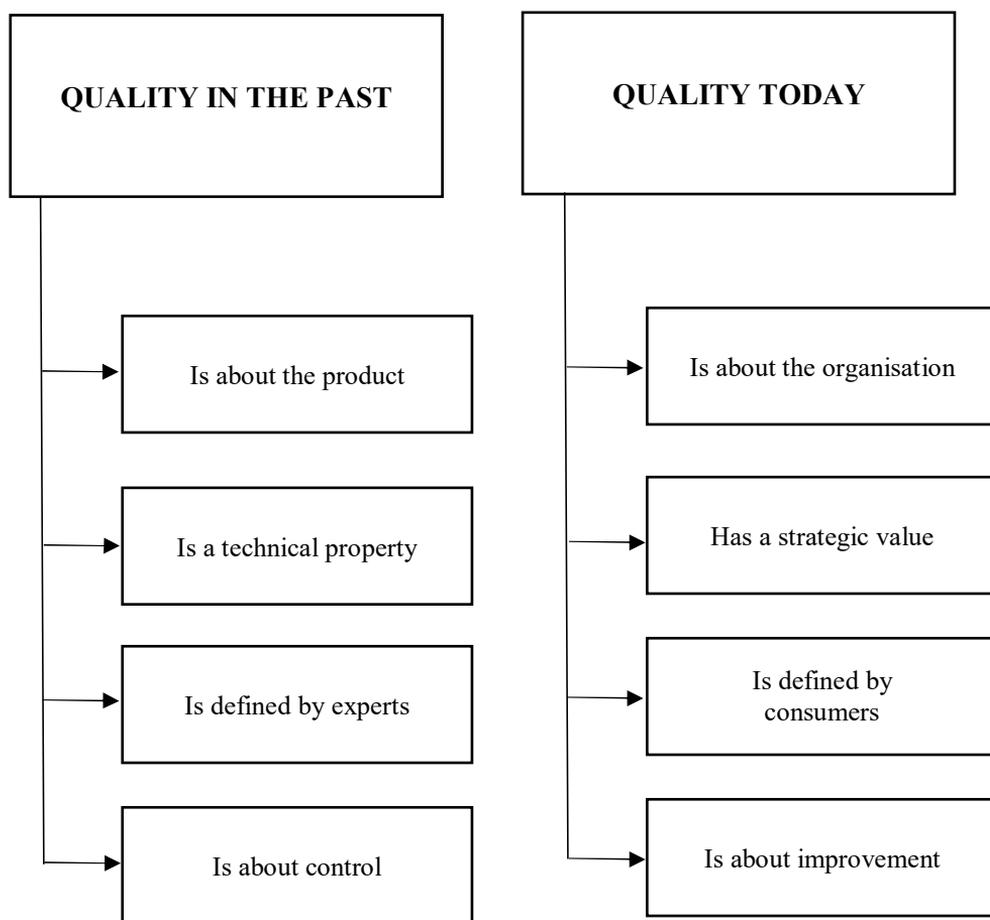


Fig. 1. Differences in the perception of quality in the past and today

Source: own work

Following the observance of J. Bank (1997), one must remember that the customer does not depend on us, but it is we who depend on the customer. Customers are the actual purpose for which any enterprise operates. Customers are the heart and goal of business, they rely on us, they must be in the centre of operations, while quality should always meet their expectations. The advanced and up-to-date approach towards quality has to be the standard in companies which do business within the system of the market economy.

Following A. Parasuraman, V. Zeithaml and L.L. Berry (1988) the attributes of quality include:

- material attributes – the appearance and condition of buildings, devices, and the personnel who provide services and communicate with customers,
- reliability – the certainty that the service will be provided in line with the offer,
- competence – knowledge and skills necessary to provide the service,
- credibility – trustworthiness,
- safety – minimization of risk, insecurity and threats in relation to customers,
- accessibility – ease of obtaining the service and contacting the service provider,
- communicability – maintaining contacts with customers via comprehensible messages and listening to their opinions,
- understanding – willingness to know customers and their needs better.

Quality in sport manifest itself at the methodical **level**.

It is reflected in the value of results achieved in competitions and the effectiveness of training (Łasiński 2017, pp. 7-19).

Sport has become a product chosen by more and more consumers. This means the growing significance of marketing and management activities in sport, most often revealing the aspect of efficiency (performance) in the assessment of how sport organizations function (Nowy et al. 2015, pp. 155-175). Table 5 presents the model of quality evaluation in sports (aspects, criteria, measures, perspective of evaluation).

The quality assessment in sport is not invariable, since social and technical phenomena (e.g. regarding new types of equipment) evolve. The needs of recipients created by the powerful market of the media also change.

In the case of traditional enterprises, the key goal is to stay in the market and to increase the financial result. Professional sport, however, works on the basis of other principles which treat the performance in games as the driving force of organisations. It is this performance coupled with marketing activities that attracts sponsors and fans. It should be noted that fans are more attached to their teams (it is very rare that a fan changes his or her favourite team in the same discipline) than to service providers who cater for other needs, such as hairdressers, rental companies, healthcare, restaurants or hotels. Observing the behaviours of sport fans, R. Cialdini noticed a rule pertaining to any team's victories and defeats: when a team loses, its fans say that "they [players] lost", but a team wins, the fans say: "we won" (Cialdini 2010, p. 261). There is a new trend in sport, consisting in commercialisation and implementation of new management models in sport organisations.

**Table 5. Model of quality evaluation in sports
(aspects, criteria, measures, perspective of evaluation)**

Aspect	Criterion	Measure	Perspective
Humanities	Creation of the quality of life, increasing the level of culture in a society	Changing the attitudes and behaviours related to physical activity and doing sports	Studying the impact of sports on the changes in lifestyle, attitudes and behaviours related to physical activity, sports and social integration
Sociology	Attitude/preferences of recipients/viewers towards specific attributes of quality	Values, indicators, scales of preference	Surveys of viewer/participant preferences
Technology	Norm, standard, project, quality defined with the exclusion of recipients (technical parameters of objects, jobs, devices, equipment, safety)	Compliance of technical parameters with assumptions, projects, norms	Measurement of parameters, comparisons of parameters
Sports	Performance level of individuals and teams	Physical parameters of measurable activities (s, m, kg), team performance indicators (% , numbers, points)	Measurements, analyses, comparisons, lists, victories
Economy	Degree of the service compliance with the requirements of recipients/viewers resulting from their needs, income, prices	Price of the event and of the participation in the aspect of the perceived quality	Comparison of the price and of devoted time with the widely understood benefits (emotions, experiences, satisfaction, contacts)
Marketing	Only the market aspect of services; level of customer/viewer satisfaction, fulfilling or exceeding viewer expectations	Interest, popularity, contacts, active participation	The number of event participants, viewership, participation on social media
Praxeology	Effectiveness	Degree and value of purposes/intentions (e.g. acquisition of resources, processes, satisfaction of stakeholders)	Assessment of relations: the value of goals, achieved results, costs

Source: Łasiński (2017, pp. 7-19)

1.3. The quality of human life in an organization

*Quality management should be oriented
towards improving the quality of life
(of customers, employers, owners etc.),
because by forgetting the quality of life
you make all procedures, standards
and systems useless.*

Prof. Su Mi Dahlgaard-Park⁴

“The point is that people should willingly do what they have to do ...”

T. Kotarbiński, *Traktat o dobrej robocie*

*Everyone can only understand the meaning
and value of their life through a capable
reconciliation of work and the private sphere*

J. Tischner

*When you work to someone, you
always employ the entire person. You cannot employ
“hands to work”; there is always a person to whom these hands belong.*

P.F. Drucker

One of the authors of the term “quality of life” was L.B. Johnson, the former president of the United States, who, when making a speech in 1964, said that the US development goals “cannot be assessed in financial categories, but should be analysed with respect to the quality of life” (Barcaccia et al. 2013). Quality of life is a notion with multiple meanings: it includes medical, sociological, economic and psychological (most subjective) dimensions. It is the effect of a person’s attitude to his/her own physical and mental well-being, material existence, interpersonal relationships, personal development opportunities and sense of subjectivity (Walczak, Tomczak 2011, pp. 219-240; Tetsuya et al. 2006, pp. 2076-2083; Padilla et al. 1983, pp. 99-154). According to World Health Organization, a person’s quality of life should be understood in the context of this person’s perception of his/her life situation with respect to the cultural context and the system of values accepted by the society in which the person lives as well as with respect to his/her life goals, expectations and interests.

⁴ This view was presented by professor Su Mi Dahlgaard-Park during the 16th International Conference Quality Management and Organizational Development in Portorož (Slovenia) on 4-6 September 2013.

The following attributes of quality are shared by all people:

- freedom of movement,
- social relationships,
- financial situation which allows to satisfy the basic needs,
- independent living,
- understanding of the world around,
- finding a satisfactory job,
- acquisition of knowledge,
- improving activities etc.

Human activity (social, professional, private) relates to the satisfaction of needs, achievement of goals and fulfilment of dreams with hopes for a better life, a sense of happiness and satisfaction. The satisfaction with life and its conditions is individual and depends on many factors, including needs, aspirations and perception which are different for each person (Kusterka-Jefmańska 2015). The subjective sense of satisfaction with life also results from the system of values, the comprehensive quality of life, the relative sense of hurt as well as personal experiences or the awareness of fulfilling one's mission in social, professional and private life (<http://idn.org.pl/Lodz/Mken/Mken%202001/Referaty%202001/14.pdf>).

The quality of life is the level of satisfaction as a result of consuming goods and services, leisure and the use of material and social conditions of the environment (Puciato, 2008, p. 11).

Definitions of the quality of life found in publications relate to the following spheres of human activity:

- psychological and moral values,
- social and cultural values,
- technical and economic values (Goranczewski, Puciato, 2010, p. 4).

As observed by B. Goranczewski and D. Puciato (2010, p. 4), without the proper quality of life exemplified by ethical and professional conduct of the organisation members, it is impossible to ensure high quality of products and services. The quality of life in an organisation is:

- a free, conscious, rational and purposeful set of technical, organisational, economic and socio-technical activities which result in a physical and mental development of a human being in line with the dynamic human model (Jędrzycki, 1978),
- true and complete “humanization” requiring a considerable development of intellectual processes as part of working and at least limited sense of freedom in the choice of goals and the manner of working (Zieleniewski, 1971).

Table 6 presents selected definitions of the quality of life.

Table 6. Selected definitions of the quality of life

Author	Interpretation
A. Campbell	The quality of life consists of the degree of the satisfaction of needs in predefined areas of life such as marriage, family, health, neighbours, friends, house chores, work, living in the given country, place of residence, leisure, housing conditions, education etc.
A. Kaleta	The quality of life covers the needs which a person deems essential for his/her life and the person's opinions on the level of their satisfaction.
C.E. Ferrans and M.J. Powers	The quality of life is the welfare measured by the satisfaction with those area of life which are important to a given individual.
K. de Walden-Galuszko	The quality of life is the assessment of one's life situation made at a given time and based on the adopted hierarchy of values.
S. Otok	The quality of life is a set of the factors of space, environment, production and culture which create the reality in which a person lives.
R. Kolman	The quality of life is the degree of fulfilment of the requirements which define the material and spiritual existence of the individual and the society at large.
E. Skrzypek	The quality of life is not only physical existence, but also the possibility of enriching the spirit and the mind as well as the possibility of education and creative activities (...) the sum of efforts, attempts and struggle with oneself, the sum of the skills of right choices, and dependence on compromises; first of all it is the ability to make decisions and accept their consequences with full responsibility.
K. Lisiecka	The quality of life is the philosophy of life based on responsibility, morality and purposefulness of life. The idea of life based on true and healthy morality and honesty encourages people to a deeper reflection and looking more ahead than ever, to give some thought to the meaning of life.
A. Niesior	The quality of life is the degree of meeting the requirements which define the material and spiritual existence or, in a wider sense, the function between expectations and their fulfilment. Therefore, the quality of life of a given individual should be defined with respect to the temporal perspective and social contexts, considering the personality factors, the environment determinants and their interrelations. The quality of life is the result of the subjective evaluation derived from the comparison of various internal and external parameters regarding life, i.e. in different areas and dimensions.

Source: own work on the basis of: Rogala (2014)

A. Rogala (2014, p. 5) emphasises that the quality of life has the objective dimension as well the subjective dimension. **The objective quality of life** is semantically similar to the conditions of life (and the level of life) which can be described as the totality of the objective conditions of infrastructure where a given community lives. They are mainly related to:

1. the material situation,
2. the existential support and
3. the environment support of individual lives.

The measurement of this quality is made with the use of indicators, most often in the form of natural measures of intensification. The objective quality of life usually covers such areas as:

- income,
- material situation,
- participation in culture and relaxation,
- use of health services etc.

The subjective quality of life is related to the perception of one’s life within the framework of a specific system of values and specific social, economic and political conditions. The subjective dimension covers such areas as the individual assessment of health and of prosperity (possessions). Table 7 presents the factors which shape the quality of life.

Table 7. Factors shaping the quality of life

Factors related to pleasure	Factors related to displeasure	Gladness with life	Satisfaction with areas of life
pleasure joy satisfaction pride fondness happiness bliss	shame sadness fear anger stress desolation envy	willingness to make changes satisfaction with life satisfaction with the past satisfaction with the future	work family leisure health finances friendship interpersonal relationships

Source: Theofilou (2013, p. 152)

There are four types of relations between the evaluation of the subjective quality of life and the objective quality of life (Table 8):

1. **Real paradise** – when the life conditions are good and people are satisfied.
2. **Real hell** – when the life conditions are poor and people are dissatisfied.
3. **Paradise for fools** – when the life conditions are poor, but people are satisfied.
4. **Hell for fools** – when the life conditions are good, but people are dissatisfied.

Table 8. Types of relations between the subjective and the objective quality of life

		Subjective quality of life	
		<i>High</i>	<i>Low</i>
Objective quality of life	<i>High</i>	Real paradise – “happy, rich people”	Hell for fools – “unhappy, rich people”
	<i>Low</i>	Paradise for fools – “happy, poor people”	Real hell – “unhappy, poor people”

Source: (Rogala, 2014)

Figure 2 presents the foundations of the quality of life (Goranczewski, Puciato 2010, p. 5). The first foundation of the quality of life is the **social quality** which can be divided into the internal quality and the external quality. The internal quality has the most subjective nature among the specified subcategories which consists of the following elements:

- the system of values based on achievements, successes, activity, individualism, humanitarianism etc.,
- world-view orientations,
- interests and hobbies,
- beliefs and attitudes resulting from experiences, activities and learning processes.

The external quality of life covers:

- significance and intensity of the family impact,
- belonging to social and religious groups,
- belonging to reference groups understood as communities which have a direct or indirect impact on the individual’s behaviours and attitudes,
- belonging to social classes which are permanent social groups organized in a hierarchy and manifesting shared attitudes and behaviours.

The second foundation of the quality of life is the **quality of upbringing and education**. Upbringing is the totality of processes through which an individual develops his or her capabilities and attitudes, adopting behaviours which have a positive value for the society. Upbringing is the social process in which a person is subjected to a conscious and purposeful influence so that the person can become prepared for life and develop his or her personality. The lack of development opportunities, poverty, alcoholism, helplessness, and dependence on social aid deteriorate personality and considerably reduce the quality of life. Upbringing based on appropriate educational processes is an integral part of the quality of upbringing. It mainly relates to the institutional environment and the system of education in which a person acquires the knowledge necessary for living and working. Due to the significance in terms of shaping the quality of life, educational processes should be systematically evaluated in order to implement constant improvements.

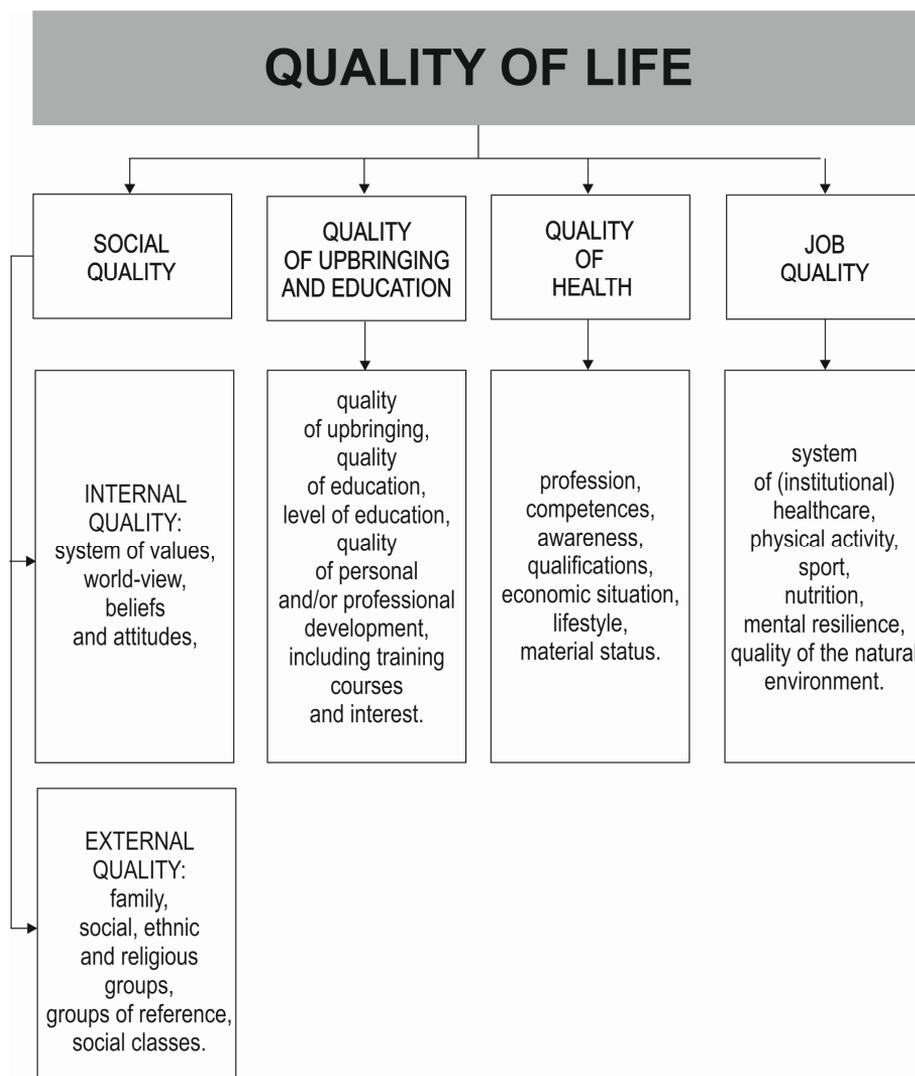


Fig. 2. Foundations of the quality of life

Source: own work on the basis of: Goranczewski, Puciato (2010, p. 5)

The quality of development is the third foundation of the quality of life. It pertains to both the internal quality with respect to development of personality and the job quality with respect to building employee awareness, professional development based on the relevant training system which allows to gain new experiences, models of behaviour, skills, knowledge, professional predispositions, interests etc.

The job quality is a subcategory which is mainly relevant to social and economic aspects of life. The factors within the subcategory of the job quality include: profession which pertains directly to the quality of life (a personally satisfying/dissatisfying profession), competences and awareness, i.e. the professional

self-esteem, resulting from the fact of holding a specific job position, the economic situation which determines the individual's income that can be allocated to expenses, savings or credit capacity; the economic situation influences the lifestyle (being in the world expressed in activities, interests and views), the person's status resulting directly from the job position and the related economic situation.

The last foundation of the quality of life is the **quality of health** which comprises a number of elements: healthcare, physical culture, physical efforts, motor activity, sports, good nutrition, mental health etc. Health is one of the key foundations of our existence. To a large extent, the quality of health depends on the individual conduct, i.e. the way of life, eating habits, coping with stress, physical efforts etc. It also depends on the ways of thinking and attitude towards life (Goranczewski, Puciato 2010, p. 5).

The development of contemporary civilisation is not conducive to physical activity. Technological amenities, means of transportation, automation and computerization minimize the level of physical activity in daily life. Many inventions and amenities eliminate each superfluous movement (Niedzielski, Witek (ed.) 2011). More and more jobs are now performed in a seated position, i.e. with reduced effort (Church et al. 2011; Balon et al. 2015, pp. 175-182; Łabuz-Roszak et al. 2017a, pp. 231-238; Roszak 2007, pp. 57-69).

The sedentary working style contributes to the increase in the incidence rate of diseases of civilisation (Uffelen et al. 2010, pp. 378-388): cancers, obesity, diabetes, circulatory system diseases (Hamilton et al. 2007, pp. 2566-2667), resulting in early mortality (Hu et al. 2004, pp. 666-673).

It is important to make changes in lifestyle by focusing on physical activity (Niedzielski, Witek (ed.) 2011). Sport comprises all forms of physical activity which, through sporadic or organised participation, influence development or improvement of the physical and mental condition, development of social relationships or the achievement of sport results at all levels (GUS 2011).

Poland has recently become a society with the highest obesity rate. 64% of men in Poland have excessive body mass. This indicator among women reaches 49% (Report of the National Food and Nutrition Institute in Warsaw of 2015).

In contemporary societies, sport is treated as one of the cultural values with a large impact on the human development, health and quality of life (Niedzielski, Witek (ed.) 2011).

Studies show that office employees spend nearly 2/3 of their working time in a seated position (Clemes et al. 2014, pp. 188-192), which increases the risk of the musculoskeletal system ailments (Griffiths et al. 2012, pp. 533-541). The job quality is a part of the general quality of life considered at the level of societies, groups and individuals. At the same time, it is the means to improve the quality of life (Olędzki 1981, p. 26). There is a feedback between the quality of life and the job

quality in the individual and social dimensions. The force of the mutual impact of work and private life is diverse in the individual dimension (due to personality, upbringing, family conditions etc.), in employee groups (due to the type of work, demographic characteristics etc.) as well as in regions and countries (due to the social and economic system, religion, culture etc.). It also undergoes an evolution in stable conditions and radical transformations in the case of rapid, sometimes traumatic changes in the life of an individual or in the environment (Borkowska 2010, p. 5).

At present, more and more companies encourage their employees to do sports (Metelski 2017, pp. 75-87). The success of each organisation depends on satisfied employees, their attitude towards the organisation, jobs, the type of work, and the atmosphere in the workplace resulting from the relations between co-workers and superiors. When an organisation fulfils the needs of its employees and creates the environment for personal development, it can expect an increase in their satisfaction, which translates into improved efficiency and quality of work (Sypniewska 2018, p. 190). The United States and Western Europe did recognise the benefits of doing sports by employees a long time ago. One of the examples is Google which provided its employees in the headquarters in California with volleyball and basketball courts, a small golf course, a swimming pool, a gym and bicycles. The employees can devote 20% of their working time to activities unrelated directly to their job duties. Physical activity can cover up to 20% of the working time. It means that during the 8-hour business day employees can engage in different forms of recreation for more than one hour. It is asserted that the best and the most innovative ideas appear when employees do not perform their professional duties (Waugh 2012).

Doing sports brings a number of benefits. The first benefit is the improved employee productivity thanks to better health due to increased physical activity. Doing sports regularly can also be an indication to the employer that the person who does sports enjoys good health and is organised and self-disciplined. Sport eliminates anxiety and “clears the mind”, making the employee work more efficiently (Well.hr b.r.). By doing sports, employees feel better and perform their daily duties more efficiently, they do not make mistakes and use their full potential. **Employees who do sports are more committed and satisfied with their jobs. They become natural AMBASSADORS of the company and often recommend it as an employer to their friends.** This results in lower recruiting costs and allows the company to spend less on employer branding campaigns (Hallsworth et al. 2008).

A child who does sports regularly gains such skills as determination in achieving purposes, the ability to manage limited time and the ease of working in a group. These skills help adults develop their professional careers (MSiT 2016).

Richard Branson, one of the most popular business leaders in the world, focuses more on employees than customers in his approach to business. He believes that if an employer cares for employees, they will care for customers. He emphasises that for employees to work effectively, they need to be in a good mental and physical condition. He asserts that “the people are the power. They are the real driving force of each business. Good people are not only crucial for the company, they are the company! To find such people, to manage, inspire and retain them is one of the key challenges faced by business leaders, and whether this challenge is met or not determines the company’s success and growth in the long run [...]. The people in the front line can decide about the success or the failure of the business” (Branson 2014).

The greatest advantage of employees who do sports is the increased motivation to work, engagement and self-fulfilment. Physical activity and rivalry teach consistency, determination in achieving goals and healthy competition. People who like their work are happy, successful and much more efficient in their jobs – these values are also important from the perspective of the employer. Sport teaches perseverance, determination and discipline. It boosts courage, self-confidence and appropriate attitudes towards other people. It also helps to shape strong organisational culture based on collaboration, inclusion and common striving towards victory. At the same time, it teaches humility, since each success in sport requires long hours of hard work (Well.hr b.r.).

Regular physical activity is specifically important in the case of people who perform intellectual work, since (Kowalczyk et al. 2015, pp. 24-27; Grzywacz 2011, pp. 87-94; Singer 1985, p. 376; Jasik 2015, pp. 254-259):

- It supports intellectual performance.
- It neutralises the stress caused by mental overload and the monotony of work.
- It improves the quality of sleep and well-being.
- It increases the employee productivity.
- It increases the employee motivation.
- It decreases the number of mistakes made by employees.
- It makes the employee more satisfied with work.
- The employee is more engaged at work.
- It has an impact on the speed of decision making.
- It supports better planning.
- It develops creativity.
- It allows to reach the emotional balance.

At present, it is asserted that an employee who is well-tended is also a capable employee, since a fit body makes him/her feel more comfortable, be more self-confident and helps in achieving success. It is deemed that a well-tended employee

personifies control over life and can manage the time in an organised way. If an employee has time for exercises and a healthy diet, s/he can also manage time so as to perform duties efficiently (Pikuła 2019, pp. 191-192).

A good physical condition improves mental health, interpersonal relationships, concentration and commitment to work performance. On average, employees who do sports show shorter absences at work due to sick leaves. Their results indicate that sport activities correlate with employee absences shorter by 20 days in the period of four years (van den Heuvel et al. 2005, p. 5).

When doing sports, athletes are forced to act quickly and effectively under the pressure of time and to work on their imperfections and persevere in training (Metelski 2017, pp. 75-87). Owing to the organisation of running events, the awareness of health and the role of physical activity grows, while jogging or simply scuttling for better health is accepted, understood and inspiring admiration for the strong will (www.wszystkoobieganiu.com.pl).

Sport develops teamwork skills, communication and problem-solving capabilities (Bailey et al. 2013, pp. 289-308). In the social dimension, physical activity allows to build relationships in group training and it also facilitates adaptation, overcoming barriers and integration (Ważny 2010, pp. 9-12; Singer 1985, p. 376).

The role of sport is not fully appreciated in Poland. 85% of Polish companies declaring that they promote physical activity do not seek information about employees' needs in this respect (Juszczuk et al. 2012, pp. 547-554).

Many people associate doing sports with slimming, a type of entertainment or something that is less demanding than mental efforts. Doing sports allows to make contacts which are precious gains in contemporary business. Studies from Sweden indicate that employees who do sports are more productive and motivated and they also show better social skills (Juszczuk et al. 2012, pp. 547-554).

The research by W. Fenrich, M. Stec, A. Gołdys and M. Rogaczewska (2009) demonstrates that amateur athletes feel joy, energy and satisfaction when collaborating with others.

Studies presented in the Fitness in Poland report (Fenrich et al. 2009) expressly indicate that physical activity improves well-being and reduces stress. Female patients who reported problems with anxiety, aggression, irritation, poor concentration and low mood at work were encouraged to engage in regular fitness exercises before work instead of prescribing antidepressants. In result, a considerable mood and well-being improvement was observed after a dozen days, while after 40 days there was a permanent effect in the form of better resilience to difficult situations.

One can therefore conclude that an employee who does sports falls ill less frequently, is mentally stronger, more efficient intellectually, more effective and more satisfied.

Table 9. Enterprise benefits resulting from the physical activity of employees

Benefits to the enterprise	Description
Healthy employees	<ul style="list-style-type: none"> • lower level of absences, • less frequent presenteeism, • sense of well-being, • strong organisational culture (lower costs, higher efficiency).
Stress prevention	<ul style="list-style-type: none"> • limited risk of occupational burnout, • limited risk of errors, • better atmosphere at work, • sense of well-being, • strong organisational culture (lower level of rotation, lower costs of employee loss, higher efficiency).
Engagement and satisfaction	<ul style="list-style-type: none"> • sense of well-being, • loyalty, • increased willingness to recommend the employer (employees as company ambassadors), • higher innovativeness, • creativity, • readiness to make more efforts, • strong organisational culture (lower level of rotation, lower costs of recruitment and employer branding, higher efficiency).
Development of employees	<ul style="list-style-type: none"> • leadership, • strategic thinking, • persistent pursuit of goals, • determination, • strong organisational culture (higher efficiency, innovativeness, creativity, effectiveness in achieving goals).
Team building	<ul style="list-style-type: none"> • good atmosphere – communication, • collaboration, • sense of shared goals, • sense of well-being, • strong organisational culture (lower level of rotation, lower costs, higher efficiency).

Source: Own work based on Well.hr b.r.

The studies of the Geriatric Research Department at Université Laval in Canada (published in 2011) indicate that when people older than 65 years are physically active (exercises more intense than walking at least three times a week), they reduce the risk of disadvantageous changes related to the process of ageing. The risk of dementia is reduced by 37%, the risk of decrease in cognitive abilities by 42%, and the risk of Alzheimer's disease by 50% (<https://link.do/...>).

The studies of the American College of Sports Medicine show that employees who do exercises at work, e.g. during the lunch break, for around 30-60 minutes are more productive by 15% on an average basis. Physical activity increases creativity and may lead to ground-breaking ideas in business (Well.hr b.r.). Table 9 presents the benefits that the physical activity of employees can bring to employers.

As specified by Apple's report, in the recent year the interest in the health and fitness applications increased by 70% and their subscription profits by 58%. Studies by AON show that in 2017 Poland had a record low level of employee engagement and historically the lowest commitment to work among Polish people in comparison to other European countries. As many as 52% of Polish employees do not feel committed to the work they perform and the difference between Poland and Europe reached the record-breaking value of 14% (Well.hr b.r.).

1.4. TQM and the quality of life

Broniewska observes that the philosophy of TQM (Total Quality Management) expressly emphasises the human subjectivity in the process of work. TQM assumes reaching higher quality of work and its products, but also of the quality of life in an organisation (Broniewska 2005, p. 27). The author underlines that the quality of products and services has an essential effect on the quality of life. The interrelations of these elements can be described as feedback, i.e. on the one hand the high quality of products and services influences the assessment of the quality of life, and on the other hand, a person's or a group's satisfaction with life provides strong motivation to make goods and services at a high level. Furthermore, an analysis of the factors defining the quality of life indicates that in the longer perspective:

- each of them is determined by the quality of work performed by employees of enterprises and service institutions,
- there is a reverse dependence, i.e. the quality of life determines the quality of work.

B. Goranczewski and D. Puciato (2010, p. 7) notice that TQM exceeds the framework of organisational activity, influencing the widely understood quality of life. The two authors emphasise that the category of the quality of life and the concept of TQM are mutually complementary. They cross and overlap in some areas. The essential attribute which reveals the common features of the quality of

life and the philosophy of TQM is the comprehensiveness of improvement understood as sustainable development in all areas and spheres of human activity. In the case of TQM, these activities exceed far beyond organisational behaviours. The effective implementation of the elements of this management concept can be achieved only when the quality of life of all organization members is satisfactory.

Deming believes that quality is not something that comes easy. Quality must be implemented. Quality must be worked out. It is a mental process. By implementing Total Quality Management, an enterprise says: “We radically change our way of thinking about quality” (Lewandowski 2013).

Total Quality Management (TQM) is a method that involves all employees in the constant improvement of the quality of the enterprise services and processes (Armstrong, Kotler 2012, p. 828). The British Quality Association defines TQM as a team philosophy of enterprise management where the needs of customers and the goals of the enterprise are inseparable (British Quality Association Newsletter 1989). According to T. Wawak (2016), TQM is a philosophical concept which assign decision making to the constant increase in the quality of work and products. Moreover, it is a philosophy and a strategy of reaching higher quality of work and continual improvement of the quality of products and services. TQM strives to meet the quality requirements and achieve the permanent satisfaction of internal and external customers.

In line with the ISO standards, TQM is a method for enterprise management focused on quality and based on the participation of all organisation members, oriented towards long-term success owing to customer satisfaction and benefits to all organisation members and to the society (PN-ISO 8402:1996).

The British BS 7850 standards defines TQM as the philosophy of management and business practice aiming at the most effective use of personal and material resources in order to reach the set goals. The ISO 8402 defines the total quality management as “the manner of organisation management focused on quality and based on the participation of all organisation members, oriented towards long-term success owing to customer satisfaction and benefits to all organisation members and the society (Kolman et al. 1996).

The implementation of the total quality management strategy relates to the necessity of overcoming habits and traditions, the systematic increase in qualifications, identification with the enterprise as well as **the reorientation towards 5C, i.e. customer, costs, creativity, communication and culture** (Karaszewski 2006, p. 139). TQM is based on the following key principles:

- creating awareness and engagement of all employees and, first of all, the senior management with respect to quality,
- striving to determine and meet the requirements of internal and external customers (each employee has his/her own customers and suppliers),

- continuous improvement of all activities in line with the cycle of Deming, including the continuous reduction of quality costs (excellence, not a predefined level).

The structure of the TQM philosophy is based on three elements:

- 1) teamwork methods (flat organisational structures) and problem solving,
- 2) a documented formal system of the enterprise quality assurance where the most known models are presented in the ISO 9000 standards,
- 3) methods and tools used to present and analyse data regarding quality and its improvement (known organisational techniques, methods of statistical quality management).

These three elements coexist and interact thanks to the quality-focused culture of the company, the general commitment of all employees, particularly the senior management, to quality as well as effective exchange of information within the enterprise (the cross-divisional approach). The central part of this model covers processes between customers and providers, both external (employees of the enterprise that adopted the TQM philosophy treat each other as customers and providers of products and services) and internal. The TQM philosophy uses ideas and information from all employees whose responsibility for the work they perform and understanding of their role as internal “providers” and “recipients” are crucial (Kolman et al. 1996).

The implementation of TQM is carried out by all employees as part of the teamwork, engagement, self-control and continuous increase in qualifications. The goal is to achieve long-term success resulting from customer satisfaction and benefits to the organisation, its members and the society (Wawak 2016).

The basic conditions for the implementation of the TQM principles:

- general participation and commitment of employees, specifically the management,
- understanding of processes and ensuring techniques and measures defining their effectiveness,
- determination of the relevant organisational structure to ensure the effective flow of information and the possibility to immediately correct any discrepancies,
- definition, current monitoring and prediction of the requirements of internal and external recipients,
- establishment of the program and organisation of training.

Total Quality Management is the concept of management with the key idea of permanent improvement of quality in the scope of activity and products. This is implemented with the participation of all employees, and of the managers in particular. The adoption of TQM is aimed at achieving long-term success thanks to the continuous meeting of customer expectations (Tyrańska 2016, pp. 24-33).

The current research confirms that the TQM philosophy is adopted in 54.5% of European enterprises, 53.8% and American enterprises and 28.6% of Asian enterprises (Karaszewski 2004). *Table 10* presents the basic assumptions of TQM.

Table 10. Basic assumptions of TQM

Assumption	Description
<p>The commitment of each employee in the enterprise to the improvement of the most detailed aspects of business enhances quality.</p>	<p>This improvement is carried out through frequent minor enhancements, not great investments. The reason for this approach is the efficiency calculus – an investment requires expenditure, so higher quality, larger production and lower costs are possible through prior spending. The real increase in efficiency occurs when this effect is generated by hundreds of minor and inexpensive changes.</p>
<p>Optimisation of processes is an essential part of TQM.</p>	<p>The use of simple and universal tools and devices which can be easily changed over maximizes the production time. Synchronisation of particular workstations allows to eliminate the costs of resources. As a result of the correct performance of tasks at the first instance, the work is not destabilised through constant corrections.</p>
<p>The causes of many quality problems are the improper management of the enterprise, the ineffective work organisation and the lack of motivation.</p>	<p>Only several percent of errors result from the actions of production employees.</p>
<p>The success of adopting management through quality is far away in time.</p>	<p>It is so, because only the long-term use of methods allows to gain a competitive advantage. However, success must have its effect on the activities of the organisation as well as bring benefits to the society and the natural environment. It results from the fact that enterprises should include the corporate social responsibility in their activities.</p>

Assumption	Description
<p>It is important to know the internal customers (employees), their attitudes and behaviours.</p>	<p>Employees should be asked about their opinions on the goals of the public institution, the system of communication between departments and the management methods. This information will, in turn, allow to formulate a general strategy within the public institution and to implement a new system. The TQM concept is characterized by participation and commitment of the personal at all levels. The philosophy of the total quality management consists in the conviction that each employee makes mistakes which influence the entire image of the organisation.</p>
<p>Commitment and participation of the entire senior management are significant elements of the TQM concept.</p>	<p>Improvement of the operations of the public institution in line with the quality requirements and the requirements of the service recipients can be achieved only with the full support from the top management. The implementation of the total quality management concept is a long-term strategy which cannot generate the expected results without the commitment, time, efforts and perseverance of the managers.</p>
<p>The provision of high quality services requires learning the customer expectations and the level of customer satisfaction.</p>	<p>The easiest way to achieve this is the survey of customer opinions regarding the satisfaction with the service. The survey provides information on weak and strong points of particular departments in the organisation and allows to determine the level of customer satisfaction and the necessary changes in the service in order to increase this level.</p>

Source: Own work on the basis of Tyrańska (2016, pp. 24-33)

The concept of TQM changes the existing approach to quality and is treated as the process of planning, preparing, producing and delivering products/services which are most economical, most useful and most satisfactory from the customer's perspective. This understanding of quality requires the commitment of all employ-

ees. **TQM is also the philosophy of reaching the higher quality of life and work with the emphasis on the human subjectivity in the work processes.** In each area of TQM, the subject and the object is the human being and his or her activities. This can be seen in all crucial areas of TQM such as the engagement of the top management, adoption of the principles of active participation and commitment of all employees, the communication within the organisation, the establishment of quality circles in order to solve quality problems, education and training programs as well as changes in the culture of the organisation. In TQM, an individual is the giver and the taker, serving the organisation and the community, but also expecting an analogous reaction from this community. **As part of the TQM philosophy, work creates the quality of life and TQM provides favourable conditions for this process.** TQM is the opportunity for success and it should be used in management as the process of quality management and as the quality of management (Skrzypek 2000). The implementation of management systems compliant with the ISO 9000 standards is the first step towards an effective management system in an organisation, but it is significant, because it initiates the structuring of the organisation's operations in the core areas. The introduction of unified and clear procedures of conduct and the express definition of the scope of privileges and responsibilities of particular functions and persons provide solid grounds for moving towards a higher level of management, i.e. TQM (Bielawa et al. 2008). ISO is the necessary element in the enterprise's progress towards the implementation of the TQM philosophy. Total Quality Management defines the philosophy of an enterprise, while the certification of the quality system makes the enterprise more credible in the eyes of customers. The certification is the prelude to TQM. The effective implementation of the TQM principles requires preparation of relevant foundations in the organisation. Such foundations are provided by the implementation of the quality management system in line with the ISO 9001 standard. This system guarantees that the core areas of the organisation's operations are structured and documented. In line with the ISO 9000 standards, the quality system does not cover many important areas of management (included in TQM) such as strategic planning, finances, marketing, knowledge management, partner relations, benchmarking, while other areas are narrowly treated, e.g. leadership, management of human resources, management of internal resources. The ISO standards also fail to address the management of results, specifically the business results (Rajkiewicz et al. 2016). The position of the ISO system in the organisation's strategy is presented in Figure 3.

TQM enables the combination of financial phenomena and indicators with non-financial values and measures (Lisiecka 2002); it is tantamount to overcoming the crisis of work, since it brings back (Wawak 1998) the meaning of work in an organisation (the active collaboration of employees within the organisation with

external customers) and it encourages all employees to take initiatives. **The above benefits improve the quality of life for people in the organisation.** Table 11 presents quality from the perspective of TQM, ISO and Kaizen.

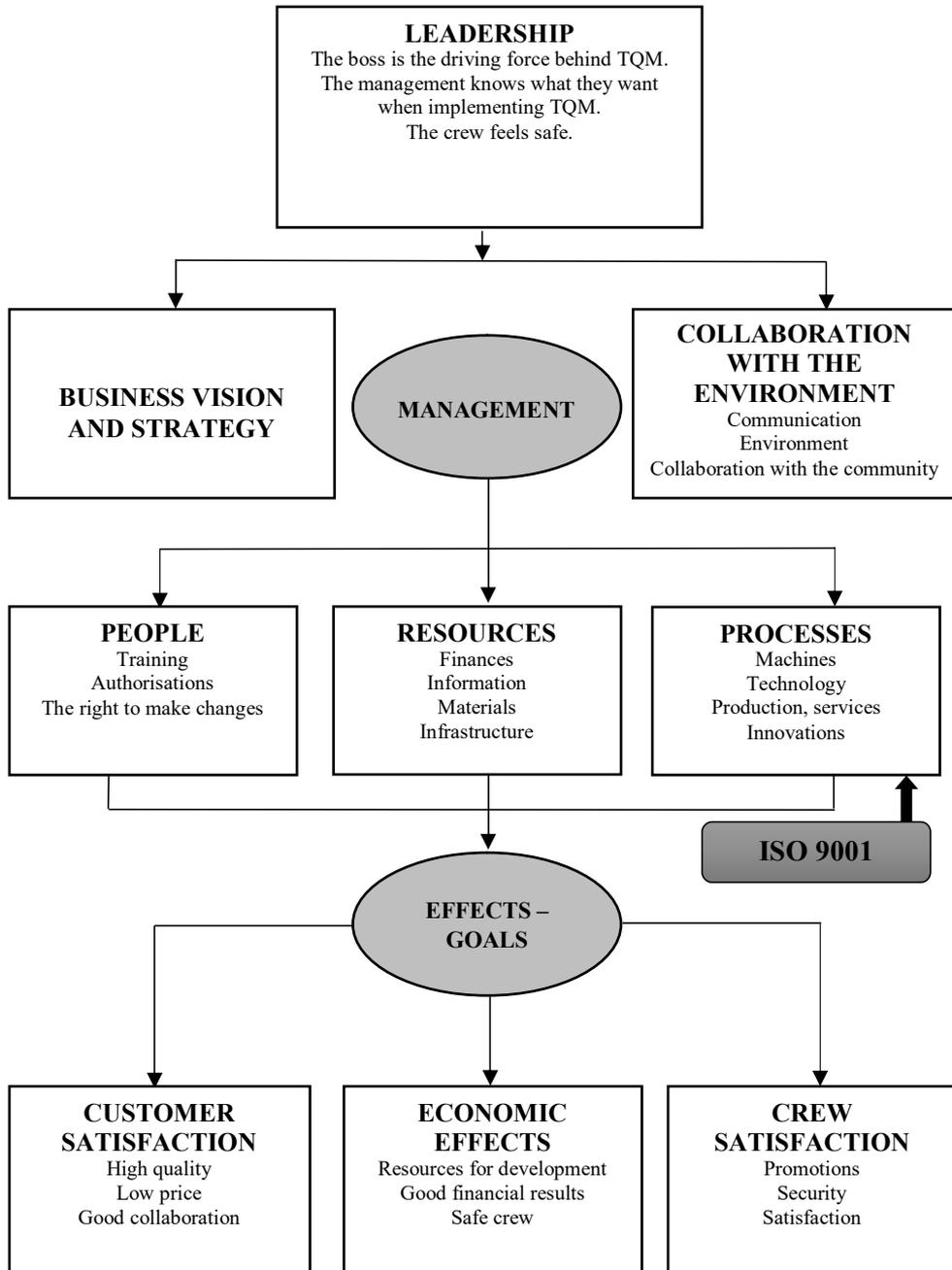


Fig. 3. Organisation strategy – TQM

Source: Bielawa et al. (2008, pp. 165-170)

Table 11. Quality from the perspective of TQM, ISO and Kaizen

Author	Definition of quality
W.E. Deming	Quality is the predicted degree of homogeneity and reliability with the lowest possible costs and adaptation to the market demands.
J.M. Juran	Quality is the compliance with the intended use or goal.
V.A. Feigenbaum	Quality is collective characteristics of a product and a service, including marketing, design, provision and maintenance, which makes the given product or service meet the user's expectations.
M. Imai	Quality is everything that can be improved.
ISO	Quality is the totality of an object's attributes related to its ability to satisfy the identified and predicted needs.
R.L. Flood	Meeting formal and informal requirements of customers with the lowest costs at the first instance and each subsequent instance.

Source: Horbaczewski (2006, pp. 9-12) and Łańcucki (2001, p. 389)

The common thread in these definitions of quality is the customer. It is mainly the customer who defines the quality of any given product. Without the correct interpretation of customer expectations, enterprises cannot gain a competitive advantage on the market (Tyrańska 2016, pp. 24-33). Figure 4 presents the concept of TQM from the perspective of organisational implications of particular subcategories of the quality of life (Goranczewski, Puciato 2010, p. 7). **The social quality in the total quality management** is mainly the appropriate atmosphere at work, based on collaboration instead of rivalry. The appropriate attitudes in the superior/subordinate interactions and relations between workers. **The quality of upbringing and education** is related to the social quality, since the culture of an organisation depends on the professional preparation and the general knowledge of the organisation members. The appropriate education before employment and professional development, including the system of post-employment training, transforming the workforce into the intellectual capital, are fundamental for the achievement of the organisation's goals. In the information society, knowledge understood as the possessed information becomes a resource that is equivalent to people, capital and infrastructure. It is used by superiors and subordinates alike. **The job quality** comprises such factors, already mentioned before, as personal satisfaction with the performed work and motivation. From the perspective of TQM, the job quality is mainly the standardized work in order to satisfy customers and other stakeholders as well as to ensure continuous implementation of improvements. Improvements and the related innovations and counteracting the routine make the work provide inner enrichment and development.

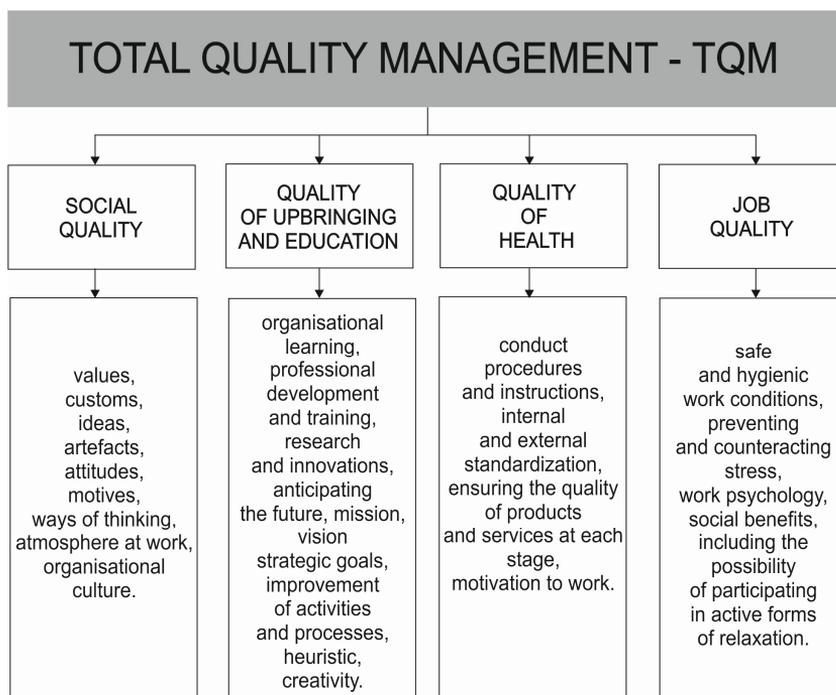


Fig. 4. The concept of TQM from the perspective of organisational implications of particular subcategories of the quality of life

Source: own work on the basis of: Goranczewski, Puciato (2010, p. 5)

The quality of health from the perspective of TQM comprises: safe and hygienic conditions of work, preventing accidents and occupational diseases by the working environment measurements, identification of threats and the assessment of occupational risk, and the consecutive implementation of the collective and personal protection measures; work psychology, capabilities of coping with stress as well as proper interactions within the organisation and proper, preferably active relaxation after work. When building the culture of an organisation on the basis of TQM, the following stages should be considered (Oakland 1993) (Fig. 5). As observed by some authors (Kolman, Grudowski, Meller, Preihs 1996), to build solid grounds for TQM, it is necessary to ensure that all employees understand the basis notions and strategies related to this philosophy. The necessary condition for further actions intended to the implementation of the total quality management is the change in the awareness of all employees to guarantee that quality is the leading element at work. The key role in creating this awareness must be played by the managers whose commitment to quality should be expressed in the form of a generally known and understandable vision and the resulting quality policy in the enterprise. The acceptance and identification with this vision by all employees will ensure the stability of the TQM structure and will also facilitate the achievement of quality

goals. In the light of contemporary global experiences, the key condition for the company's success is the strategic planning, authorized and authentically supported by the senior management and using the creative potential and engagement of all employees. The TQM model can be presented as the integration of 4 elements:

1. Customer – meeting the customer's requirements, minimization of costs.
2. People – hard-working and experienced personnel.
3. Processes – actions taken in the organisation are processes (business processes, administrative processes, production processes).
4. System – a properly implemented and documented system of quality management enabling systematic improvements (Salerno 2016).

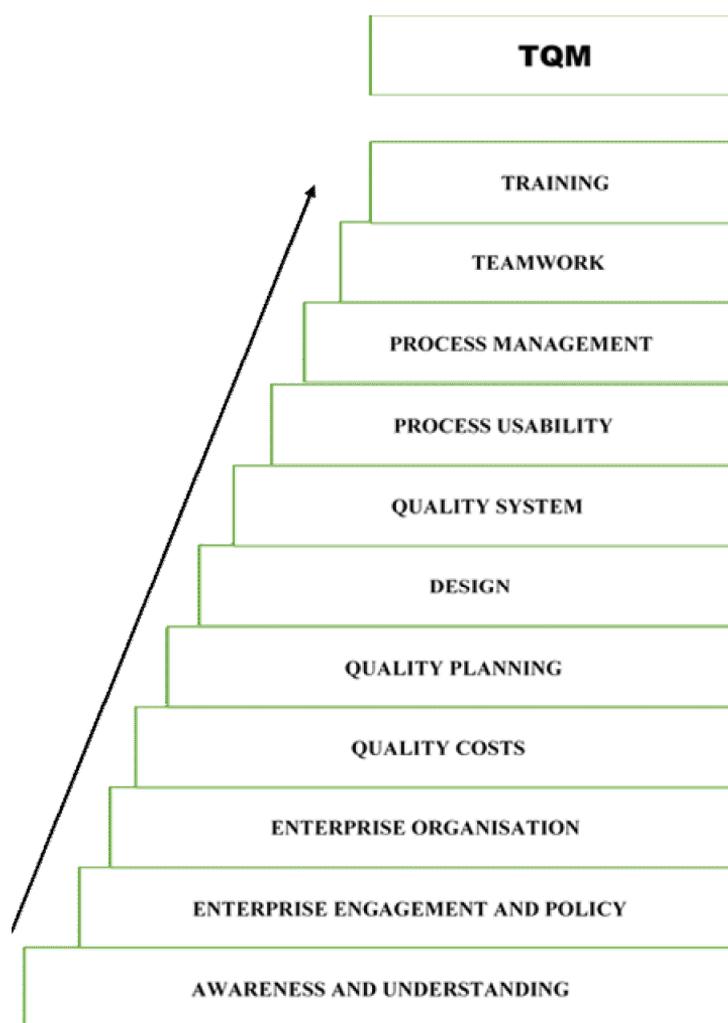


Fig. 5. Stages (degrees) of creating the TQM structure within the enterprise

Source: own work on the basis of: Oakland (1993)

The differences between TQM and ISO 9001 are presented in Table 12.

Table 12. Differences between TQM and ISO 9001

Feature	TQM	ISO 9001
Documentation	TQM can be implemented without documentation and procedures	Systemic procedures or another form of system documentation are required
System foundation	The general philosophy of management strives to satisfy all participants	Requirements included in ISO 9001
System area	The entire organisation	Finances need not be specified in the system of quality management
Assessment	Through customer satisfaction	Also through customer satisfaction, but mainly through internal audits and external audits (certification authorities)
Certificate	No certificate confirming the implementation of the principles of TQM	It is granted by the certification authority
Engagement of particular employees	Key significance for the implementation of TQM in the organisation	Emphasised engagement of the management and competences and responsibility of all managers

Source: Bielawa et al. (2008, pp. 165-170)

The TQM model is specifically needed by organisations which have a quality system in place, since it enables a wider perception of the organisation and its further comprehensive and effective improvement (Bielawa et al. 2008).

The significance of sport in the era of globalization

2.1. Sport as the factor in the sustainable development of countries

According to the survey by ARC Rynek i Opinia, 44% of Polish people are interested in sports.⁵ The popularity of any given sports discipline depends mainly on the international successes achieved by Polish athletes. The sports market is becoming more and more global (Sznajder 2007, pp. 45-65). It is related to services in the area of both professional and amateur sporting rivalry as well as forms of leisure. The sports market constitutes an important branch of industry (production of equipment and products dedicated to athletes). Figure 6 presents the interest in sports disciplines in Poland in 2008. The interest in sports is exemplified by ski jumping (in the seasons when Adam Małysz had worse results in the World Cup competitions, the popularity of this discipline decreased) and Formula 1 (the high positions in the Grand Prix cycle by Robert Kubica increased the interest in the races among Polish people) (Gębarowski 2010, pp. 337-345).

Sport is generally divided into performance sport and sport for all. Performance sport focuses on rivalry and victory. Both professionals and amateurs participate in this form of sport. Sport for all is also based on the rules of rivalry, but here participants have a different objective. First and foremost, sport for all satisfies the need for motor activity, for exercises which improve the physical condition and for active forms of leisure. Similar goals

Inspire recreational sport of the autotelic type, often in the form of sport practised with family members or friends. Sport has the following features (Glińska et al. 2009, p. 176):

⁵ The survey conducted in 2008 through computer-assisted personal interviewing (CAPI) with the representative sample of 1235 Polish residents at the age of 15-65 years (*Sport i sponsoring sportu 2008*).

- universality (national, continental, global),
- simplicity of the message and associations,
- emotions,
- media coverage,
- multiple layers of reception and participation,
- egalitarianism,
- exclusiveness,
- natural presence of advertisements and international reach.

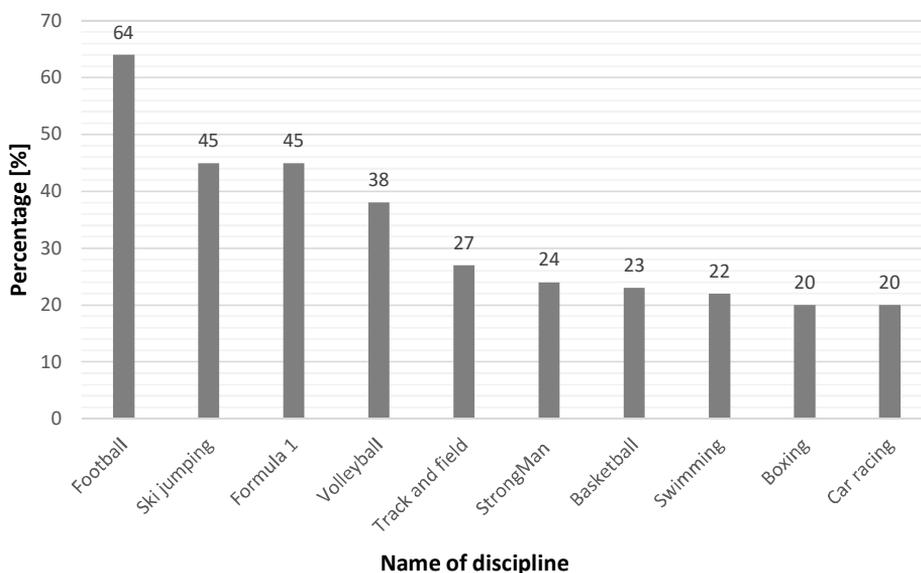


Fig. 6. The interest in sports disciplines in Poland in 2008

Source: Own work on the basis of Gębarowski (2010, pp. 337-345)

The contemporary performance sport is based on four key pillars (Godlewski 2011, pp. 9-23):

1. **pageantry** (spectator sport, pop culture, broadcast time, theatricalization),
2. **commercialization** (professionalization, marketing in sports),
3. **universalism, unification** (fair play, homo sportivus) and
4. **globalization** (supranational organisations, trans-cultural diffusion, global competition).

In contemporary world, sport is an important value in terms of civilisation, culture and society. In today's developed societies, sport has become a public good available in different variants according to the possibilities and the interests of the citizens. It is also a part of the social policy in a modern state, stimulating many branches of economy by creating a specific labour market

(www.msport.gov.pl). Sport is a stimulant of a country's sustainable development consisting in correlated social and economic benefits (Jedel 2013, pp. 215-227). Table 13 presents a description of the sports market.

Table 13. Description of the sports market

Element	Description
Diversification of entities	Sports organisations as entities operating in the sports market on the side of the supply are strongly diversified.
Diversification of goals	The goals of sports organisations are considerably more diversified than the goals of enterprises from other sectors of economy.
Interdependence of sports clubs	Professional sports clubs engage in a strong competition, but they also depend on each other.
Comments on decisions	Decisions made by managers of sports organisations are immediately commented by fans and by the media.
Market duality	The sports market is dual in a double sense – sports organisations operate on the sports market (individual consumers buy products) and on the advertisement and sponsoring market (institutional buyers), since the profits from the sale of products are insufficient to cover the expenses of the clubs, so they adopt two business models – B2C (<i>Business-to-Consumers</i>) and B2B (<i>Business-to-Business</i>).
Sale of products on the primary market and on the secondary market	For the sports market it is necessary to sell products on the primary market (during the sports spectacle in the stadium) and on the secondary market (sale of sports products via the media).
Diversification of products	Products offered by sports organisations are diversified depending on the target customers: consumers (sport fans) or institutional buyers (companies which do sport-based marketing or TV stations).
Specificity of sport fans	Sport fans have specific qualities as buyers: they are loyal and attached to the club and usually they want to have some impact on how the club functions.
The market is regulated	The sports market is a regulated market, i.e. clubs/enterprises have to consider general applicable regulations as well as specific sports regulations.

Source: Own work on the basis of Sznajder (2007, pp. 45-65)

Of special importance is the *White Paper on Sport* published by the European Commission in 2007, asserting that physical activity has a considerable potential in terms of improvement of public health (*EU Physical Activity Guidelines...* 2008, p. 44). The *White Paper* defines strategic goals that sport should achieve in the European Union. The goals are divided into three dimensions: social, economic and organisational. As regards the social and economic dimensions, sport has an effect on the achievement of strategic goals in the scope of improvement of the quality of life and integration of the EU residents. It creates values such as peace, tolerance, mutual understanding and education, and it also stimulates economic cooperation. Sport is a dynamic market with increasing significance. It fulfils social needs and it can also boost the economic growth and create new jobs. Performance sport based on healthy competition depends on the proper social and material conditions that a country should ensure for athletes, i.e. on the requirements by the key players in the sports market (Jedel 2013, pp. 215-227).

A new phenomenon is electronic sport (e-sport) which, in contrast to other disciplines, could use all the amenities of the 20th century during its emergence, promotion and development, which has influenced its present form. The accompanying commercialization has made it thriving and widespread (Dąbrowski 2011, pp. 117-141).

At present, one can observe large interest in computer games as one of the forms of spending free time. The growing interest in computer games is related to the increase of investments in the production of games, to the great technological revolution in hardware and software, and to the greater speed of the Internet connection and access. As a result, it has been possible for electronic sport (e-sport or cybersport) to emerge and develop (Stępnik 2009, pp. 213-222).

E-sport is electronic sport, i.e. computer gaming competitions (<http://www.pgs-gaming.pl/>). E-sport can also be understood as gaming (where participants compete with each other), i.e. each activity consisting in playing computer games where the goal is to defeat the adversary. Gaming means spending free time by playing computer games (Stępnik 2009, pp. 213-222). Electronic sport is, first of all, rivalry between people. Computers are sport courts where, depending on preferences, one can play football or volleyball and participate in track and field events. Moreover, similarly to traditional sports, e-sport players can also count on the full support from their fans around the world (Wróbel, Krusiński 2007).

E-sport can be perceived as an alternative to the traditional sport or as one of the sports disciplines that can soon be included in the Olympic Games. Professional e-sport started around 20 years ago, when following the success of "Quake II", the Cyberathlete Professional League was established in the US. The global expansion of e-sport started in Korea with the first international finals of the World Cyber Games in 2000, organized by International Cyber Marketing.

The next finals were held e.g. in South Korea, the US, Singapore, Germany, Italy and China. At the peak moment in 2008, the participants included 800 gamers from 78 countries, competing in 14 different games, while the total prize pool was USD 0.5 million. The national finals of WCG have been held in Warsaw since 2005 at the Blue City and Złote Tarasy shopping malls and on the premises of the Expo XXI Centre. E-sport comprises different sub-disciplines (Table 14).

Table 14. Types of e-sport sub-disciplines

Type of e-sport sub-disciplines	Description
FGT	fight
FPS	first-person shooter
RAC	races
RTS	real-time strategies
SPO	sporting

Source: Own work on the basis of the games offered by World Cyber Games

E-athletes are grouped in various leagues of which the most famous ones include: ClanBase, Cyberathlete Professional League, Cyberathlete Amateur League, CyberEvolution, Major League Gaming, Electronic Sports League. They participate in many national and international competitions of which the largest include: World Cyber Games, Electronic Sports World Cup, The Championship Gaming Series, World e-Sports Games (Stępnik 2009, pp. 213-222).

The number of players participating in competitions in Poland and worldwide is constantly growing (<http://www.fatality.com>). At present, there are around 335 million fans of e-sport around the globe. E-sport owes its development mainly to the energetic interest shown by one of the largest generation groups which influences numerous spheres of life. Research shows that e-sport fans mainly include the Millennials – the most interested age groups are 18-24 year olds (43%) and 25-34 year olds (27%) who have good earnings and stable jobs (<https://www.money.pl/...>). The growing popularity of e-sport events made the global revenue of the sector reach USD 0.87 billion in 2018. In 2017, e-sport had slightly more than 923,000 viewers in Poland.

The *Global E-sports Market* report published by Newzoo indicates that during the next few years the revenues in the e-sports sector will rise by 15% on a yearly average. The e-sport viewership will reach 495 million globally. E-sport is becoming more and more interesting to TV stations which compete for the broadcasting rights. The key region for e-sport in 2019 was North America with 23.9 million viewers and revenues of USD 409.1 million. The second position in terms of profitability in 2019 was taken by China (revenue of USD 210.3 million). Watching e-sport has become one of the forms of leisure in China (<https://www.money.pl/...>).

In recent years, running has become very popular as the sport for all (Parzonko, Szuba 2017, p. 61-70). There have appeared competing groups of people from different backgrounds along the running trails (Galloway 2002, p. 13). The fashion for running is observed in Poland, but also in Europe and worldwide (Stempień 2016, p. 89-107). In recent years, Polish people manifest a growing interest in running and a healthy, active lifestyle (Nowak 2012a, pp. 290-301).

In the early 1970s, Americans noticed that physical activity was crucial for keeping healthy and fit and running became a real passion for many (Galloway 2002, p. 13). The systematic promoting and spreading of the healthy lifestyle made many Polish people notice the positive impact of physical activity on the general physical and mental condition (Parzonko, Szuba 2017, p. 61-70). The oldest running event in Poland is the Westerlatte Run in Gdańsk (10 km), organised since 1962, while the first Polish marathon was held in Dębno in 1969. The number of mass running races has systematically grown (Parzonko, Szuba 2017, pp. 61-70).

The recent statistics for Poland are as follows: 250 running events in 2000, more than 1,000 running events in 2008, nearly 3,000 running events in 2014. The annual increment reached 25% (Kabengele et al. 2015, p. 172).

Recreational sport is an organised way of spending free time which develops the health potential by engagement in the planned and controlled training process as well as contributes considerably to the improvement of the quality of life by participation in the sports and recreational events (Wolańska 1997, p. 107). Running is today the third most popular discipline of motor recreation in Poland, preceded only by cycling and swimming (CBOS 2013, p. 9; Dziubiński 2016, p. 260). Running as a form of active recreation has never been so popular in Poland as it is nowadays.

The market of products for runners is developing. New specialist stores open, general sport and tourism stores include professional articles for runners in their offer, while chain stores and outlets organise temporary offers of such products (Kasperska, Kasperski 2017, pp. 297-308).

The studies by J.R. Stempień (2016, pp. 47-70) and Z. Waśkowski (2014, p. 33) indicate that the reasons for taking up running include: improving fitness, losing weight, combating a habit, pleasure, testing oneself, and the need for rivalry. P.F. Nowak and J. Supiński (2014, pp. 41-47) demonstrate that for the majority of runners health is the main declared motive for running. Many people start running e.g. to reduce their body mass or improve general health. However, when they have reached those primary goals and enhanced their physical fitness, there emerge new goals related to self-improvement. The health-oriented running workout is a process which aims at developing the efficiency of the organism and it can, in its most advanced form, be related to participation in sports and recreational events with the elements of competition. One can compete with oneself, with the distance, with time, with a difficult route or the weather. Many runners

have their own goals and make their own categories of competition, e.g. the number of runs during a year. It should be noted that goals which are set independently can be irrational and unrelated to health or a healthy lifestyle. The most dynamic growth in the number of runners has been observed in recent years. According to different estimates, 1-3 million people in Poland practice running, but the exact number is impossible to determine due to the widespread popularity of running and different definitions of who qualifies as a runner. This sport is more popular among men. Women account for 20-30% of runners in Poland. The studies by Z. Waśkowski (2014, pp. 483-491) indicate that the key determinants increasing the popularity of running in Poland include: a healthy, active lifestyle, high popularity of running in Western countries and increasingly higher availability of high-quality footwear, clothes and accessories for runners, the increasing number of mass running events, fashion for running, a relatively low cost of practising this sport and, first of all, the lack of any special requirements regarding the sports arenas. In another study by this author, it is demonstrated that women participate more willingly in such runs where the profit is designated for charity purposes and they are more often motivated by socialising goals rather than competition (Waśkowski 2007, p. 242).

Runners discover a kind of addiction to the relaxation they feel when they go running and, particularly, after the run. It is suspected that the hormones from the group of beta-endorphins are responsible for this effect, acting upon the midbrain in a slightly calming way. The organism and the mind start to expect this post-training condition and will feel its lack when the usual running workout is skipped. The symptoms of “hunger” can be different: capricious behaviour, fatigue, irritability, desolation etc. (Galloway 2002, p. 13).

In addition to the fashion for running, one can observe the growing popularity of “running tourism”, i.e. covering extremely long distances (even several hundred kilometres) to reach the place where the contest is held (e.g. a half marathon or a marathon). It should be emphasised that amateur runners do not treat victory as the key reason for participation in running events. What they value more is the environment of the run or the atmosphere created by the participants. An important element of each contest is the possibility to compete. One can compete with oneself, with one’s weaknesses, with the distance, with time, with a difficult route or the weather and with friends. Many runners have their own goals and make their own categories of competition, e.g. the number competitions in a year or the number of kilometres in a month. For the majority of runners health is the main motive for running. Many people start running e.g. to reduce their body mass, improve general health, regulate the blood pressure or quit an addiction. However, when they have reached those primary goals and enhanced their physical fitness, there emerge new goals often related to self-improvement. The health-oriented running workout is

a process which aims at developing the efficiency of the organism and it can be related to increasing the distances, e.g. a runner who took part in a 5-kilometre race dreams to run in a half marathon, a marathon or a mountain run (Rosak-Szyrocka 2019, pp. 10-11). Runs are characterised by the features presented in Table 15.

Table 15. Run features

Run feature	Description
Distance	The most popular distances in running events are 5, 10, 15 km, a half marathon (21.097 km) and a marathon (42.195 km). Runs with other distances are also held, e.g. shorter (Warszawska Trójka – 3 km) and considerably longer (ultramarathons with practically no upper limit).
Measurement method	Distance runs (measurement of the time in which the set distance is covered), timed runs (measurement of the distance covered within the set time), pursuit runs (the mobile finish line pursues the runners and the winners is the one who manages to escape for the longest time).
Route	Stadium runs, street runs, cross country runs, mountain runs, forest runs, runs in a developed/undeveloped areas, mixed runs, runs along a designated route and orientation runs.
Number of disciplines	Standard runs, duathlons, triathlons.
Difficulty	Runs on flat terrains, on hills, on beaches, with obstacles (e.g. mud, field drains, steep sections requiring ropes), extreme runs on particularly difficult terrains (e.g. swamps, high mountains), desert runs, runs beyond the polar circle, runs on the frozen surface of Lake Baikal.
Participants	Individual runs, team runs, relay races, family runs.
Cyclicity	One-time races (usually occasional), annual races, biannual races (a summer edition and a winter edition), stage races (several stages over the year, stage results are cumulated).
Other	Thematic runs, where the imagination of organisers is the only limit – e.g. the Santa Claus race (in costumes), High-Heel Race, the Race to Get the Dragon's Egg (which must be brought to the finish line unbroken) and many others.

Source: Own work on the basis of Kasperska, Kasperski (2017, pp. 297-308)

With respect to the key idea, runs can be divided into (Parzonko, Szuba 2017, pp. 61-70):

- **performance runs**, where the key goal is competition and achievement of the best results;
- **recreational runs**, where the fun element is more important than competition and results. Such runs are mainly dedicated to amateurs and they are often occasional runs, e.g. the Valentine's Day run, the Santa Claus run etc. They are usually accompanied by thematic games and activities.

- **charity runs**;
- **commemorative runs**, e.g. commemorating historical events or eminent persons;
- **promotional runs**, e.g. promoting cities, natural environments, attitudes, behaviours etc.

A running event can be defined as a combination of a sports contest with a festivity. Competition is not the only element of such events. They are mixtures of games, activities and other attractions related to the set goals of the event. The type and number of additional attractions depend on the prestige of the event, the budget of the organisers and the general idea for the run (e.g. runs that commemorate historical events may be accompanied by historical re-enactments) (Parzonko, Szuba 2017, pp. 61-70). Additional attractions, i.e. (special) accompanying events such as Nordic walking, roller-skating contests, runs for people with disabilities, runs for kids, pasta parties, concerts, festivals, balls etc., allow for a greater number of participants and motivate healthy behaviours as well as improve the competitive edge of the event (Dzięgiel, Lubowiecki-Vikuk 2013, pp. 119-135). The participants of running events include many collectors of medals, trophies, occasional T-shirts or race numbers. As a result, one can observe the development of events dedicated to the fans of jogging on the running market. The generally available online calendars of running contests indicate that in 2001-2012 the number of such events increased by nearly five times. Hence the conclusion that running events are becoming specific sporting ventures and diversified tourist products which a growing demand (Dzięgiel 2013, pp. 104-106). A tourist runner needs to be fit and resilient to hardships and difficult weather conditions as well as mentally resilient and capable of coping with strength crises. Such a person has to possess self-discipline, strong will and persistence, but should also be mindful with respect to health. When taking up a challenge, such people want to put themselves to the test and confront their own capabilities as well as to improve the physical capacity and fitness (Dzięgiel, Lubowiecki-Vikuk 2013, pp. 119-135).

The attitude of Polish people to sport has changed over the years. In 2009, the favourite sport that they did was football (26%). The disciplines which have gained most popularity over the years are: cycling (from 23 to 38%) and running (from 12 to 30%). Figure 7 presents the distribution of disciplines in the age group of 18-24 years. Data analysis shows that the youngest generation (18-24 years) chooses such disciplines as running, gym workout and swimming. The young generation does not indicate cycling as a sports discipline, probably because they treat it as a means of transport, which is confirmed by the popularity of city bikes, especially in large cities. Figure 8 shows data regarding the distribution of disciplines in the age group of 25-34 years.

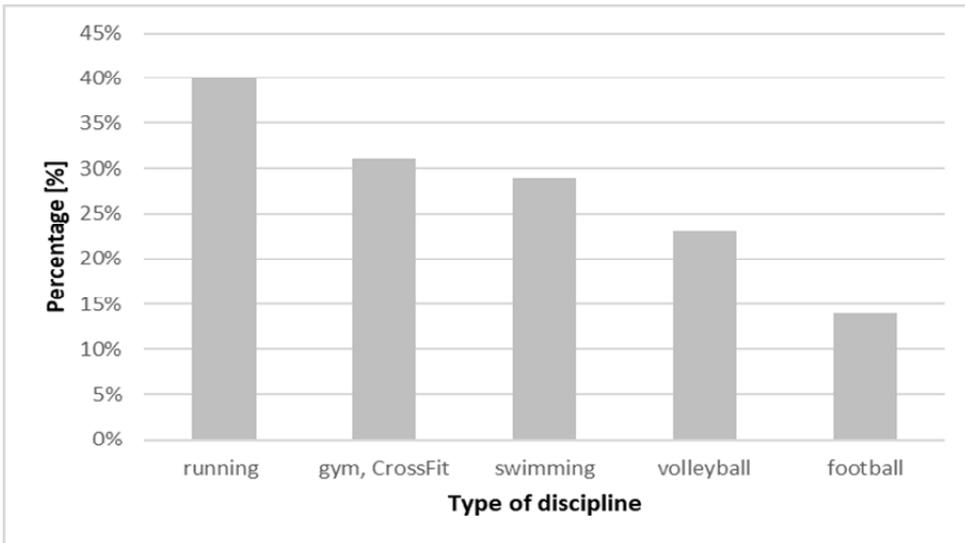


Fig. 7. Distribution of disciplines in the age group of 18-24 years

Source: Own work on the basis of the Sponsoring Monitor study, ARC Rynek i Opinia 2019 ([https://arc.com.pl/...](https://arc.com.pl/))

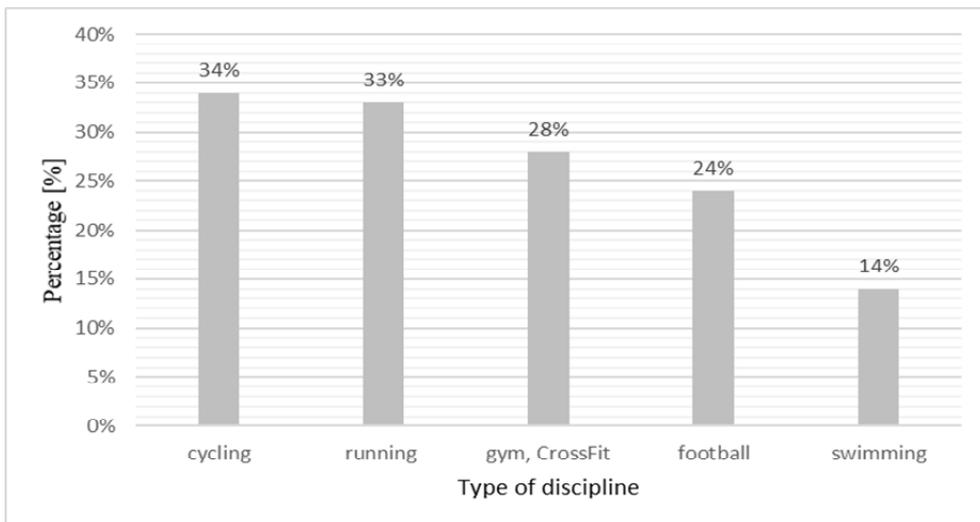


Fig. 8. Distribution of disciplines in the age group of 25-34 years

Source: Own work on the basis of the Sponsoring Monitor study, ARC Rynek i Opinia 2019 ([https://arc.com.pl/...](https://arc.com.pl/))

The **generation of 25-34-year olds** most often choose cycling and running. The next most popular disciplines are gym workout and football. Swimming is the last on the list. Figure 9 presents the distribution of disciplines in the age group of

35-44 years. **People between the age of 35 and 44** usually prefer cycling and running. Figure 10 shows data regarding the distribution of disciplines in the age group above 45 years.

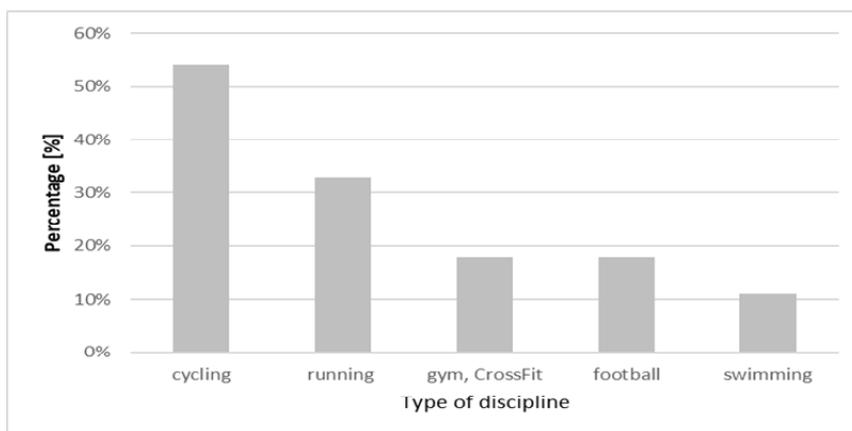


Fig. 9. Distribution of disciplines in the age group of 35-44 years

Source: Own work on the basis of the Sponsoring Monitor study, ARC Rynek i Opinia 2019 ([https://arc.com.pl/...](https://arc.com.pl/))

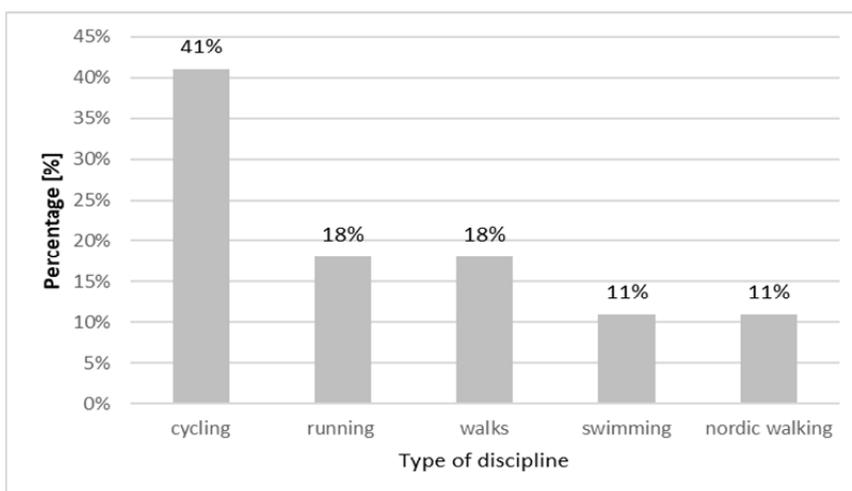


Fig. 10. Distribution of disciplines in the age group above 45 years

Source: Own work on the basis of the Sponsoring Monitor study, ARC Rynek i Opinia 2019 ([https://arc.com.pl/...](https://arc.com.pl/))

Persons aged 45+ (45-64 years) choose cycling most frequently. In this generation, the list includes new disciplines: strolls, hiking and Nordic walking. The care for the condition of joints is the key factor in choosing sports, since people from this age group prefer such disciplines which do not cause severe load on the joints.

2.2. Physical activity in Poland

World Health Organization (WHO) is the key agent in the process of defining policies which counteract obesity (<http://www.euro.who.int/>). As part of its operations, WHO adopted a number of documents which define individual and collective goals related to physical activity and nutrition.⁶ In 2002, WHO adopted the recommendation that everyone should engage in physical activity for at least 30 minutes per day (<https://www.who.int/...>). In line with the guidelines of WHO, we should be active each day to maintain well-being and good health. It is important, because the lack of movement kills – WHO calculated that one hour in a seated position make a human life shorter by 21 minutes, while one smoked cigarette by 11 minutes.

As indicated by the WHO research of 2002, adult societies still pursue a lifestyle that is far from healthy. Only 7% of Polish people declare systematic physical activity, while 33% are physically active once a week and 12% even less frequent than that, but at least once a month. The remaining 48% engage in activities which improve the physical fitness only sporadically, i.e. they do some sports and take up other forms of active recreation. The Polish society has a low level of engagement in systematic physical activity. The underlying causes are the general conditioning factors such as upbringing and education, affluence, access to sports and recreation infrastructure and the level of engagement in the activity of various non-governmental organisations. The insufficient physical exertion may lead to numerous diseases of civilisation such as obesity, slow metabolism, cardiovascular failure etc.

The special Eurobarometer surveys conducted in 2009 with respect to physical activity⁷ (Eurobarometer 2010) indicate that 40% of respondents who declare good health participate in sport activities regularly or with some regularity (once a week or more often). According to the Eurobarometer survey, around 60% of Europeans regularly do sports in 700,000 sports clubs or outside (Eurobarometer, special survey, 2009).

⁶ World Health Organization (Geneva, 2004): *Global strategy on diet, physical activity and health*. World Health Organization (The WHO Regional Office for Europe, Copenhagen (2006): *Steps to health. A European framework to promote physical activity for health*. The WHO European Ministerial Conference on Counteracting Obesity (Istanbul, 2006): *European Charter on Counteracting Obesity*. World Health Organization (Geneva, 2007): *A guide for population-based approaches to increasing levels of physical activity. Implementation of the WHO global strategy on diet, physical activity and health*.

⁷ This survey was intended to determine which countries show the greatest (the smallest) physical activity and whether respondents practice specific sports in an organised way or prefer other, more informal approaches.

Table 16. Description of respondents with respect to social and demographic data

Social and demographic data	Description
Men do sports more often than women.	43% of surveyed men declare they do sports at least once a week, while the same declaration is made by 37% of women. At the same time 49% of men and 57% of women never do sports or do sports less often than once a month.
The frequency of doing sports decreases along with increasing age.	The majority of respondents aged 15-24 (61%) do sports at least once a week; in the age group of 25-39 it drops to 44%, in the age group of 40-54 it drops to 40%, in the age group of 55-69 it drops to 33% and in the age group of 70+ it drops to 22%.
Young men do sports more often than young women.	19% of men in the age group of 15-24 do sports regularly (5 times a week or more often); in the case of women it is only 8%. 71% of surveyed men in this age group declare they do sports at least once a week, while the same declaration is made by 50% of women. However, in the older groups this difference between men and women is significantly smaller; the frequency of doing sports by men is only marginally higher. Data expressly indicate that young men in the EU have many possibilities of doing sports, while young women less so (or at least they are less encouraged to take up sports).
There is a strong connection between the level of education and the frequency of doing sports.	64% of respondents who finished their education at the age of 15 declare they never do sports; in the case of those who quit learning at the age of 16-19, it is 39%, while among those who continued their education until the age of 20+, it is 24%. Since a higher level of education is related to a better living standard, data suggest that the well-educated residents of the EU identify physical fitness with a better quality of life.
Living in a household with a greater number of people also extends the possibilities of doing sports.	47% of respondents who live alone never do sports. In households with 4 or more members, it is only 32% who never do sports.
People experiencing financial problems ignore sports more than people with a better material situation.	56% of respondents who have problems with paying household bills never do any sports. Only 35% of respondents who almost never have problems with paying their financial obligations say they never do any sports.

The Eurobarometer survey was conducted by TNS Opinion & Social in 28 member states from 23 November to 2 December 2013. 28,000 respondents belonged to various communities and social groups.

Source: Own work on the basis of Eurobarometer (2010)

In the case of the EU member states, Ireland has the greatest number of citizens (23%) who do sports regularly (5 times a week or more often) from among all European countries. Ireland is closely followed by Sweden (22%). The residents of the Scandinavian countries treat sport most seriously Sweden (72%), Finland (72%) and Denmark (64%) considerably exceed the EU average of 40% of residents engaging in physical activity regularly or with some regularity (once a week or more often). In four member states, more than half of the surveyed people do sports at least once a week. Those are: Ireland (58%), the Netherlands (56%), Slovenia (52%) and Luxembourg (51%).

Countries with the greatest number of respondents who declare they never do sports in any form are: Greece (67%), Bulgaria (58%), Portugal (55%) and Italy (also 55%). Only 6% of Swedish respondents and 7% of respondents from Finland admit they do not engage in any type of physical activity. In fifteen member states, at least 50% of citizens declare they never do sports or if they do, it is less often than once a month. According to this criterion, the countries where sport is least popular include: Bulgaria (82%), Greece (79%), Hungary (71%), Romania (69%), Italy (67%), Poland (66%) and Latvia (65%). Table 16 presents the description of respondents with respect to social and demographic data (Eurobarometer, special survey, 2009).

Physical activity as a form of spending time with friends is relatively popular in such member states as Austria (39%), Finland (34%) and Sweden (33%). In other countries, specifically Poland (8%), the Netherlands (9%), Greece (10%), Lithuania (11%) and Romania (11%), this factor is not significant. The most frequent reasons for physical activity are (Eurobarometer 2010):

- to improve health,
- to look better,
- to counteract ageing,
- to have fun,
- to relax,
- to spend time with friends,
- to make new acquaintances,
- to meet people from other cultures,
- to improve fitness,
- to improve the physical condition,
- to control the body mass,
- to improve self-esteem,
- to gain new skills,
- to compete with others,
- to have better social integration.

The EU surveys regarding physical activity indicate that along with increasing age the possibilities of physical activity become reduced and the recent changes in living conditions have only intensified this phenomenon. Important inventions of modern times have considerably reduced the physical effort necessary to do the house chores, to move around and travel (cars, buses), and even to take up recreational activities (including the process of reaching the organisers of physical activity). According to Eurobarometer, 40-60% of the European population live a sedentary life. Everyone who improves their level of physical activity, even after long periods of idleness, can gain health benefits regardless of age. It is never too late to begin (*EU Physical Activity Guidelines...* 2008, p. 44). Studies by A. Kowalczyk, E. Kozłowska, M. Rząca and K. Kocka (2015, pp. 24-27) indicate that the decisive factor in starting or quitting physical activity is the amount of available free time. It could mean that the probability of physical activity by employees is extremely low.

However, the CBOS survey on free time of Polish people shows that the most common form of leisure in Poland is watching TV (52% of respondents), family life (36%) and passive rest – I sit, I lie, I rest (27%) (Kowalczyk et al. 2015, pp. 24-27).

The surveys by the Polish Economic Institute conducted in 2009 (Kutwa, Rafał 2009) indicate that physical activity of Polish people decreases. 28% of Polish residents do sports regularly or with some regularity, while it is around 40% in other EU member states. More than a half of Polish people (56%) declare they never do any sports. It means that the lack of physical activity increased by 10 percentage points since 2004. The costs related to the lack of activity are estimated at PLN 7 billion per annum. 5% of people in Poland do sports regularly, while 23% admit they do it with some regularity. These indicators in the EU are 7 and 33%, accordingly. More than a half of the surveyed Poles admit they never do any sports (56%). Furthermore, the rising direction of this trend is cause for alarm. The percentage of people who state they do not engage in any motor activities grows year-to-year in Poland: 52% in 2013, 49% in 2008, and 46% in 2004. The conclusion is that the rate of sports activities dropped by 10 percentage points in the period of 15 years (Kutwa, Rafał 2009).

The 2011 survey by TNS OBOP⁸ show that 52% of Polish people do not do sports and do not engage in any forms of physical activity.

The beginning of the 21st century saw an extreme growth of running events in Poland that aimed at inspiring physical activity. Only in 2013, as many as 2,800 such events were held (Budner 2014, pp. 41-52). The highest and the lowest num-

⁸ The survey of TNS OBOP *Aspirin Protect: Jak Polacy dbają o serce*, conducted on the representative group of 1,000 adult Poles on 6-19 June 2011.

bers of runs in 2013 by provinces were as follows: Silesia (393), Masovia (393) and Greater Poland (367); Podlasie (33), Holy Cross (38), Lublin (53), Opole (56), Subcarpathia (56) and Lubusz (59).

In France, physical activity is prescribed by physicians, similarly to pharmaceutical drugs, and in Poland more and more medical doctors recommend motor activity to their patients, but the situation in this area has not been improving significantly. In the recent report (2017), Eurobarometer indicates that nearly 60% of the EU residents never do any sports or do sports sporadically.

The surveys conducted in 2019 by ARC Rynek i Opinia ([https://arc.com.pl/...](https://arc.com.pl/)) show that 74% of Poles do sports and 88% do it at least once a week. In the period of 2009-2019, the percentage of Poles who do sports increased by three times. In 2009, only 24% of Polish respondents admitted they did sports, while in the most recent survey it is 74% ([https://arc.com.pl/...](https://arc.com.pl/)).

The surveys (*MultiSport Index 2019*) conducted by MultiSport Index 2019⁹ indicate that at present 48% of Polish citizens are active in sports, while 64% of Poles are active, i.e. they engage in physical activity at least once a month. According to MultiSport, the physically active group includes mainly young people – 80% of respondents in the age group of 15-24, as well as educated persons (78%) and residents of large cities (64%). Still, every third Pole is not physically active. In Poland, 64% of men and 49% of women have an excessive body mass. Therefore, a great importance is attached to all kinds of initiatives which educate and motivate people, and especially children and senior citizens, to engage in physical activity. The Polish provinces which are most active in sports are: Silesia and Lubusz (each 56%) and Pomerania (54%). The lowest results in 2019 were observed in West Pomerania (35%) and Lower Silesia (39%). Employee benefits exert a great influence on physical activity in Poland, e.g. training cards used by 21% of Polish residents. Figure 11 presents the types of physical activity chosen by Poles most frequently according to the MultiSport survey (*MultiSport Index 2019*).

In terms of physical activity, Poland has the result of 64% and is below the European average which is 71% of active residents according to Eurobarometer 2017 (*Special Eurobarometer 472*). Among the EU member states, Poland takes the 6th position from the bottom of the list, preceding Portugal, Malta, Italy, Romania and Bulgaria (the average percentage of physically active people in these countries is 51%). A level of physical activity similar to Poland can be observed in Greece and Spain, while Cyprus, Croatia and Hungary have a slightly better result

⁹ The survey was based on the representative random sample of 1,858 Poles aged 15+. It was conducted with the use of CATI (computer-assisted telephone interviewing) on the Kartezjusz platform. The survey was conducted from 17 January to 31 January 2019 in line with the *International Code on Market, Opinion and Social Research and Data Analytics* (ICC/ESOMAR) and the ISO 20252 Standard.

(the average for these three countries is 68%). The leaders in physical activity are: Finland, Denmark, the Netherlands and Sweden with the average result of 94%. Figure 12 presents the types of sports facilities chosen by Poles in order to engage in physical activity.

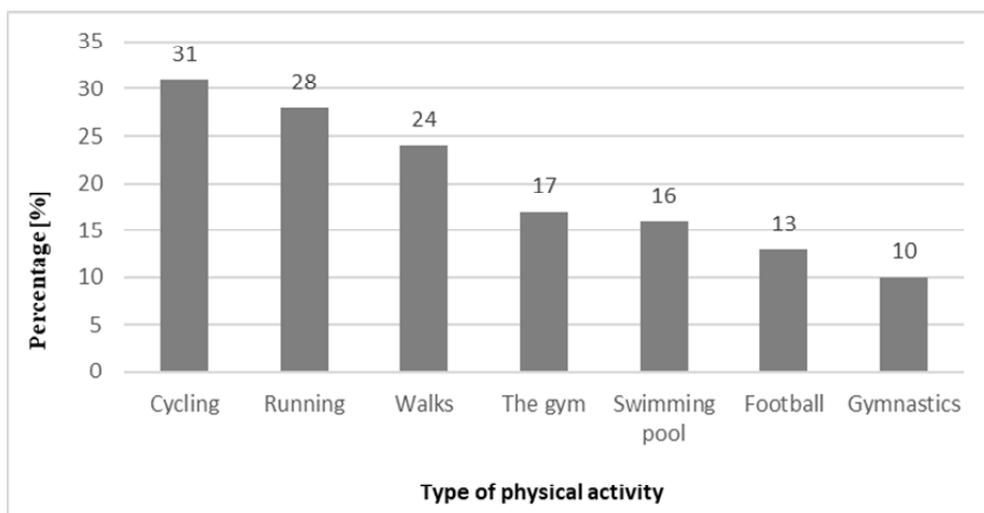


Fig. 11. Types of physical activity chosen by Polish people in 2019

Source: Own work on the basis of *MultiSport Index 2019*

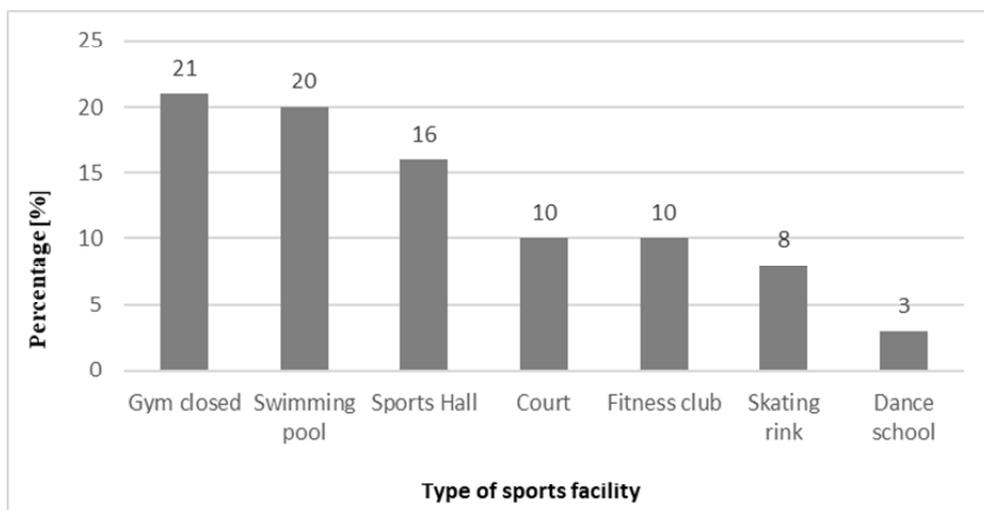


Fig. 12. Types of sports facilities chosen by Polish people in 2019

Source: Own work on the basis of *MultiSport Index 2019*

One can divide physical activity practised by Poles into four segments (Table 17).

Table 17. Description of physical activity among Poles by segments

Name of segment	Description
Active Relaxation	The key motive for physical activity in the Active Relaxation segment is health and, particularly, prophylaxis. Activity is taken up in the open air and as regards sports facilities, the representatives of this segment choose the swimming pool most often. People from this group do not spend money from the household budget on physical activity and rarely use technological innovations. Active relaxation mainly covers cycling, strolling, running or Nordic walking. People from the Active Relaxation segment express the best opinion of the physical education classes they had at school and have a great sentiment for the time spent on physical activity in their youth.
Figure and Health	Health is important for this group, but it is not the only motive. The second stimulant is appearance and figure, while pleasure and relaxation during exercises are the least motivating. People from the Figure and Health group exercise on weekdays, most often in the evening. They mostly use sports facilities where they practise traditional sports disciplines, including running (in facilities and in the open air), gym workout, fitness classes, swimming, strolling and cycling.
Team Sports	The representatives of the Team Sports segment prefer team sports with the high indicator of good fun. For them physical activity contributes to community creation, while the preference for team sports results from the childhood sentiments and positive emotions which reinforce the integration of friends with similar experiences. The key motives for the Team Sports group are pleasure, relaxation, spending time with others and figure. The most popular sports are: football, volleyball and basketball. People from this group rarely go to gyms. Team Sports also mean intense engagement in the permanent group of shared interests and the need to do sports in a group. It is definitely the most sociable group of Poles who are physically active.
Striving	The “Striving” segment is characterised by the exceptional emphasis on goal and serious physical exertion. The representatives of this segment break the calorie burning records among all active Poles. They mostly go to gyms (90%), but also participate in marathons and other popular races. They often use swimming pools. The “Striving” group shows high weekly activity, they exercise on 3-4 days per week, usually in the afternoon/evening or at any free moment. They also spend more money on their interests than people from other segments. Only every fourth person in the “Striving” segment is a woman.

Source: Own work on the basis of *MultiSport Index 2019*

2.3. Physical activity in the world

*Physical inactivity is
as dangerous to our health as smoking!
Think of minutes of physical activity
as dollars in your health bank
and make an investment in your health today.*
Handbook for Canada's physical activity guide
to healthy active living, Health Canada,
Canadian Society for Exercise Physiology

Lifestyle is a determinant of health with a major influence on the morbidity and the mortality of populations (Kujala et al. 1998; Wei et al. 1999).

Health is the key value in human life and the right to health belongs to the basic human rights. Health is determined by various factors:

- genetic and hereditary (around 15%),
- clinical medicine and healthcare services (around 10%),
- environment (around 20%)
- and lifestyle (around 53%) (Clement, Ferre 2003, Pi-Sunyer 2003).

The studies by Biernat and Piątkowska (2012, p. 19) indicate that 78% of Polish people admits they engage in some form of recreational activity (including 77.9% at the age of 15-24 years, 75.6% at the age of 25-39 years, 84% at the age of 40-54 years and 75.4% at the age of 55-69 years). In Great Britain, recreational activity is declared only by 43.8% of young people (at the age of 35.3 ± 10.4 years; Rosenberg et al. 2008), in the Netherlands – only 48.5% of young people (at the age of 32.7 ± 10.9 years; Rosenberg et al. 2008).

In the late 1990s, the international group of experts recommended at least 60 minutes of moderate physical exertion per day as the optimal physical activity for young people (Biddle 1995). In the US and Canada, it was determined that the optimal physical activity of children and adolescents consists in cumulated efforts of moderate to high intensity for 60 minutes per day on most days of the week¹⁰. Some countries (Finland, Great Britain, the US) have implemented systematic monitoring of the physical activity level (Cabak, Woynarowska 2004).

¹⁰ Council for Physical Education for Children (1998) Physical Activity for Children: a Statement of Guidelines. National Association for Sport and Physical Education, Reston. Handbook for Canada's physical activity guide to healthy active living, Health Canada, Canadian Society for Exercise Physiology, www.healthcanada.ca/paguide, access: 20 Aug 2020.

The recommended physical activity is not specified by domain or by gender, which allows for a large number of different possibilities (work-related, commuting, and recreational) with which to adopt physical activity in everyday life (Merike et al. 2010, p. 640).

Researchers carried out by Barometer¹¹ showed that (Sjöström et al. 2006):

- 41% of Europeans exercise or play sport at least once a week, while an important proportion of EU citizens (59%) never or seldom do so. However, the proportion that never exercises or plays sport has increased from 39 to 42%.
- 48% do some form of other physical activity (such as cycling, dancing or gardening) at least once a week, while 30% never do this kind of activity at all.
- Overall, men in the EU exercise play sport or engage in other physical activity more than women. However, this disparity is particularly marked in the 15-24 age group, with young men tending to exercise or play sport on a regular basis considerably more than young women (74 vs 55%). The amount of regular activity that people do tends to decrease with age, notably 71% of women and 70% of men in the 55+ age groups never or seldom exercise or play sport.
- Generally speaking, citizens in the Northern part of the EU are the most physically active. The proportion that exercises or plays sport at least once a week is 70% in Sweden, 68% in Denmark, 66% in Finland, 58% in the Netherlands and 54% in Luxembourg. The lowest levels of participation are clustered in the Southern EU Member States. Most respondents who never exercise or play sport can be found in Bulgaria (78%), Malta (75%), Portugal (64%), Romania (60%) and Italy (60%).
- As for the levels of engagement in physical activity within a week, 54% of all respondents did not do any vigorous activity (–4 percentage points (pp) compared to 2002) and 44% did not do any moderate physical activity (+3 pp). Moreover, 13% of EU citizens did not walk for at least 10 minutes at a time on a given day within a week (–4 pp). In addition, on a usual day, about two-thirds

¹¹ Eurobarometer survey, which follows on from comparable surveys conducted in 2002 and 2009, will contribute to providing some of the data to support the developing policy framework for promoting sport and physical activity. This survey was carried out by TNS Opinion & Social network in the 28 Member States of the European Union between 23 November and 2 December 2013. Some 27.919 respondents from different social and demographic groups were interviewed face-to-face at home in their mother tongue on behalf of the Directorate-General for Education and Culture (“Sport” Unit). The Eurobarometer program is used by the European Commission for public opinion surveys among the residents of the EU member states with respect to sport and other problems related to the widely defined physical activity. The questions pertained to participation in physical activity (the frequency of physical exercises, benefits of doing sports as well as its negative impacts), the role of sports in school curricula, collaboration of the educational system with sports organisations, professionalism in sport and the activities and the role of the European Union in the area of sport. The surveys were conducted with the use of individual interviews. The category of physical activity and sport included 8 questions with quantitative and multiple-choice replies.

(69%) of respondents spend between 2.5 and 8.5 hours sitting (+5 pp), while at other extremes, 11% sit for more than 8.5 hours and 17% 2.5 hours or less.

- Sport or physical activity takes place in a wide range of locations, most commonly in parks and outdoors (40%), at home (36%) or on the journey between home and school, work or shops (25%).
- The most common reason for engaging in sport or physical activity is to improve health (62%). Other popular reasons include improving fitness (40%), relaxing (36%) and having fun (30%).

An analysis of the socio-demographic data reveals strong differences (Table 18).

Table 18. Replies to the question: How often do you exercise or play sport [%]?

	Regularly	With some regularity	Seldom	Never	Don't know
GENDER					
Man	9	36	18	37	0
Woman	7	30	16	47	0
AGE					
15-24	11	53	17	19	0
25-39	8	38	21	33	0
40-54	8	31	20	41	0
55+	8	22	12	58	0
EDUCATION					
15	8	15	9	68	0
16-19	7	28	19	45	1
20+	9	43	20	27	1
Still studying	12	61	14	13	0

Source: https://ec.europa.eu/commfrontoffice/publicopinion/archives/ebs/ebs_412_en.pdf

- Men are more likely than women to exercise or play sport: 45% of men do so at least once a week, compared with 37% of women; meanwhile, 37% of men never exercise or play sport, compared with 47% of women.
- The frequency of exercise or sport tends to decrease with age. A majority of 15-24 year-olds (64%) exercise or play sport at least once a week; this falls to 46% in the 25-39 age group, 39% for 40-54 year-olds and 30% for the 55+ age group. Correspondingly, the proportion that never exercises or plays sport ranges from 19% among 15-24 year olds, to 58% of those aged 55 or over.

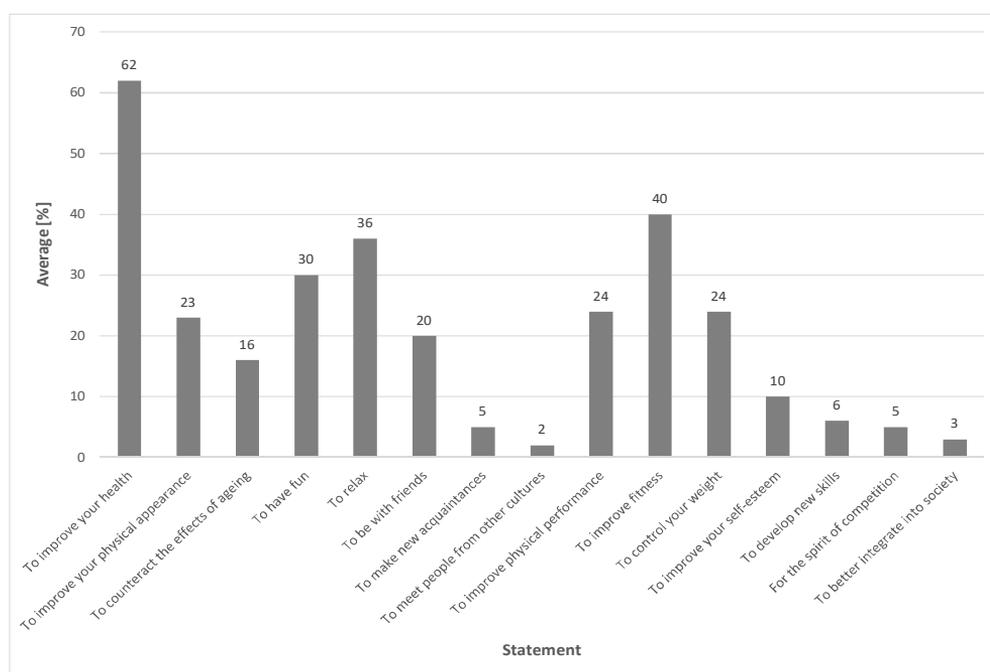
- The difference between men and women is strongest in the younger age groups: 74% of men aged 15-24 exercise or play sport at least once a week, compared with 55% of women in the same age group. The gender gap is narrower for older age groups, with men exercising or playing sport only slightly more than women in the 40-54 and 55+ age groups. The same pattern applies in relation to regular activity (at least five times per week): the gap between men and women is large in the youngest age group (15% compared with 8%), but then narrows in the older age groups.
- A link also appears between education and the frequency of exercise or sport done. The majority (68%) of people who left the education system by the age of 15 or earlier say they never exercise or play sport; this falls to 45% of those who ended education at 16-19; and 27% of those who finished education at the age of 20 or over.

Despite the growing importance attached to the promotion of physical activity in EU Member States, the previous Eurobarometer survey in 2009 identified “alarmingly high” rates of physical inactivity in the EU, and found that the vast majority of Europeans (60%) never exercise or play sport. As in 2009, the survey’s results show large disparities among EU Member States on many questions. The more physically active countries are overall clustered in the Northern part of the EU, while the less active are mainly the Southern countries. These variations are likely to reflect the facilities and infrastructure available; in fact, the same country patterns apply when respondents were asked about opportunities for physical activity. Such findings suggest that there might be scope for some Member States to learn from good practices established in other countries.

One of the questions that respondents were asked was: Why do you engage in sport or physical activity? Respondents had the following options to choose from:

- To improve your health,
- To improve your physical appearance,
- To have fun,
- To relax,
- To make new acquaintances,
- To meet people from other cultures,
- To improve physical performance,
- To improve fitness,
- To control weight,
- To improve self-esteem,
- To develop new skills,
- For the spirit of competition,
- To better integrate into society,
- Other.

Figure 13 presents the average reply in 28 member states of the EU. Data analysis indicates that **the main reason for which the EU residents engage in physical activity is health**. This is asserted by 62% of respondents. Next on the list is self-improvement and relaxation. For 30 of Europeans, physical activity is a good way of spending their free time. Figure 14 shows the health aspect in particular member states. The analysis of Figure 14 allows to conclude that the health aspect is extremely important in all the EU countries, but the top percentage values were recorded for Sweden (81%), Slovenia, Denmark (76%) and Cyprus (73%). The lowest percentage was recorded for Hungary (39%). The analysis of the question (Why do you engage in sport or physical activity?) and the replies leads to the conclusion that self-improvement is the most important aspect after health (Fig. 15). The analysis of Figure 15 indicates that the self-improvement aspect is very important in Finland (61%) and Denmark (60%). The lowest percentage in this category was shown by Bulgaria (12%) and Romania (12%). Studies in physical activity by adults were conducted by M.A. Martinez-Gonzalez et al. (2001) in 15 selected member states of the EU (Fig. 16).



**Fig. 13. The average EU reply to the question:
Why do you engage in sport or physical activity?**

Source: Own work on the basis of:

https://ec.europa.eu/commfrontoffice/publicopinion/archives/ebs/ebs_412_en.pdf access: 19 Aug 2020.

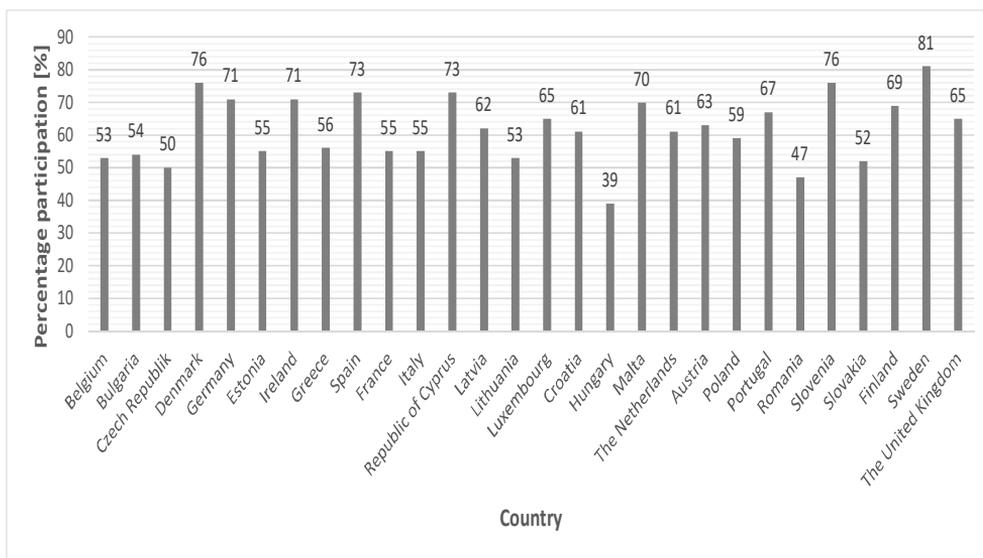


Fig. 14. Replies to the question: Why do you engage in sport or physical activity? in the UE countries. Health aspect

Source: Own work on the basis of:

https://ec.europa.eu/commfrontoffice/publicopinion/archives/ebs/ebs_412_en.pdf (access: 19 Aug 2020)

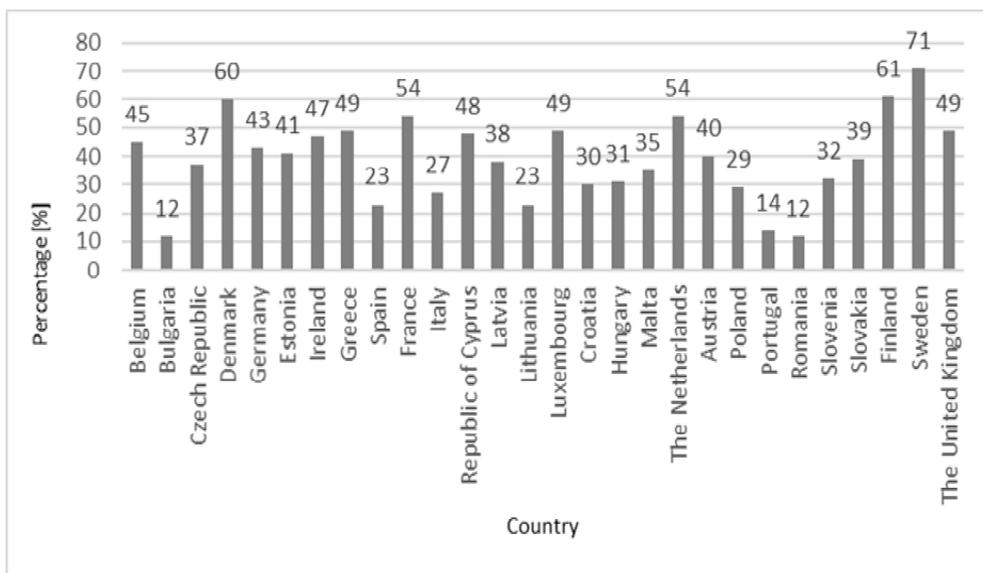


Fig. 15. Replies to the question: Why do you engage in sport or physical activity? in the UE countries. Self-improvement aspect

Source: Own work on the basis of:

https://ec.europa.eu/commfrontoffice/publicopinion/archives/ebs/ebs_412_en.pdf(access: 19 Aug 2020)

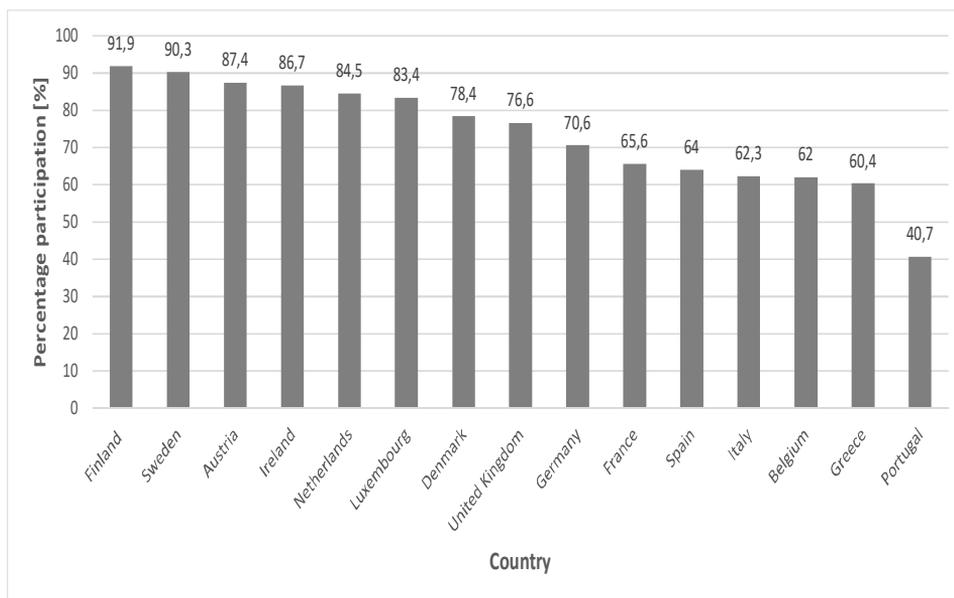


Fig. 16. Percentage of adult population practising any leisure-time physical activity

Source: own study on the basis on: Martinez-Gonzalez et. al. (2001)

The results show that Finland and Sweden have the largest percentage of adults who engage in some forms of physical activity. High results were also recorded for Austria, Ireland and the Netherlands. Portugal had the lowest results.

2.4. Physical activity during the COVID-19 pandemic

The pandemic of the contagious disease COVID-19 caused by the coronavirus SARS-CoV-2 started as an epidemic on 17 November 2019 in the city of Wuhan, in the province of Hubei, in central China, and on 11 March 2020 it was recognized by the World Health Organization (WHO) as a pandemic¹². Actions to prevent and counteract the spread of the disease were undertaken on the international scale. Travelling was restricted, quarantines and curfews were implemented, many sports, religious and cultural events were cancelled or deferred. The world stopped. Literally. Due to the restrictions and closed borders, the international traf-

¹² Coronavirus: COVID-19 Is Now Officially A Pandemic, WHO Says, NPR.org [access on 11 March 2020] (English). World Health Organization (WHO), BREAKING “We have therefore made the assessment that COVID19 can be characterized as a pandemic”, @WHO, 11 March 2020 [access on 11 March 2020] (English). Coronavirus: China’s first confirmed COVID-19 case traced back to November 17, scmp.com, 13 March 2020 [access on 21 March 2020] (English). The first COVID-19 case originated on November 17, according to Chinese officials searching for ‘patient zero’, businessinsider.com, 13 March 2020 [access on 21 March 2020] (English).

fic and economy froze. Kindergartens, schools, universities, shopping malls, cinemas, entertainment centres, cosmeticians, hairdressers, restaurants etc. were closed all over Europe. In order to encourage people to stay at home, social media promoted the hashtag: #stayathome. The new regulations do not prohibit activities which fulfil “necessary daily needs”. It is possible to go to stores, to the chemist’s or to the workplace, adhering to all the required precautions. This permitted category also includes strolls or walks in the forest, but in keeping with the distancing rules and the limits regarding the number of people. One can go running or cycling. But it is better to go alone. The first case of COVID-19 in Poland was confirmed on 4 March 2020 in Zielona Góra, but the epidemic in Poland started much earlier, in mid-January 2020, and the data on the cases are considerably underestimated, at least by 50%. The pandemic continues and some experts say that we will have to live with the restrictions and the sanitary regime for the next two years (Kałużny).

The COVID-19 pandemic has forced all people around the globe to change their lifestyles and follow the rules of isolation and hygienic safety. When all fitness clubs, gyms, aqua parks, bowling alleys and other such facilities were closed in Poland on 13 March 2020, physical activity of the population was considerably limited. Undoubtedly, the lack of physical activity during the period of social isolation due to the COVID-19 pandemic can cause many adverse consequences for participants in physical activity (health-related consequences) and for entities providing services in the area of sports and recreation (business-related consequences) (Sowier-Kasprzyk, Widawska-Stanisiz 2020).

According to the MultiSport Index Pandemic report from April 2020, the majority of people who reduced their physical activity during the preceding 3 months feel the negative impact on their well-being (74%), health (65%), and figure (61%).¹³

The surveys conducted by Kantar and commissioned by the Ministry of Sport and Tourism in 2017 and 2018 indicated that physical activity of Poles in their free time (after completing work and house duties) was increasing. In 2017, “nearly every seventh Pole at the age of 15-69 years (16.1%) met the WHO standards regarding physical activity in free time. This indicator grows to 21.9% if the regular transport activity, e.g. cycling, is included.”¹⁴ In 2018, “around one fifth of Poles at the age of 15-69 years (21.8%) met the WHO standards regarding physical activity in free time. If cycling is included, the result amounts to 30.6%.”¹⁵

¹³ <https://www.branzafitness.com/rusza-ogolnopolska-kampania-zdrowiepotrzebujeruchu/>

¹⁴ <https://www.msit.gov.pl/pl/sport/badania-i-analizy/aktywnosc-fizyczna-spol/575,Aktywnosc-fizyczna-spoloczenstwa.html>

¹⁵ <https://www.msit.gov.pl/pl/sport/badania-i-analizy/aktywnosc-fizyczna-spol/575,Aktywnosc-fizyczna-spoloczenstwa.html>

The 2018 CBOS survey says that “six in ten respondents (61%) admitted they did sports during the recent year. Considering the social and demographic variables, physical activity depends on age to the greatest extent – a large majority of young people at the age from 18 to 34 years and two thirds of the respondents at the age of 35-54 years did sports during the recent year. Less than half of the respondents aged 55+ engaged in physical activity.”¹⁶

The study by Sowier-Kasprzyk, Widawska-Stanisiz (2020) regarding physical activity in a sports club during the pandemic indicate that 67% of respondents stated they had been going to fitness classes, gyms and fitness clubs before the coronavirus epidemic. The author emphasises that in the face of the pandemic and the related closing of clubs 15% of respondents participates in on-line classes as part of their subscription, while 21% suspended the subscription and 10% quit the subscription. The survey in the sports club also concerned the opinions of respondents with respect to payments for on-line classes during the COVID-19 pandemic. 62% were not interested in paid services over the Internet, claiming they would easily find free-of-charge classes on the Web. The survey showed that 85% of respondents decided to continue exercising by looking for alternatives to the sports club offer. The most frequent ways to keep fit during the social isolation included:

- running in the open air,
- walks in secluded places¹⁷,
- walking the dog,
- cycling,
- exercises at home, X-trainer, dumb-bells, exercycle,
- yoga at home,
- motor activities with children,
- on-line training, exercises with on-line trainers (e.g. Ewa Chodakowska, Qczaj¹⁸), streaming classes,
- training with the use of instruction materials on You Tube,
- dancing,
- garden work, seasonal cleaning etc.

The author of the book conducted quarterly surveys in 2020 based on the CAWI – Computer Assisted Web Interview. The purpose of the CAWI was to check physical activity of runner during the pandemic. The participants included

¹⁶ The CBOS 125/2018 survey communication, on-line access: https://www.cbos.pl/SPISKOM.POL/2018/K_125_18.PDF

¹⁷ The entry to forests was forbidden at the beginning of April (footnote by the author).

¹⁸ Ewa Chodakowska, Qczaj – Polish fitness trainers known in the media and providing on-line training as well.

322 runners from Poland. The surveys focused on engaging in physical activity of running, the impact of the pandemic on the frequency of training and on time management in the face of COVID-19 as well as the influence of the coronavirus on the runners' nutritional habits.

Women accounted for 75.6% and men for 24.4% of all respondents. The majority of respondents received higher education (61.7%) and belonged to the age group of 40-49 (44.2%) (Figs. 17 and 18).

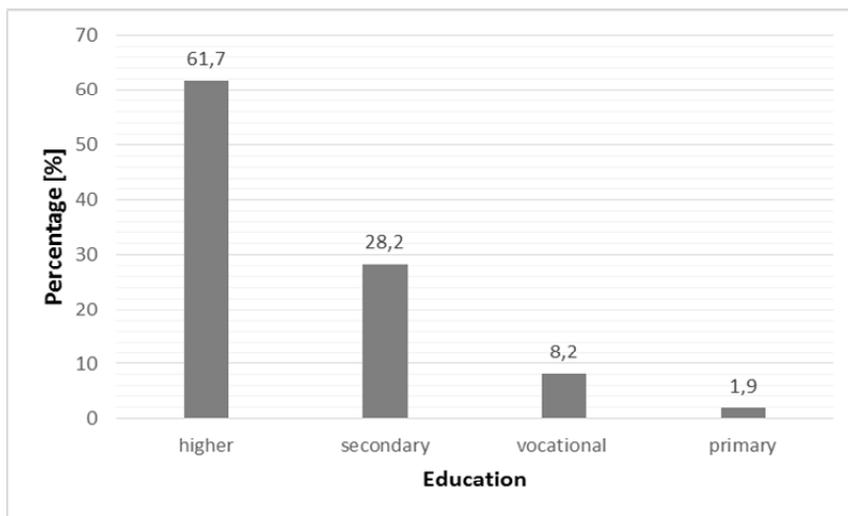


Fig. 17. Description of respondents with respect to education

Source: own work

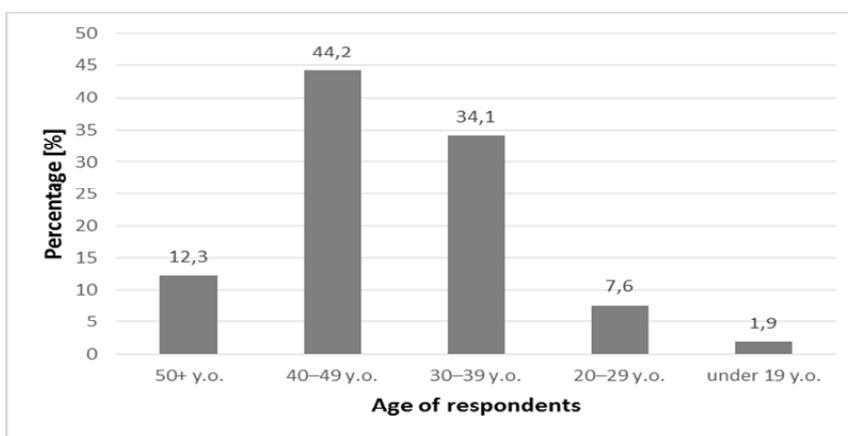


Fig. 18. Description of respondents with respect to age

Source: own work

The survey results and analysis indicate that the pandemic did not influence the physical activity of runners. 65.1% of the surveyed runners state that the pandemic and the related restrictions had no influence on their physical activity, while 85.8% of respondents declare that the pandemic did not change their motivation to train.

72.9% of respondents assert that the pandemic had no impact on their body mass, while only 25.9% of respondents admit that COVID-19 and the cancellation of popular running events made them put on weight, since their motivation to train dropped considerably. The data analysis shows that due to the closing of sports clubs and the cancellation of popular running events as many as 64.9% of respondents started exercising at home in addition to running. Despite the pandemic, 76.8% of respondents train regularly, while 16.2% admit they find it hard to have any motivation to run, because popular races were cancelled and they do not meet with their friends (Fig. 19). Respondents were asked if they miss the organised running events during which they could overcome their barriers and break their life records. More than 67.5% of respondents miss the contests which drive them to take up challenges (after participation in a contest runners usually talk about the next contest for which they register). Respondents also mention that they sometimes lack the will and strength to train, so they use various “motivators” which make them go and train (Fig. 20).

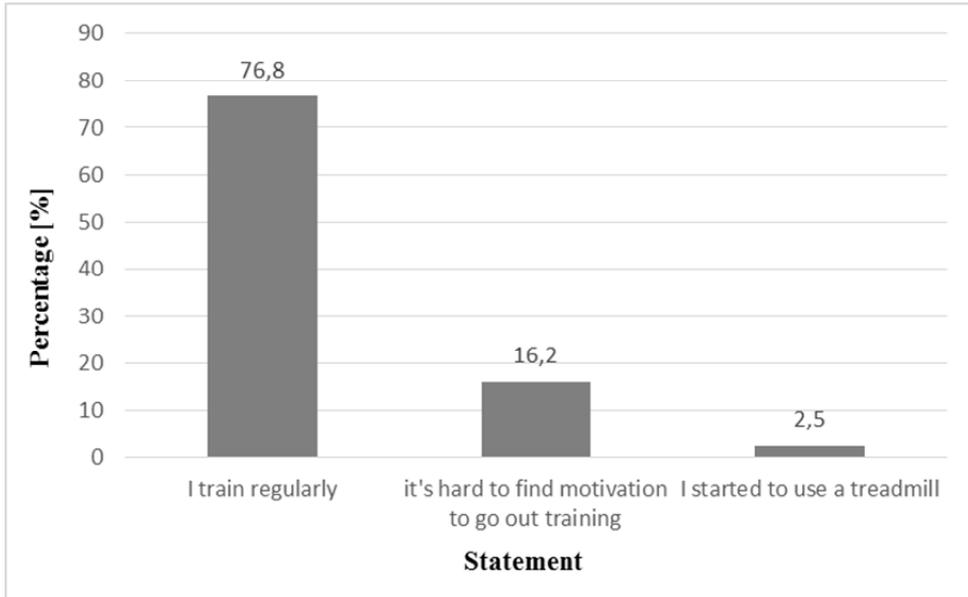


Fig. 19. Training regularity and Covid-19

Source: own work

The economic crisis caused by the pandemic reduces the number of job offers and it also changes **the content of job offers which are no longer as attractive** as before in terms of benefits, e.g. sports cards or medical packages. The Grant Thornton Report¹⁹ indicates that in May 2020 employers stopped offering the majority of additional benefits for future employees; at present only 30% of enterprises provides private medical care and only 27% offer to co-finance the sports cards. The reduced attractiveness of job offers is caused by the fact that enterprises seek savings and have to “cut costs”.

At present the key incentives offered to candidates are **training courses on the company premises** (Fig. 20).

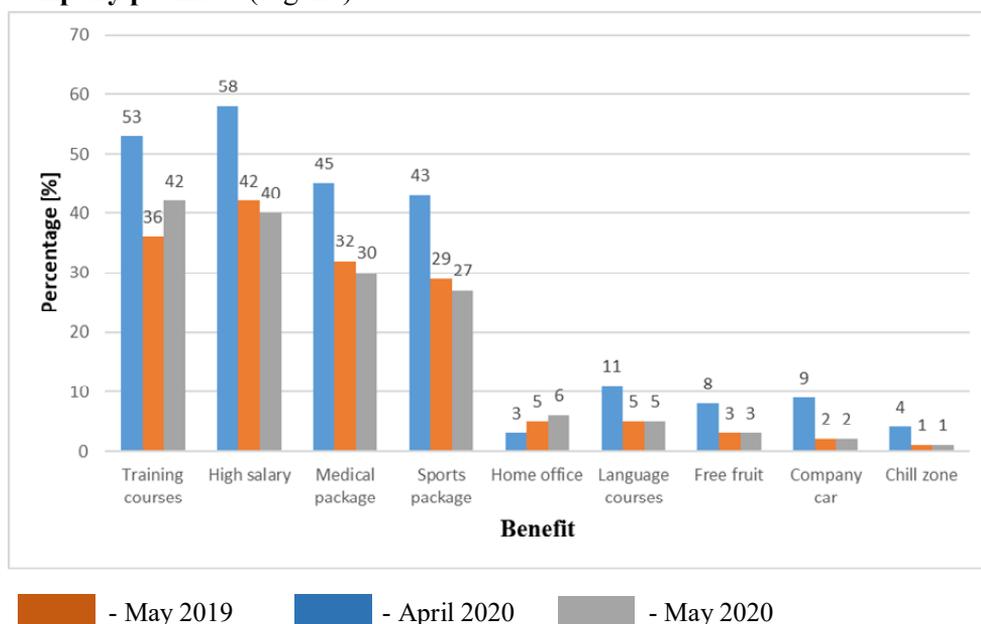


Fig. 20. Percentage of job offers containing the particular incentives

Source: <https://grantthornton.pl/wp-content/uploads/2020/06/Rynek-pracy-w-czasie-koronawirusa-w-maju-RAPORT.pdf> access: 28 Sept 2020

The analysis of Figure 21 allows to conclude that 41% of the surveyed runners belong to running groups where they can motivate one another to train, sharing impressions from participation in contests, photos and life records, but also such running groups allow them to meet new people, to find help in the case of injuries or seek advice and find shared transport to competitions. Runners often treat one another as family members, they support and help each other.

¹⁹ <https://grantthornton.pl/wp-content/uploads/2020/06/Rynek-pracy-w-czasie-koronawirusa-w-maju-RAPORT.pdf>

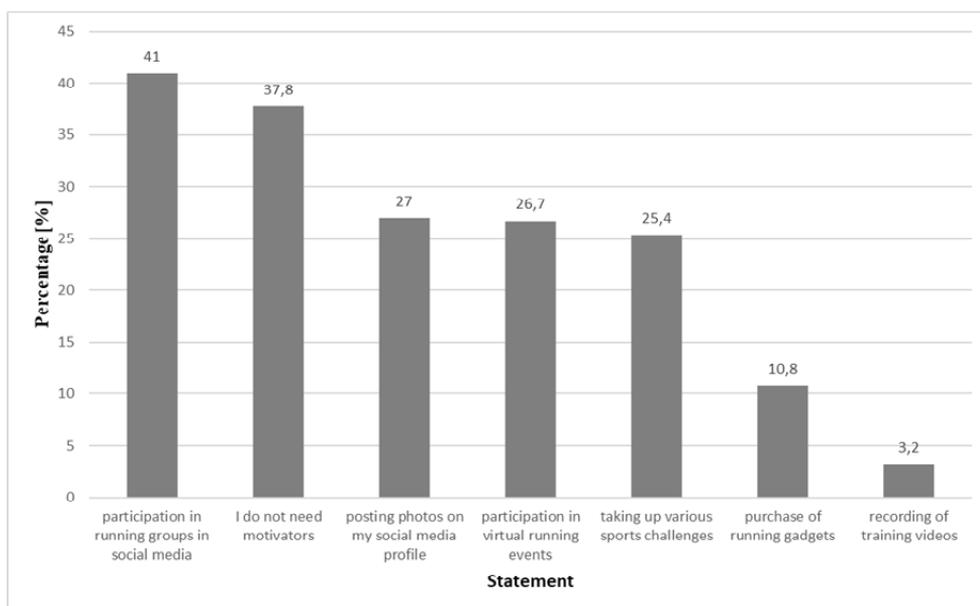


Fig. 21. Use of running motivators

Source: own work

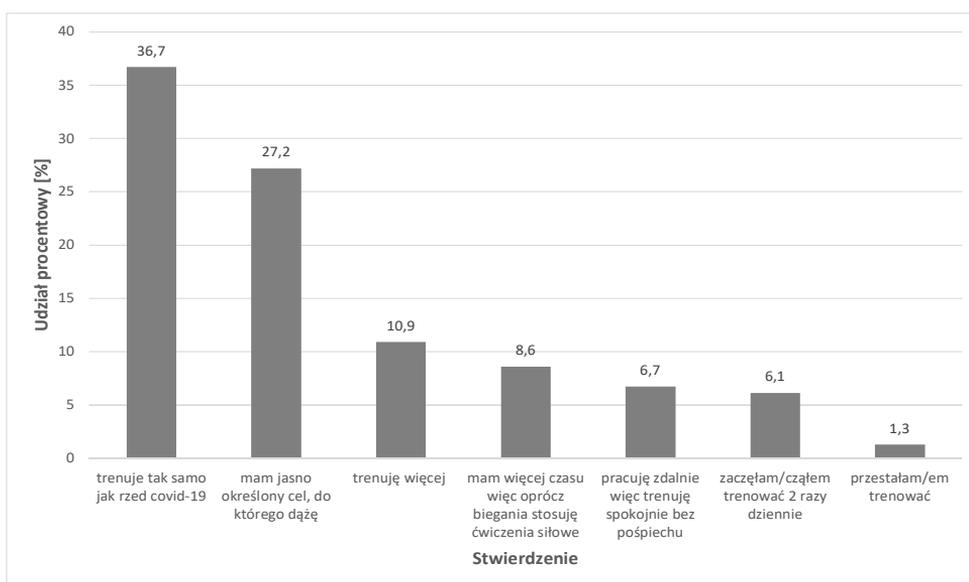


Fig. 22. Impact of the pandemic on the physical activity of runners

Source: own work

Figure 22 presents the impact on the pandemic on the physical activity of runners. Results indicate that the pandemic did not have a significant influence on their physical activity. 36.7% of respondents train with the same regularity

as before the pandemic, since they do not work remotely, but in a normal mode. 27.2% of respondents state that the pandemic and the related restrictions did not have impact on their training and the motivation to go training, since the surveyed runners have a clearly defined goal they want to reach. 10.9% of runners started training more because of the pandemic. These are respondents who switched to remote work due to the restrictions, so they can decide when they work and when they train. 8.6% of respondents have more time due to the pandemic, so they can also do strengthening exercises at home in addition to running. The surveyed runners mention that COVID-19 and the shift to remote work allowed them to train without hurry. This pertains particularly to the runners who usually train in the morning and then hurry to work. 6.1% of respondents say that because of the pandemic they can train more professionally, i.e. twice a day.

The contemporary significance of sport

3.1. The work-life balance

Imagine life as a game in which you juggle five balls. Let us call them work, family, health, friends, and soul. You keep them all flying in the air. Soon you will understand that work is like a rubber ball. Each time you drop it, it will bounce and come back to you. But the other four balls (family, health, friends, and soul) are made of glass. If you drop any of them, it will become irreversibly scratched, chipped, damaged or even smashed. It will never be the same again. You must understand it and pursue balance in your life.

B.G. Dyson – President and CEO
Coca-Cola Enterprises, during
the speech at Georgia Tech, 6 September 1996

*The quality of work is a part of the general
quality of life considered at the level of
the life of a society, a group or an individual.
At the same time, it is the means to improve the quality of life.*

M. Ołędzki

*Choose a profession that you like,
and you won't have to work all your life.*

Confucius

The quality of life is not only the key postulate of sustainable development, but also the goal of human work. The quality of life is a general value expressed in the material and non-material standard of living as well as in such values as: freedom, equal rights regardless of age, sex, nationality etc., defined in constitutions of particular countries and specified in detail in the national subor-

dinate regulations and in international law. Standards of the quality of life, especially in the non-material dimension, are also shaped by traditions, cultures, religions and education. The material dimension mainly depends on the social and economic system and the wealth of the country. Work is the foundation for the existence of individuals, families and societies, but it also constitutes the means of self-fulfilment and the source of satisfaction or dissatisfaction. Therefore, this sphere of human activity is particularly important. The need for work-life balance have been recognized for a long time. It is present in reflections by theologians, philosophers, psychologists, sociologists and economists (Borkowska 2010, p. 5).

The negative consequences of the lack of work-life balance affecting more and more people resulted in the formulation of the Work-Life Balance (WLB) concept in the US in the 1970s (Sadowska-Snarska, 2014, pp. 33-34). It postulates the ability to combine work with other areas of life, i.e. family life, social activity, self-development and rest, in such a way that work does not encroach upon life outside of work and the non-professional aspects of life are not limited by the work situation (Borkowska, 2011, p. 18; Sadowska-Snarska, 2014, pp. 21-46).

The work-life balance can be defined as the possibility of achieving goals in different spheres of life. Employees must reconcile the work requirements with their family life, the necessity to learn and develop their professional competences throughout their life, social obligations and the need to have time for recreation. The reconciliation of the work requirements with the private life requirements becomes possible through e.g. the proper time management and support from family members and co-workers (Chirkowska-Smolak 2008, p. 235).

The work-life balance can be analysed at the level of an individual (employee), an organisation, employee groups or societies. Balance occurs when work does not take possession of private life, particularly the resting time, and vice-versa, i.e. when private life does not have any negative impact on work. At the individual level, balance means the ability to combine work with other dimensions of human life, i.e. home, family, health, social activity, interests, hobbies etc. (Daniels).

The work-life imbalance is caused by a coincidence of many factors. First of all, it is the progressing globalization and high-tech development, particularly the information and communications technologies, the shift in organisational and employment structures as well as changes in the job duties, forms of employment and work organisation. Other factors include demographic changes, the growth in the service sector and the number of small enterprises, where the labour protection is poorer and employment relationships are based on the reciprocity rule, as well as the diminishing role of collective labour relationships due

to their growing individualization. These changes make the traditional homogeneous model of work a thing of the past and make way for the pluralist model with far-reaching social and economic consequences; there emerge new workers who are more flexible and engaged, who are required to learn continually and work more and more effectively though safety and salaries are reduced (Borkowska 2010, p. 16).

The lack of passion leads to mediocre work results. Negative consequences also occur when people treat their work instrumentally, as the means to achieve other successes (Jazukiewicz 2017). As noted by M. Drzewiecki: Those do not love much do not work much. On the other hand, those who try to work although they do not love anyone, do it for wrong reasons, e.g. to pursue a career or simply for money. Such people fail to experience the joy of life. On the contrary, they become addicted to work (workaholism) or they abandon it completely and try to live off others (Drzewiecki 2007).

In economically developed countries, disorders in the work-life balance usually affect managers, especially senior managers, members of government, journalists and top-class specialists difficult to replace and often strongly career-oriented (the harried class (Jung 2003)).

The OECD data say that after marriage and the birth of a child, men usually work longer, while women work less.²⁰ People in Poland work for 1937 per year on average, i.e. 167 hours more than the the average value in the OECD countries. The data collected by Eurostat indicate that the average working time at the main place of employment in Poland is one of the highest in the European Union and amounted to 40.7 hours per week in the last quarter of 2017. Only Greeks had a longer working week, while Bulgarians and Slovaks worked the same as Poles.²¹ Polish women work for 38.4 hours per week on average, which is above 9 hours longer than women in Switzerland, 8 hours longer than women in Germany and Norway, 7 hours longer than women in Ireland, Denmark and Great Britain. In the case of men, the difference between Poland and other European countries are not as striking, but still considerable. On average, Poles work above 8 hours longer per week than the Dutch, around 7 hours longer than the Danish, around 6 hours longer than Norwegians, nearly 5 hours longer than Swedes and Finns (Michoń 2014).

²⁰ OECD, How's life. Measuring Well-Being, OECD Publishing. Available at: <http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:hOW'S+life#2>, 2011 (access: 10 Aug 2020).

²¹ Eurostat, Average number of usual weekly hours of work in main job, by sex, professional status, full-time/part-time and economic activity (from 2008 onwards, NACE Rev. 2) – hours, <http://appsso.eurostat.ec.europa.eu/> (access: 10 Aug 2020)

According to the OECD studies, Poles come second in the European Union and fifth in the world in terms of working hours (1963 hours in 2015), while the Ipsos Global report gives us the 11th place in the ranking of the most overworked nations on the globe (Paszteleńska, 2016). Almost three fourths of professionally active people exceeds the 40-hour working week, including 13% working for more than 50 hours (Statistical Yearbook of Poland, 2014, p. 247). Furthermore, the intensity of work and the related requirements are much higher today than a dozen years ago (<http://serwisy.gazetaprawna.pl/.....>).

Eurostat indicates that the average working week of the Polish population is 40 hours and 42 minutes. An average European works for 37 hours and 10 minutes a week.²² The survey on the efficiency and innovativeness of specialists and managers, conducted by HRK in June 2015 (870 respondents), indicates that specialists and managers work for 9 hours and 30 minutes a day, which is 47.5 hours per week.²³

In the report based on the data from the second edition of the European Quality of Life Survey, I.E. Kotowska and her collaborators indicate that 24% of the Polish population feels the work-life conflict, which means that every fourth adult Pole think s/he spends too much time working, therefore lacking sufficient time for family, friends and hobbies. A similar number of Poles (27%) declare they maintain the balance between the time at work and the time they spend with their family (equal time). The largest group (39%) includes people who think they have too little time for their family, while the least numerous group (11%) includes people who complain they do not have enough time for work.²⁴

The surveys conducted by 4P research mix in 2013²⁵ show that 70% of wealthy Poles spends more than 8 hours at work on a weekday, while 30% work for 10 hours a day and 10% even more than 12 hours a day. Two thirds of respondents admit they also work on weekends (4.5 hours).

The work-life imbalance causes multiple negative consequences for employees, their families and society at large (Table 19).

²² Quality of life in Europe – facts and views, Eurostat 215.

²³ Efektywność a innowacyjność specjalistów i menedżerów, HRK 2015 www.hrk.eu/documents/EISM_102015_PL.pdf. (access: 12.02.2021).

²⁴ Eurofund, Family life and work. Second European Quality of Life Survey, European Foundation for the Improvement of Living and Working Conditions, 2010.

²⁵ On 12-14 June 2013, 4P research mix conducted telephone interviews with N = 200. The participants were men at the age of 30+ years with the net income of PLN 5,000+. It should also be noted that the respondents were very well educated (83% with higher education and 16% with secondary education). They mainly included managers (52%), business owners (33%) and “freelancers” (12%). – Polish men constantly at work, egospodarka.pl, 20 Aug 2020, <http://www.egospodarka.pl/96873,Polscy-mezczyzniciagle-w-pracy,1,39,1.html> and Poles work a lot, but ineffectively, Press release of 27 Sept 2013 (access: 20.08.2020).

Table 19. Negative consequences of the lack of work-life balance

For macro scale societies (national, regional etc.)	For economic organisations	For employees (and the unemployed and the excluded) and their families
<ul style="list-style-type: none"> – decreasing births – deferring the birth of the first child – increasing number of divorces – increasing number of incomplete families – increasing social inequalities – unemployment – increasing incidence rate of heart diseases, cancer and neurological diseases – insufficient child care – increasing pathologies 	<ul style="list-style-type: none"> – absences – increasing fluctuations – lost investments in the human capital – reduced commitment at work – stress – reduced concentration at work – reduced work quality and productiveness – worse customer relations and more frequent loss of customers – reduced creativity and innovativeness – lower profits and competitive disadvantage 	<ul style="list-style-type: none"> – stress – family conflicts – worsened child care – divorces – alcoholism – drug additions – additions to cigarettes and sweets – sense of insecurity at home and at work

Source: Borkowska (2010, p. 17)

Employees who work at home find it increasingly harder to make a clear distinction between the working time and the resting time, while the manager's supervision may even operate for 24 hours a day (Anioł 2002). Never before have employees had such possibilities of flexibility and autonomy at work, but they have never been so easily available with the option of 24-hour contact, which can surely contribute to the growing conflict between work and family life. Difficulties in reconciling work with family life are also related to the social changes, e.g. women entering the labour market and the resulting alterations of the family model, where two people work, changes in the composition of families, and the increasing scope of assistance necessary for elderly people in demographically ageing societies (Sadowska-Snarska 2014). The OECD data indicate that in the OECD countries the average of nearly 40% children at the age of 0-14 years grow up in families where both parents work full-time, while in the EU member states this percentage rises above 40%. In such countries as Bulgaria, Estonia, Finland, Greece, Spain, Lithuania, Latvia, Poland, Portugal, Romania, Slovakia, and the United States this percentage is from 40% to more than 60% (Sadowska-Snarska 2014).

According to the surveys conducted by the Institute of Management in 2000²⁶, 59% of managers admit that working for extended periods makes them less effective, 65% state it reduces the quality of their work, 72% assert it affects their relations with the personnel, 75% say it leaves no time for matters unrelated to work, 82% think that electronic mail failed to reduce the work overload, and 52% suffer from information overload.

The group of people most affected by the work-life imbalance include women, persons threatened with loss of job and little chance of finding a comparable job, people with disabilities and low qualifications as well as self-employed people.

The reconciliation of professional duties and out-of-work obligations and their harmonious integration is necessary for the regeneration of strength (Czermiński, Trzcieniecki 1974, p. 36) and important for well-being and satisfaction from performed activities; such a person has more energy and can make significant decisions, such a person has more time available and a healthy attitude to daily duties (Wilson 2012). Since the right proportions are kept and no sphere dominates in life, an individual can reduce or even avoid many adverse effects such as crises in personal life, usually resulting from breaks in relationships with family and friends, loss of pleasure and increased stress²⁷; such an individual can also escape or at least defer workaholism and/or occupational exhaustion (Pluta 2013, pp. 72-80).

The surveys by Chirkowska-Smolak (Chirkowska-Smolak 2008, p. 247) show that shorter working time and the sense of attachment to work contribute to maintaining the work-life balance. On the other hand, long working time (above 50 hours per week for the surveyed group) generates an imbalance between work and life. Furthermore, the author emphasises when people work overtime, the sense of the quality of life decreases, they have problems with concentration, they work less effectively even when performing simple tasks, and their physical and mental health deteriorates.

Enterprises that are aware of the market situation and want to attract and retain the best employees, start investing in the human capital and implementing WLB programs (HRK, 2016). Depending on the financial, organisational and operational possibilities, they can support 28 employees through such initiatives as flexible working time, remote work options, job sharing, part-time work, conveniences for parents (e.g. nurseries and kindergartens close to the company premises, family parties, family insurance, additional days off etc.) as well as additional training for employees in the scope of work-life balance skills (European Commission, 2005). Public opinion polls among the Polish people conducted by the EQLS in 2011

²⁶ L. Daniels, What Does Work-Life Balance Mean?, www.W-LB.org.uk (access: 12.02.2021).

²⁷ Work-Life Balance – Isn't the Point, <http://daniels.du.edu/work-life-balance-isnt-the-point/> (access: 20.08.2020).

and 2015 indicate that the most helpful methods to support work-life balance that organisations could offer their employees are: the option to take a day off without a prior notice (80% of respondents considered this option moderately or very helpful), a flexible approach to the working time start and finish (75%), better access to assistance services (e.g. assistance to children, care for the elderly, long-term care – 70%) and a flexible approach to the weekly working time (68%).²⁸

The surveys conducted by Burlita and Broński (2017) show that more and more organisations start supporting employees in achieving the work-life balance, appreciating the resultant benefits and treating it as one of the aspect of the corporate social responsibility. But still a considerable number of companies perceive such procedures as a superfluous burden, short-sightedly leaving the work-life balance problems to employees.

3.2. Stress at work and occupational burnout as determinants of physical activity

The work environment is special in terms of the large amount of factors which generate stress in people (Kowal 2002, s. 63). Stress is a factor which disrupts the balance of the organism and indirectly affects the state of health and illness of an individual (Wrońska-Polańska 2008, pp. 17-36; Chopra 1987, p. 224). Stress can cause diseases and pain, both at work and at home. It can lead to non-compliance with safety rules at work and other health problems related to work, e.g. musculo-skeletal ailments. Stress also affects the final results of operation of a given organisation to a considerable extent. When a person is at work, there appear various emotional tensions which can both increase the willingness to do the work and decrease the interest in the work processes and results. These various tensions, positive and negative, generate stress (Gólcz 2007, p. 34).

At present, it is asserted that stress constitutes one of the key causes of somatic and mental diseases. There exists a relation of reciprocal impact between the nervous system and the immune system. The effects of stress on the immune system depend on the duration and the intensity of stress. The consequences of coping with stress are positive and negative emotions (Kaczmarska, Curyło-Sikora 2016, pp. 317-321). Stress is a process through which the environmental factors threaten the balance of the organism or disrupt it and through which the organism responds to the threat (Gatchel et al. 1989, p. 386). W.B. Cannon (1928, pp. 257-269), the author of the “fight or run” model, describes the reaction to stress as the stimulation of two systems. The first one is the pituitary gland which secretes the ACTH (*adrenocorti-*

²⁸ <http://www.eurofound.europa.eu/pl/surveys/eqls> (access: 12.02.2021).

cotrophic hormone) and activates the adrenal cortex and its secretion of corticosteroids, particularly cortisol which increases fat and protein burning and reduces inflammation. The second one stimulates the sympathetic nervous system which activates the adrenal medulla, causing it to secrete epinephrine (adrenaline), norepinephrine (noradrenaline). The hormones stimulate the organism (an intensified reaction of the circulatory system, intense breathing, an increased blood flow to active muscles, enhanced mental and physical activity) and facilitate a quicker reaction to danger. Therefore, according to Cannon, they provide the “security function”, performing an important role in the process of adaptation, but if they are secreted excessively for too long a period, they may disrupt the organism and lead to its exhaustion or even death (Gatchel et. al. 1989, p. 386).

The reaction of an organism exposed to stress consists of three stages (Zimbardo, Ruch 1994, p. 361-369):

1. **Alarm** – physiological changes in response to the stress factor.
2. **Resistance** – the stressful situation continues and the organism becomes resistant to the stress factor which generated the alarm. The symptoms from the first stage recede.
3. **Exhaustion** – the duration of the stress factor is too long and the organism reaches the point when it can no longer be resistant, so it cannot adapt to the ongoing stress, which results in the return of the physiological dysfunction from the stage of alarm.

Exceedingly long stressful situation can potentially cause anxiety states, neuroses, aggressive behaviours and a number of physiological symptoms such as rising blood pressure, heart arrhythmias and drops in the level of calcium and magnesium. But it depends on the individual whether stress is beneficial and motivating (*eustress*) or negative and harmful (*distress*). It depends on the individual reaction to a situation or an event (Huber 2010, pp. 268-275; Boenisch, Haney 2002, p. 224). It is believed that stress is caused by an external situation/event (stimulant) which produces a high level of emotional tension in an individual, thus preventing the correct functioning of the individual (Holmes 1967, pp. 121-132). A stressful situation occurs in the event of the threat of losing net resources, losing of net resources, and the lack of increase in resources following an investment (Hobfoll 1989, pp. 513-524). Stress can be experienced in the face of the subjective assessment of loss or the objective loss of resources. Four types of resources are identified: objects (e.g. a house), conditions (e.g. a job), personal resources (e.g. interpersonal skills) and energy resources (e.g. money).

Today, an important type of stress is the occupational stress affecting nearly every employee. One can feel stress about relations with colleagues or superiors, the amount of work or even the need to keep the job. Sources of stress are usually divided into five categories:

1. the actions comprising the work process and the work organisation;
2. the position of the employee in the production process, including the type and scope of responsibility;
3. the course of the employee's professional career;
4. interpersonal relationships;
5. organisational atmosphere, especially the team leadership style (Kowal 2002, p. 63).

According to H. Selye (Selye 1963, p. 420), the mental strain, failures, the sense of insecurity and the lack of purpose are the strongest stress factors. As indicated by psychosomatic research, these factors can also cause physical diseases.

Work-related stress is a serious problem all around the globe, including Europe. The data of the European Foundation for the Improvement of Living and Working Conditions indicate that work-related stress is the second problem (after back pains) that employees complain about most frequently. It is experienced by both men and women in all sectors and at each level of management. Women are more vulnerable to stress. It should be noted that stress causes more than 1/4 of sick leaves lasting more than two weeks. The European Commission indicates that work-related stress should be treated as a group of emotional, cognitive, behavioural and psychological reactions to adverse and harmful aspects of the work environment, work organisation and work surroundings.

The work environment is full of all kinds of stress factors. The causes of stress at work could be objective stimulants (working under time pressure) or subjective stimulants (unpleasant atmosphere). However, each employee will see different stimulants as stressful. Stress at work occurs when the employee's skills fall short of the work environment requirements and in situations which form obstacles to the goals ahead, i.e. when a person's capabilities fail to meet the work environment requirements or when the encountered obstacles prevent the fulfilment of needs or the achievement of goals. *At present, the list of jobs which are considered most stressful includes: police officers, miners, construction workers, civilian pilots, journalists and prison guards.* On the other hand, the most peaceful jobs include librarians, nursery workers and museum workers (Ogińska-Bulik 2006, p. 294).

The results of studies on stress show that the occupational stress is very common and the work-related stress indicators are constantly on the rise. It is pointed out that in recent decades the level of occupational stress has increased alarmingly. It mainly pertains to industrialised countries and shows in the rapidly rising indicators of sick leaves and inability to work due to stress (Chmiel 2002, pp. 169-203).

Occupational stress factors are classified in many different ways. Table 20 presents a division of stress factors proposed by J. Stranks (after: Mackiewicz 2010, p. 196).

Table 20. Division of stress factors according to Jeff Stranks

Stress factor	Description
Environmental factors	Working conditions, e.g. noise levels or ambient temperature
Occupational factors	The scope of duties and requirements, the amount of work and the scope of control over performed tasks
Social factors	Interactions with other people, colleagues, friends, the closest persons outside the organisation

Source: Own work on the basis of Mackiewicz 2010, p. 196

Table 21 presents a division of stress factors proposed by D. Fontana (Szaban 2007, p. 367).

The sources of stress could be factors from different areas of occupational functioning. Initially, most studies on stress focused on the content of work and working conditions, while today researchers analyse mainly the area of interpersonal relationships (Chmiel 2002, pp. 169-203).

Table 21. Division of stress factors according to David Fontana

Stress factor	Description
Organisational problems	<ul style="list-style-type: none"> – lack of support for employees, – long and inconvenient working hours, – low prestige, – salary and prospects of promotion, – unnecessary rituals and procedures, – uncertainty and instability.
Problems related to the work performed	<ul style="list-style-type: none"> – cumbersome customers or subordinates/co-workers, – insufficient professional preparation, – work-related responsibility, – inability of effective action or assistance to others, – too much or too little work.
Specific causes of stress	<ul style="list-style-type: none"> – unclear roles, – conflict or roles, – perfectionism, – lack of impact on decisions, – frequent conflicts with superiors, – lack of support from colleagues, – monotonous work, – failing communication, – failed management, – conflicts among workers.

Source: Own work on the basis of Mackiewicz (2010, p. 196)

Regardless of the type of stimulants, stress can generate different physiological and emotional reactions. Persons who experience high levels of stress show many psychosomatic symptoms and disorders of the ability to relax and rest after completing work (Ogińska-Bulik, Jurczyński 2008, p. 319). Numerous studies on stress indicate the more occupational stress is experienced, the less satisfied the employee gets with respect to work (Terelak 1995, p. 461). The employee also has the sense of maladjustment and incompetence, which lowers self-esteem (Bańka 2016, p. 208). One of the stress symptoms is the occupational burnout syndrome.

There are many methods of coping with stress: from breathing exercises to intense physical workout. Each method can be effective if it is individually adapted to a person's needs and the actual level of stress and if it is adequate to the person's capabilities (Koszyk 2018, pp. 41-59).

Occupational burnout is widespread in contemporary organisations, though it is rarely considered at the workplace as an organisational problem (Kraczla 2013, pp. 69-81). Occupational burnout can be experienced by all employees of any profession, at any level in an organisation (Maslach, Leiter 2011, p. 208). The state of burnout is a result of long-term and repeated burden due to many years of intense work usually related to interactions with people (Kraczla 2013, pp. 69-81).

The common approach to occupational burnout focuses on employees and their weaknesses in the face of psychological difficulties. The burnout syndrome is strictly related to the stress-generating workplace and the chronic emotional strain experienced by employees. People who function in the state of long and permanent stress start experiencing the lack of harmony between themselves and the organisation, so they lose the motivation to continue working with commitment. The effects in the form of occupational burnout symptoms are the problems of the individual, but they generate measurable costs to the organisation, and in consequence burnout becomes a serious social problem (Kraczla 2013, pp. 69-81). The result of long-term coping with negative aspects of work is the experience personal failure and the progressing physical and emotional exhaustion, which is the key factor that induces burnout. Therefore, the chronic occupational stress is indicated as the most frequent source of burnout. The individual vulnerability as well as the motivation and attitude to work are also important in the context of occupational burnout. **All people experience stress, but if they go through burnout, it means they had ambitious goals, large expectations and strong motivation** (Kraczla 2013, pp. 69-81). Occupational burnout affects those who have been working for a long time in conditions of a heavy emotional burden. They include teachers, nurses, psychologists, social workers, rescuers, police officers and managers. These professions require high motivation and significant personal commitment. When such workers start to feel the growing sense of lack of success and the lack of sense of full commitment, the first symptoms of occupational burnout may

appear (Maslach 2010, pp. 13-32). The qualities of people who are particularly vulnerable to occupational burnout include (Maslach 2010, pp. 13-32):

- strong commitment to work,
- strict self-requirements,
- denial of one's own resistance limits to overload,
- deferral of one's own needs and interests,
- willing acceptance of new duties and tasks,
- imbalance between the amount of work and satisfaction with life.

There are six main areas where the sources of burnout should be sought (Maslach 2010, p. 244):

- excessive work overload (too many tasks, exhaustion, excessive availability, time pressure);
- lacking sense of control (no participation in decisions, ineffective leadership);
- lacking sense of appreciation and no satisfaction with work (low remuneration, no recognition);
- interpersonal problems at work in terms of communication and support;
- sense of injustice/unequal treatment of employees;
- discrepancy between individual values and the values of the organisation.

Occupational burnout can be divided into five stages (Bartkowiak 2005, p. 233):

1. **Physiological stage** – physiological symptoms, e.g. pains, weakness, loss of appetite, exhaustion, sleep disorders.
2. **Social stage** – irritability, self-isolation, uncertainty in interpersonal relationships, grudges towards others.
3. **Intellectual stage** – disorders of cognitive processes, difficulties in receiving and transferring information, logical mistakes.
4. **Psycho-emotional stage** – behavioural changes, e.g. abusing alcohol, tobacco and medicines, narcotics, disregarding duties, loss of responsibility and lacking sense of risk.
5. **Spiritual stage** – loss of faith in the basic principles and values, inner emptiness and lack of interest in other people.

The causes of burnout can be more readily found in the work environment than in individual qualities (Maslach, Leiter 2011, p. 208). An employee who experiences occupational burnout adopts the attitude of *dry tree*. The next step is distance towards work and resignation. An employee suffering from occupational burnout adopts a minimalist attitude by taking only the necessary actions and rejecting innovations which aim at improving performance. Such a person also experiences difficulties in managing interactions with other people. A team member with the burnout symptoms often disintegrates and demoralises others, which increases the potential for conflicts and disrupts the atmosphere (Tucholska 2009, p. 266).

When employees quit, it generates losses related to absences, reduced productivity and the increasing rotation. Such costs also relate to the necessity of training new employees, medical treatments, insurance funds and court trials (Tucholska 2009, p. 266). Therefore, organisations should cultivate employee motivation and shape the work environment in such a way as to allow employees to reach goals and fulfil their expectations, since occupational burnout considerably affect the quality of work and, in consequence, the quality of life as well.

3.3. Emotions in sport

*The most important and the greatest triumph
is when you conquer yourself.*

Plato

*Sport has the power to change the world.
It has the power of inspiration,
and the rare power of uniting people.*

J. Carlin

*Sport is beautiful, because you can't
cheat to reach up really high.*

A. Pistelli

Today, sport is one of the carriers and objects of marketing activities by many organisations. It pertains to such rules of social coexistence as collaboration, rivalry, fair play, justice, the acceptance of defeat, respect for the defeated, honest fighting without envy and with mutual understanding (Saska-Dymnicka 2011, pp. 113-125). Sport is related to intense emotions experiences by athletes (Gałda 2017, p. 131). The sporting rivalry requires maximized efforts in combination with mental strain and considerable physical fatigue, so emotional engagement is necessary (Borek-Chudek 2011, pp. 109-132). Emotions perform different functions:

- They help in coping with important situations without analysing what should be done.
- They motivate.
- They have a considerable impact on concentration.
- Emotions can influence the response time and the rational assessment of the situation.
- They also have a significant effect on physiology (muscle tensing/relaxing) ([https://asystem-trenera.pl/...](https://asystem-trenera.pl/)).

Contestants are different in terms of the power of their emotions, the emotional response time, the frequency of response to given emotions and the time needed for an emotion to subside and for resetting back to the starting point ([https://asystent-trenera.pl/...](https://asystent-trenera.pl/)).

The word “emotion” derives from the Latin “*emovere*” – to move, to affect. An organism is moved by something. This “moving” can come from the outside or from the inside and it is manifested in increased tension. The phenomenon one cannot avoid in any sport is the emotional tension before the contest/the game starts. In such situations, stress is mainly related to expectations and fears with respect to the results of the rivalry. The competition and the resulting stress are integral parts of sport as such and the idea of rivalry. It is a conflict of interests and no win-win outcome is possible: if one participant wins, the other must lose. In such a situation, even the best level of preparation for the contest does not guarantee success, which rarely takes place in other forms of human activity. There is a group of emotions with the greatest impact on how athletes behave. It includes anger, fear, happiness, sadness, joy, surprise and interest (Rybarczyk, Klimczyk 2017, pp. 781-796). The greatest level of stress and emotional excitement is experienced before the contest (Sankowski 2001, p. 233). Considering the emotions related to participation in a sports contest, one can identify three types of emotions (Table 22).

Table 22. Types of emotions related to sport contests

Type of emotion	Description
<p>Emotions before the start)</p>	<ul style="list-style-type: none"> • State of readiness – the most positive pre-start state. It manifests in tense waiting, moderate excitement, the need of contact with the sporting environment, slight increase in motor activity, the willingness to face the adversary, the time and the space, readiness to start competing. In the state of readiness, the participant reaches the optimal level of emotional tension, the level of mobilisation corresponds to the difficulty of the task, and the planned results is important and possible to achieve. In terms of physiology, the state of readiness before the start shows in the increased heart rate and breath, slight sweating and some tremor of the limbs. • State of the start fever – strong excitement and anxiety, variable emotions and mood, increased nervous excitability and sensitiveness, anger, weeping, aggression (extremes cases), the obsessive need to talk about the start and the chances (impatience), disruptions in motor coordination, perceptions, memory and thinking, disruptions of learned motor habits

	<p>(technical skills). These are accompanied by increased heart rate and breathing, intense sweating, excessive tremor of limbs and the entire body, feeling of coldness in limbs or other parts of the body (e.g. along the back), intensified diuresis and other excretion processes. A contestant reaches this state when the tension exceeds the mobilisation level. It usually happens when the strong will to succeed is hindered by the excessive difficulty of the task (e.g. the rival is too strong and the sporting form is too weak). Overexcitement can also be caused by the reactions of the viewers or disruptions in the contest.</p> <ul style="list-style-type: none"> • Occurrence of the start fever – it is a normal condition in the case of extremely important contests and even the best athletes happen to experience it. It results from the threat to aspirations and expectations related to the planned results and often exceeding the past achievements and capabilities of the athlete. • State of the start apathy – it is manifested in the general discouragement, reduced nervous excitability (weak perceptiveness and concentration), lowered motor activity in relation to normal behaviour, unwillingness to engage in physical exertion and participation in the contest, malaise, sleepiness (yawning) and a sense of isolation, avoiding conversation about the contest, a sense of weakness and a subjective perception of physical exhaustion, states of anxiety and insomnia. Low emotional excitability can be caused by protective inhibition (related to fatigue and even nervous exhaustion of the organism) resulting from the strong and lasting emotional excitement (the start fever) which generates discouragement and the willingness to resign at the secondary stage.
<p>Emotions during the contest</p>	<p>The intensity of emotions decreases considerably once the contest starts. This is the effect the motor activity which releases the emotional blockade. In cyclic sports activities, especially during submaximal exertion, the state of a “standstill” may occur. It happens during runs, skiing and cycling races, swimming, rowing etc. It is manifested in:</p> <ul style="list-style-type: none"> • rapid deterioration of conscious processes, i.e. loss of clear perception, illusions, especially in perceptions of muscles and motion, weakened thinking and memory (especially remembering); • distraction, narrow attention scope, loss of divisible attention, rapid reduction of the attention span; • slower response, a growing number of wrong responses;

	<ul style="list-style-type: none"> • irritable dyspnoea, breathlessness, perception of a cardiac arrest; • lowered motor activity, a strong sense of heavy legs, a sense that it is impossible to continue, willingness to reduce the speed or stop all together. <p>If an athlete finds motivation to continue, central nervous processes undergo a transformation and metabolism in nerve cells increases, which generates the state of the “second breath”, manifesting itself as follows:</p> <ul style="list-style-type: none"> • physical relaxation, receding of all stillness symptoms (dyspnoea, breathlessness, heart activity problems); • resumption of the normal performance in all the previously disrupted mental functions; • sthenic reactions, will to continue the fight, self-confidence (Rudik 1970, p. 184).
<p>Emotions after the contest</p>	<p>The long-lasting tension after the contest, related to the bitterness of failure or the euphoria of victory, can delay the return to mental balance, disrupting the processes of the body and the mind. Success gives wings and boost the sporting self-esteem, providing motivation to continue working on the fitness improvement, to achieve new successes. But it is not for everyone and not in all circumstances that success become the source of new energy which serves to increase the efforts of continued training. In some situations, good results in a sports contest can produce negative effects, e.g. “a swelled head”. A contestant become overconfident and ignores the rivals, believing they stand no chance. The direct consequence of this interpretation of success in sport can be neglect in further training, lack of progress and, finally, defeat.</p>

Source: Own work on the basis of Sankowski (2001, p. 233); Łuszczynska (2011, p. 244)

Sport arouses many positive emotions and values, so it attracts recipients (viewers, participants) who show loyalty and attachment, which makes them attractive target customers to enterprises (Szulgina, Rak 2014, pp. 162-176). In the contemporary era of experiences, when we move from the leisure economy to the experience economy, delivering emotions, especially in the sector of event tourism, become the key success factor (Waškowski 2015, pp. 790-798).

The athlete’s body carries emotions. According to the Hungarian psychologist, Mihály Csíkszentmihályi (Rogowski, Skrobacski 2011, p. 309), sport triggers the state of “flow” which is described as the feeling of uplift, overreaching, optimal experience in which we are so engrossed in what we do that we do not notice the time passing.

In interviews, athletes often emphasise the personal attitude to their discipline. They say they love sport, challenges, rivalry and fighting (Gałda 2017, p. 131). Sport can be treated in different ways by athletes: as love, sacrifice, commitment, dreams/fulfilling dreams, meaning of life, joy, happiness, longing or a metaphor (Table 23) (Gałda 2017, p. 131).

Table 23. The significance of sport from the perspective of athletes. Sample statements

The significance of sport from the perspective of athletes	Sample statements by athletes
Sport as love	<ul style="list-style-type: none"> • “I love jumps, the very possibility of flying is the reward to me.” • “I love racing. I think that’s why I can train so hard every day.” • “I love challenges, they motivate me, but I am aware how difficult it is going to be to replace X.” • “I love rivalry and all kinds of challenges.” • “My form is great and there are several reasons for that. I do what I love and this drives me forward.” • “Volleyball is all my life and I love this sport.” • “I love fighting and there are no lost balls for me.” • “We just like everything that is related to rivalry.”
Sport as sacrifice	<ul style="list-style-type: none"> • “In my discipline you have to be ready for renunciations.” • “I subjected everything to the games.” • “You have to be fully committed right from the start, you need fight during each class.” • “My career was full of sacrifices, no one gave me anything for free.” • “Standing on the Olympic podium, I realized the amount of hard work and renunciations during my preparation for this event.” • “One day I feel better, another day I suffer and barely keep my balance, but I cannot give up sport.”
Sport as commitment	<ul style="list-style-type: none"> • “We have some hard work ahead of us and we will do our best.” • “I am now during hard preparations for the games.” • “You can be talented as no one else, you can live in a magical place, but you have to work. That’s the key.” • “I will give my 100% and I will keep smiling, enjoying it a lot.” • “If you treat this profession seriously, you will train as hard as you can.” • “When you train, you cannot spare yourself, it has to hurt, if you want success in the games.” • “You can always lose, but I will accept defeat only when I know we did all our best.”

	<ul style="list-style-type: none"> • “You need to maximise the time you have for work.” • “You have to train and participate in duels more often.” • “I am glad it was that tough! It is the only way to play better and better.”
Sport as a dream/fulfilment of dreams	<ul style="list-style-type: none"> • “It is my dream to participate in the games.” • “Participation in the Olympic Games is the fulfilment of my dreams. I am an Olympic Champion. It has been my dream since childhood and I knew it would come true.” • “My first time and I became an Olympic Vice Champion. Such a début is a dream.” • “The Olympic medal is the dream of every athlete.” • “I am fulfilling one of my dreams, fortunately I still have enough time to prepare well.”
Sport as the meaning of life	<ul style="list-style-type: none"> • “Sport is my way of life.” • “I treat MMA really seriously, it is not just fun, but passion.” • “You need passion to be successful.”
Sport as joy/happiness	<ul style="list-style-type: none"> • “You could see the joy when the guys scored goals and won.” • “Each game is a lot of joy, but the right moment to express is after you have won.” • “When you are happy, you don’t feel the fatigue.” • “Football is there to give you a maximum of joy.” • “I enjoy my game and I want to go on developing.” • “I get lots of fun when I train, I experience something new.”
Sport as a longing	<ul style="list-style-type: none"> • “I went to Finland for the Europe Cup, because I miss participation, adrenaline and rivalry.” • “For the whole season I have been waiting for the games and this enthusiasm is really visible.” • “I look forward to next contests with optimism.” • “Treating my injury took some time, but I still feel the will to win.”
Sport as a metaphor	<ul style="list-style-type: none"> • “He has the health and the heart to fight. There is some reflection and tactics, he often responds with a counterattack, his running if phenomenal.” • “She showed a great heart for fighting.” • “His heart is in the field.” • “They put all their heart and strength in the training, they are very ambitious.” • “You play ball with all your heart and senses.”

Source: Own work on the basis of Galda 2017, p. 131

The analysis of Table 23 allows to conclude that athletes’ feelings related to their disciplines are compatible with the feelings typical of interpersonal relationships. For athletes, sport is mainly hard work which triggers emotions, but it is

also enormous love that makes them capable of sacrifices and fulfil their dreams (Gałda 2017, p. 131). The surveys by J. Czechowski (2015, pp. 161-178) indicate that sport is perceived in the following manner by athletes themselves:

- a way to earn money,
- key to success,
- meeting new people,
- happiness factor,
- profession,
- a way to express emotions,
- improvement of health, fitness, strength and stamina,
- mental and physical development,
- “teacher” of respect, diligence and perseverance,
- moral release of tension, entertainment,
- personality development,
- body improvement, protection of mental health,
- keeping healthy,
- drive towards the best results,
- well-being.

Sport can also provide the meaning of life and drive athletes in their activities (Fig. 23).

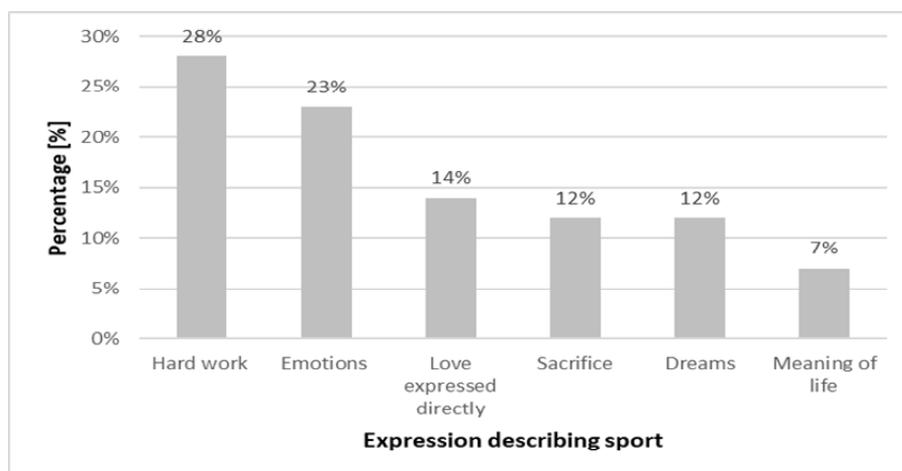


Fig. 23. Expressions describing sport

Source: Own work on the basis of Gałda (2017, p. 131)

Athletes perceive “educational moments” in sport, such as meeting people or possibilities of expression and relieving the emotional tension. They notice that one can know oneself better by being around other people. Conversations and

closer relationships with new people are educational. Other educational aspects of sport include gaining the skills of coping with excessive emotions, especially negative ones, through releasing such emotions in sporting activity (Czechowski 2015, pp. 161-178).

Sport is a form of life in which people fight each other in earnest and not in earnest at the same time. The effort to compete is maximized, though it is only a game, sometimes only a playful game (Demel, Skład 1974, p. 255). But even if amateur sport is a playful game, this game is treated very seriously: some contestants risk their health, they keep running despite injuries or they participate in the contest despite infections, because they have already paid for participation.

Lance Armstrong, who won Tour de France seven times, once said: *“When you feel you start giving up, you must ask yourself how you want to live (...). Pain goes away, resignation stays”* (after: Sheard 2010, p. 18). A similar attitude is adopted by amateurs whose sports results are not as impressive as those of professionals, but sometimes amateurs even show more determination than other contestants who do not want to risk a serious injury and a resulting break in participation in contests.

Dean Karnazes, a champion of ultramarathons, was once asked about covering distances longer than 150 kilometres and the related pain. He replied: *“Yes, there’s pain (...) but it’s a good pain”* (Kamazes 2006, p. 231). The experience of pain during amateur runs of 5 km or 10 km will bring satisfaction with overcoming one’s weaknesses and crossing new sport barriers. An important and commonly shared symbol of a runner’s status is the “life record” which tells the sporting community about the precise level of advancement of the given runner at the given moment in the non-professional running career. The moment of crossing the finish line is a very significant moment for amateur runners. It arouses great emotions. D. Le Breton emphasises that such challenges provide an opportunity to shape a “tough” personality and: *“(…) to show personal excellence through the individually understood challenge of which the athlete will later speak with pride”*, while words such as “it was really hard” spoken right after crossing the finish line underline the sporting agony and the strong but resisted temptation to give up (Le Breton 2000). It often happens that many amateurs who cross the finish line almost immediately enter into highly emotional interactions with the people whom they know and who have finished the contest, but also with other contestants whom they do not know, simply to share the experience of the run. A ritual after the completed contest (included in the participation package) is the regeneration meal which is the last item on the agenda, a worthy conclusion to the sporting hardship. Many amateur runners treat contests as a way of self-testing and an opportunity to socialise. Running teaches a systematic attitude and perseverance which can come useful in professional life and in maintaining interpersonal relationships.

In 2019, the author of the present work conducted an interview with amateur runners. The respondents included 60 runners who participated in contests covering various distances and organised in different places. Table 24 presents the emotions felt by runners before and after contests.

Table 24. Emotions felt by runners before and after contests

Emotions before contests	Emotions after contests
Concentration	Gladness
Stress	Pride
Lack of self-confidence	Joy
Anxious checking of the equipment	Satisfaction
Attempt at calming the emotions	Tears of agitation, because the goal was reached despite adversities
Curiosity about the results	Calming
Pressure of the result	Fresh mind
Fear of disgrace	Self-confidence

Source: Own work

The surveys by F.J. Penedo and J.R. Dahna (2005, pp. 189-193) indicate that people participating in a training program assess the quality of their life higher and manifested a greater vigour in everyday tasks after completing the program. Several hours after physical exertion is the time when the emotional effect arrives in the acute form of the **tip of the iceberg**. It manifests through high vigour and low level of negative moods such as depression, fear, enmity, desolation or fatigue. Regular engagement in sporting activities for many weeks brings a long-lasting improvement of well-being as well as increase in vigour and self-confidence. Positive emotions are triggered by exercises together with other people, satisfaction with doing the particular sport and the achievement of increasingly better results (Grzeńkowiak, Siwy-Hudowska 2016, pp. 359-374).

Any analysis of mental aspects, i.e. positive and negative emotions related to doing sports, cannot disregard biological factors, that is the impact of hormones and neurotransmitters on subjective feelings (the mind) and the functioning of the organism (physiology). Possible negative effects include the stress related to rivalry or the expected result and the fear of failure or sadness caused by unsatisfactory results. The typical positive emotions are the satisfaction with the engagement in the activity, pride from the achievement of goals and specific results. Positive emotions are triggered by hormones (endorphins) which produce the sense of calm and relaxation, and they also inhibit the stress hormones which can dominate in a situation of too intense endurance training (Łuszczynska 2011, p. 244).

Summary

The contemporary world is defined by changes resulting from the development of sciences and technologies. Industry 4.0 (i4.0), Economy 4.0 and Society 5.0 mean that we are standing on the threshold of a great breakthrough. Surveys indicate that 97% of the Polish population believe that innovative solutions are necessary, 90% perceives their crucial role in the growth of the Polish economy, but only 50% would choose a remote medical appointment, only 34% would agree to an operation performed by a robot, and less than 33% would take a ride in a bus without a driver. The use of services is also undergoing changes. New solutions include virtual bank branches, applications which monitor activity and health (watches, pulsometers), electronic tickets in public transportation, and e-learning. The jobs of the future are shaped by technologies and the market demand. Until recently, a superathlete has been someone who trains a lot, is well-built and wins medals. Today, e-athletes are perceived in a similar way, as evidenced by the StarCraft Championship which has the same number of participants as the World Athletics Championships.

In March 2020, Poland announced the state of an epidemic threat and then the state of an epidemic due to the spread of the contagious disease COVID-19) caused by the SARS-CoV-2 virus, which caused a collapse of the Polish economy and had a strong impact on the labour market. The modern history has not seen such a lockdown as the one caused by the coronavirus. Hairdressers, cosmeticians, restaurants, transportation and tourism are particularly affected by the negative effects of the pandemic. But while some lose, others profit: growth can be observed in the areas of e-commerce, courier shipping and parcel lockers.

The contemporary world focuses on quantity, on “more”, yet “more” no longer means only the quantity, but quality as well. Contemporary businesses compete to offer beautiful products and beautifully packaged services in order to satisfy and even to enrapture the customer, which leads straight to success. The revolution of quality is happening right now. The ongoing improvement of quality is the condition for business survival. In economy, quality results from the market needs and

is created by human effort and collaboration. At present, quality is generated by decisions of the customer who dictates and verifies the level of quality. In the era of globalisation and the Internet, the customers are very demanding prosumers who know their rights perfectly well. They can quickly and easily find information on products/services and choose companies. They assess the quality, the prices and the reliability of products/services. Therefore an organisation needs more than a positive image in order to succeed. Today, organisations focus on quality on a daily basis. Quality assurance is a regular process inscribed into their DNA. Each enterprise should listen to customer needs. It must be emphasised that entrepreneurs generate the largest costs not through quality assurance as such, but when they have quality problems which cause losses to everyone. Low quality or neglecting quality translates into expenses and loss of trust which leads directly to loss of customers.

The contemporary quality is one of the attributes of products, constant monitoring of the buyers' markets and a competitive advantage. The condition for an organisation's existence in the market and for its growth is the innovative ability to adapt its own flexibility to the surroundings. The growth of an organisation is determined by the implementation of innovations and quality assurance with respect to the designed products, technologies, systems and business models. When observing consumer behaviours in the market, one can notice that the enterprise brand, its quality, reputation and time in the market provide the competitive edge. The implementation of innovative solutions depends on the level of advancement of the quality management systems. Quality and innovation complement each other. Both quality and innovation have a great impact on the enterprise image and they generate the added value.

Physical activity is the best way to keep healthy, live longer and ensure well-being (Skotnicka, Pieszko 2014, pp. 379-383). Physical activity influences many aspects of human life, including the quality and comfort of life (Michalik et al. 2017, pp. 33-40). J.F. Konopack and E. McAuley (2012, p. 57) have demonstrated that physical activity is an important determinant of the quality of life in the case of elderly people and it ensures higher well-being. M. Levasseur, J. Desrosiers and D. St-Cyr Tribble (2008, p. 30) observe that physical activity helps to live in a society. M. Kaczmarczyk and E. Trafiałek (2007, pp. 116-118) as well as K. Bogus, E. Borowik and T. Kostka (2009, pp. 116-120) assert that regular physical activity is beneficial to mental and physical well-being and it prevents loneliness and social isolation.

The lack of motor activity is a problem at any age, but specifically in the case of elderly people. Systematic physical exercises allow them to keep fit and independent in daily activities and contribute to the improvement in the ageing process (Grimm et al. 2012, pp. 64-79). Quality of life is understood in terms of happiness,

physical and mental well-being, satisfaction and fulfilment of life expectations (Fidecki et al. 2011, pp. 221-225; Farquhar 1995, pp. 1439-1446; Zhang, Gallagher, Neubeck 2014, pp. 987-1002).

Running is today the third most popular discipline of motor recreation in Poland, preceded only by cycling and swimming (CBOS 2013; Dziubiński 2016, p. 260).

Running as a form of active recreation has never been so popular in Poland as it is nowadays. The studies by J.R. Stempień and Z. Waśkowski indicate that the reasons for taking up running include: improving fitness, losing weight, combating a habit, pleasure, testing oneself, and the need for rivalry (Stempień 2016, pp. 47-70; Waśkowski 2014, p. 33). P.F. Nowak and J. Supiński (2014, pp. 41-47) demonstrate that for the majority of runners health is the main declared motive for running. Many people start running e.g. to reduce their body mass or improve general health. However, when they have reached those primary goals and enhanced their physical fitness, there emerge new goals related to self-improvement. The health-oriented running workout is a process which aims at developing the efficiency of the organism and it can, in its most advanced form, be related to participation in sports and recreational events with the elements of competition. One can compete with oneself, with the distance, with time, with a difficult route or the weather. Many runners have their own goals and make their own categories of competition, e.g. the number of runs during a year. It should be noted that goals which are set independently can be irrational and unrelated to health or a healthy lifestyle. The most dynamic growth in the number of runners has been observed in recent years. According to different estimates, 1-3 million people in Poland practice running, but the exact number is impossible to determine due to the widespread popularity of running and different definitions of who qualifies as a runner. This sport is more popular among men. Women account for 20-30% of runners in Poland. The studies by Z. Waśkowski indicate that the key determinants increasing the popularity of running in Poland include: a healthy, active lifestyle, high popularity of running in Western countries and increasingly higher availability of high-quality footwear, clothes and accessories for runners, the increasing number of mass running events, fashion for running, a relatively low cost of practising this sport and, first of all, the lack of any special requirements regarding the sports arenas (Waśkowski 2014, p. 33). In another study by this author, it is demonstrated that women participate more willingly in such runs where the profit is designated for charity purposes and they are more often motivated by socialising goals rather than competition (Waśkowski 2007, p. 242).

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