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# Physical Activity, Body Image, and Subjective Well-Being

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## Abstract

The notion of well-being is in tight relation and sometimes used interchangeably, with quality of life, physical and mental health promotion, good living, or happiness. Physical appearance is one of the first individual characteristics noticed by others and has an important impact on social interactions and therefore has become very important construct in contemporary societies. The aim of this chapter is to discuss the influence of physical exercise on the subjective well-being dimension related to better health and eventually happiness. In contrast, the physical inactivity determined by the increasing amount of time spent in sedentary activities is becoming an issue with serious consequences, being the cause of more than 5 million death/year globally. Physical activity favorably influences mental health, improves the emotional state and reduces the incidence and severity of diseases and pathological conditions, such as cardiovascular disease, type II diabetes, osteoarthritis, osteoporosis, and obesity. Promoting physical activity, physical and health education and sport as healthy lifestyle components in schools, universities and lifelong learning targets the enhancement of vigour, resilience, employment, and social outcomes for graduates and communities. Motives of physical inactivity were discussed aiming to underpin possible remedial solution for better health, quality of life and well-being.

**Keywords:** physical inactivity, weight status, self-esteem, self-image, healthy lifestyle, co-morbidity

## 1. Introduction

Well-being is a topic in trend in social sciences, even the definition of this concept is not yet established and unitary. The notion of well-being is in tight relation and sometimes used interchangeably, with quality of life, physical and mental health promotion, good living, or happiness.

Quality of life is also the subject of academic debate in economics aiming to measure and compare changes in quality of life within and between communities, cities, regions, and countries [1]. Over the past 40 years grew the idea that economic indicators alone could not reflect accurately the quality of life of populations. New indicators and datasets were created to capture social and environmental aspects that Gross National Product failed to incorporate. Therefore, social and psychological indicators have been developed to assess various facets and dimension of subjective well-being. This included indicators measuring education achievements, health outcomes, and environmental degradation [2]. Major studies on well-being and quality of life are now undertaken by the most important global organizations such as UNO, the OECD, or WHO.

Subjective well-being is related to individual perceptions, opinions, beliefs, cultural patterns, and feelings about own life. The range of variables showing significant associations with subjective well-being includes health, employment status, income and material wealth, education, marital status, social relationships, migrant status, trust in others, volunteering, governance, confidence in institutions, freedom, water and air quality, personal safety, and crime—among others [3]. Still the most important drivers of well-being seem to be considered the income, social connection, and health.

Diener et al. [4] proposed a structure of four groups of concepts that summarize subjective well-being:

1. Positive emotions: glad, strong, proud, determined, interested, etc.
2. Negative emotions: worried, sad, guilty, insecure, angry, etc.
3. Satisfaction of life: satisfaction, fulfillment, sense, achievement, aims, etc.
4. Domain satisfaction: family, career, health, financial status, living conditions, etc. [4].

Well-being develops individually and depends on the attitude individuals evaluate their lives. The psychological aspect of well-being has important repercussions on self-esteem and self-confidence and has a wide range of consequences for how a person deals with society and life. In the last 20 years, psychologists have had a constant regard of self-esteem as a significant psychological predictor for health and quality of life. An important number of studies has linked the self-esteem concept with a wide range of topics from violence and aggression [5] to life satisfaction [6], moderated by age, gender or ethnicity.

Regarding the relationship between self-esteem and body image perception, studies have revealed a preference for Caucasian female samples confronted with Western cultural patterns.

A possible explanation is the unconscious association between feminine beauty and tall, slender figures with Caucasian skin promoted on catwalks. In 2007, a very inspired New York University Ph.D. student counted every single model on the runway, and of the 677 models that were hired, only 27, or less than 4%, were non-white [7].

## 2. Body image: a constant stressor

Physical appearance is one of the first individual characteristics noticed by others and has an important impact on social interactions. Appearance in general and body image in particular have become very important constructs in contemporary Western societies [8]. Body image is not just a cognitive construct, but also a reflection of attitudes and interactions with others. The tendency to link physical attractiveness with positive personal qualities has become a cultural stereotype, not only in western culture, but also globally. The image is powerful, but also superficial, and we are all over surrounded by images. The avalanche of perfect bodies in mass media, advertising, and social media is burdensome to the subconscious, causing people to accept that “what is beautiful is good” with physical attractiveness often being linked with success.

Physical appearance was far less important in earlier times. The ancient Greek ideal was “kalokagathia” —a man refined in mind and body: Physical beauty (kalos) was acquired by exercising in the palestra, practicing agonistic disciplines, while the intellectual and spiritual goodness (agathos) were refined by practicing music, song, dance, rhetoric, and philosophy [9]. In a Hymn to Hygieia (V or VI century BC), it was said that “To have good health is the best for a mortal./Second is to be born handsome in appearance.” The link between health and beauty trespasses the centuries through the medieval age. Despite the tones of pink flash painted by Rubens (1577-1640), depicting the presumptive beauty ideal of the epoch, some studies have suggested that a small waist was actually a symbol of feminine beauty, health and fertility. Singh et al, after examining over 7000 documents containing prose, poetry, and drama references to women’s physical appearance in XV-XVII century, concluded that “the marker of health and fertility—a small waist—has always been an invariant symbol of feminine beauty” [10], not only in the European countries, but also in the Indian and Chinese cultural spaces [17].

In the middle of the nineteenth century, society admired overweight people. Generally, those in the lower socioeconomic classes would not be overweight due to physical work, walking as their primary form of transportation, and lack of quantity or quality of food. On a contrary, the upper socioeconomic classes viewed excess weight as a sign of success and prosperity. Men of robust proportions were often thought to have correspondingly large bank accounts. As a woman became older, she was almost expected to have a larger figure and extra weight was connected to successful motherhood [11]. Yet, in a very short amount of time, a full figure changed from ideal to unattractive. At the turn of a century, the small waist was again appreciated, and roundness was out of fashion. The twentieth century debuted with new beauty standards for women: a slender, graceful, and healthful silhouette was promoted in motion pictures, on stages, post cards, and illustration.

In present times, the personal physical image is a mean of gaining a distinct place in the real or virtual social environment. In order to achieve this status, investments in body appearance (cosmetics products and procedures, piercing and tattoos, plastic surgeries, sportive material and equipment, etc.) have notably increased for women and men as well.

As they grow up, children are building a picture or image of themselves. This image develops through the things that they can or cannot do and by how other people see them. Poor opinion of our body can cause low self-esteem and self-confidence. An important contribution in constructing the youth's body image has the media. Constantly, watching "perfect" bodies can feed their insecurities over attractiveness and weight. Studies show that idealized body image contributes to eating disorders as anorexia nervosa or bulimia, steroid use, protein supplements [12] and even plastic surgery.

Before and in parallel with formal education, children acquire life habits in family, tending to adopt the example of their parents. Therefore, parents have an important responsibility in promoting a healthy lifestyle in family and thereby giving a good example to their children. The effect of family life style is tracking more than one generation. In a similar way, overweight and obesity tend to run in families. There are 50% chances for a child of being overweight if one parent is overweight or obese, and if both of parents have weight problems the chances will increase to 80%.

During adolescence girls, more than boys, have particular concerns about weight, body shape, and self-image. There is scientific evidence that body image is experienced negatively by the majority of women and girls [13]. Many are dissatisfied with their body size and weight because slimness is seen as the desirable standard or the beauty pattern especially for young women. In adulthood, also the underweight is much more prevalent among women compared with men [14].

Disturbed self-perception is usually associated with preoccupation, insecure attitude or seeking reassurance in peer's opinion. An explanation for this insecurity is the media and fashion industry's controversial promotion of underweight models and unrealistic imagery, which in time created the Western cultural pattern. The question which arises is how could this post-modern society to overcome the twenty-first century frustration, depressions, anxieties, and psychoses when natural beauty has been annulated by botox's dictatorship [15], the cult of anorexia and emaciated super models?

Media prizes way ahead the relationship between health and beauty than the relationship between health and well-being. Health standards have changed with culture's definition of the attractive figure [16]. The manipulative use of technology in advertising creates unrealistic images of ultra-thin women bodies and muscular, fit males. In the same time, the contemporary society creates a perfect paradox promoting beside those idealized bodies personifying everlasting youth and beauty, a physical effortless life style in a culture of abundance.

### **3. Body image and subjective well-being**

In my research, I have found a significant correlation between self-body image perception and self-esteem, mediated by weight and subsequent by fat deposits. Results indicates a consistent

statistically significant correlation between body mass index (BMI) and body dissatisfaction ( $r(158) = 0.56$ ,  $p < 0.0005$ ), with a prevalence of 79% of body dissatisfaction on young women [17]. Even 87.7% of the subjects had a BMI that place them in normal and underweight category, most of them, 66% wanted to lose weight, for an ideal, slimmer silhouette. I found as well a significant negative correlation between body image dissatisfaction and self-esteem; the higher the dissatisfaction, the lower the self-esteem:  $r(158) = 0.56$ ,  $p < 0.0005$  and also a significant correlation between health perception and self-esteem ( $r = 0.36$ ;  $p < 0.005$ ). Health perception and self-esteem are variables incorporated in subjective well-being concept.

These data confirm the thesis that landmarks that society promotes are very severe for most girls and young women and put them in a position of inferiority, repercussions on self-esteem and self-confidence. These conclusions are confirmed by others studies' results investigating women samples, generally students, from divers cultural and ethnic samples. Jaworowska and Bazylak have found in a sample of Polish female students almost the same percentage (65.6%) of body dissatisfaction [18].

In Brazil, women seem to be more indulgent with their appearance, whereas the prevalence of dissatisfaction reported was 47.3% [19]. Among a Pakistani students, sample body dissatisfaction was complete: 45.6% of the respondents perceived their self-body as too heavy, while 54.4% perceived it as too thin [20]. In a different cultural environment, in Saudi Arabia, among a group of young female students aged 21.02 ( $\pm 1.48$  SD) with a BMI mean value of 22.79 ( $\pm 4.71$  SD) 26.4% reported to be satisfied, 18.6% perceived self-body as too thin, while 55% perceived as being too heavy and wanted to lose weight [21]. These results confirmed the percentage obtained in my study: 21% satisfied, 13% wanted to gain weight, and 66% wanted to lose weight.

There are scientific studies, which are linking women's body dissatisfaction and low self-esteem for physical appearance [22]. This perception can have repercussions over lower self-esteem especially in teenagers and emergent adults, who are still on the education period, but right before important life choices as a working place or a life partner. A systematic review concluded that control weight and behavioral interventions could be successful by boosting self-esteem and increasing satisfaction with body areas too [23].

Speaking about the subjective young women's body image perception, we conclude that it surpass the normal anthropometrical references regarding average body mass. Under the social and cultural patterns pressure, a majority of women are not satisfied with their body shape regardless the BMI values and identifies their ideal body with a thinner version. Even underweight persons are willing to lose weight in order to "over adapt" to an expected physical attractiveness standard. The normality for women under 25 years of age seems to be a constant preoccupation for losing weight and an ultrathin body is their beauty ideal.

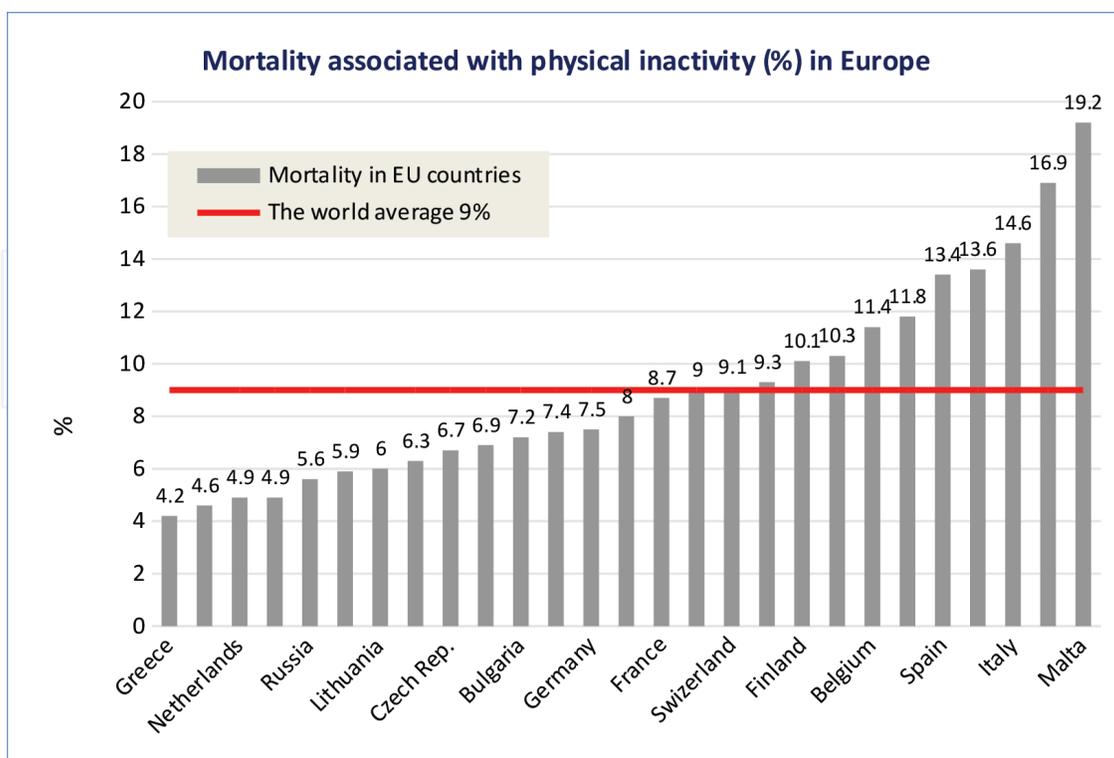
By prizing women's physical attractiveness, western society encourages them to evaluate their social value in terms of image and also perpetuates this societal objectification through continuous cultural scrutiny, the strengthening of negative stereotypes and prejudices against overweight people. Among women, social and cultural context shape a self-critical orientation toward their physical appearance that is manifested in certain comparison tendencies associated with negative self-body perception [24], anxiety, eating disorders, social reluctance, and depression.

Integrating physical and health education in overweight preventative strategies would have effect in reducing the occurrence of physical and emotional disorders and co-morbidities associated with these later, over the lifetime and could offer an alternative to this eternal and quasi-globalized body dissatisfaction.

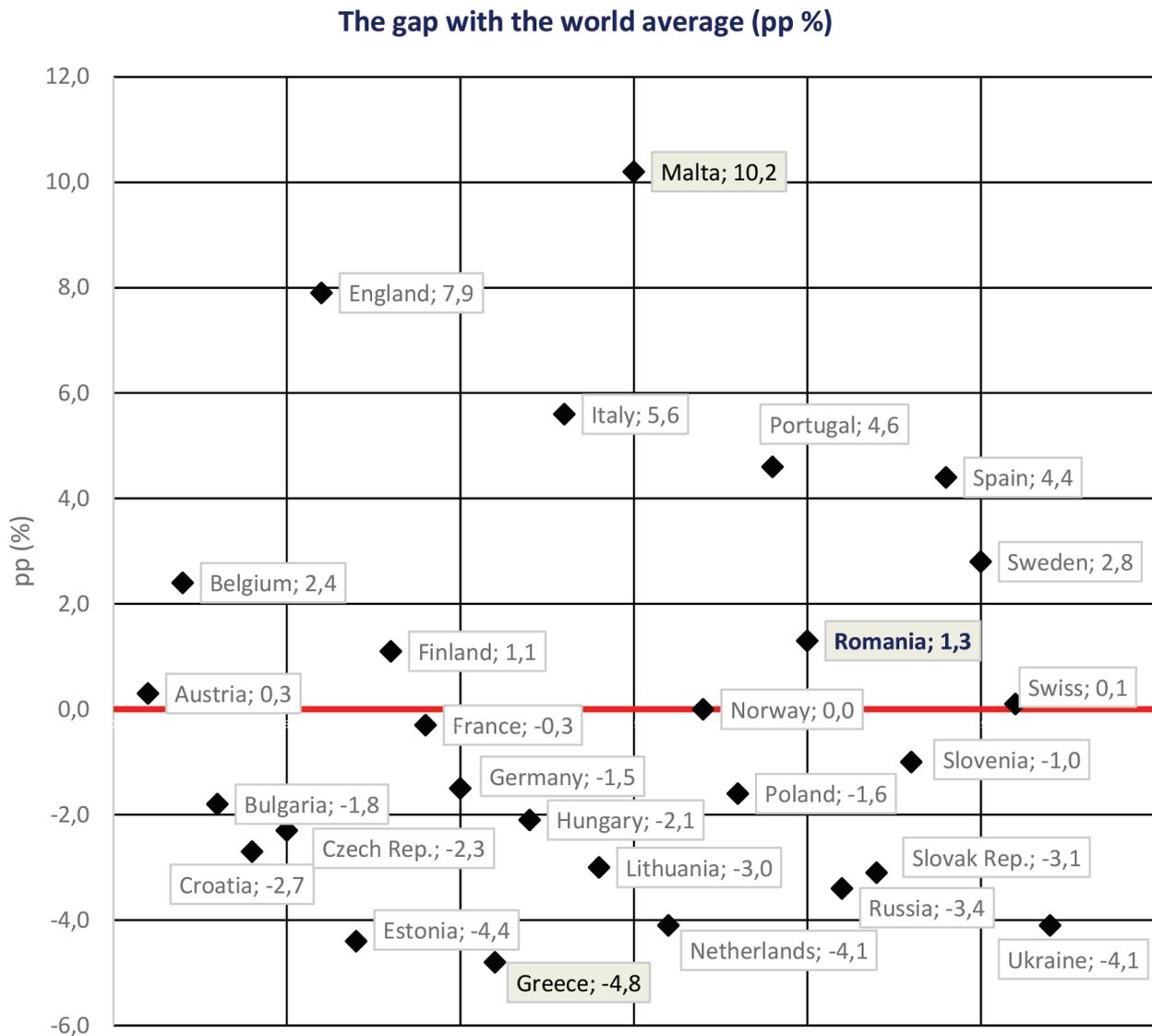
#### 4. Physical inactivity

If 5 years ago we were worried because physical activity among European children tends to drop significantly between the ages of 11 and 15 years and only 20% of them exercise regularly, nowadays it is certain that physical inactivity accounts for more than 5 million deaths each year globally [25]. The estimated proportion of mortality due to physical inactivity ranges from a high of 19% in Malta to 1% in Bangladesh. Self-reported physical activity levels vary substantially around the world as well, with six countries reporting 90% or more of the adult population reaching the 150 min/week recommended by the World Health Organization and 16 countries reporting 40% or less of the population meeting the physical activity recommendation [26].

The average percentage of mortality due to physical inactivity is estimated to 9% globally. The European average is equal with the calculated range of 9% worldwide, but there are important differences between the lowest and the highest values of European countries in estimated proportions of mortality due to lack of physical activity, as could be seen in the following graphs (**Figures 1 and 2**). Observing data distribution is hard to discern a pattern; countries



**Figure 1.** Mortality associated with physical inactivity (%) in Europe.



**Figure 2.** Mortality associated with physical inactivity (%) in Europe comparing with world average.

from same geographical region, with same economical status have different ranking. Greece and Estonia have the best ranking, while Malta and England are the European countries with the highest percentage of death due physical inactivity.

According to a report from the Organization for Economic Cooperation and Development (OECD) entitled "Health at a Glance: Europe 2012," obesity in Europe has more than doubled over the past 20 years in most EU countries for which data were available. In addition, the report explains that physical activity among European children tends to drop significantly between the ages of 11 and 15 years. Only 20% of children have exercised regularly in 2012 [27], and if the tendency was correctly estimated, in 2017, less European children are involved in regularly formal and informal physical activities and more have a precarious weight status. Physical activity includes all activities which involve bodily movement and are done as part of playing, working, active transportation, house chores, exercise, and recreational activities. Formal physical activities are planned, structured, repetitive, and aiming

the improvement or maintenance of one or more components of physical fitness. Whether is about physical education, exercise or training, the main point is the balance between calories intake and energy expenditure.

The globalization of overweight and obesity, the acute perception of being stressed most or all the time, the sedentary life style and the co-morbidities of those behaviors might be the most comun consequences for the new millenium generation and their families. Education and healthcare systems are attempting a weak counterattack to this aggressive epidemic and against the consumption culture which pushes the younger generation toward a greedy lethargy. It is striking that in the United Kingdom between about 1942 and 1947, when very strict rationing was imposed as a result of the Second World War, the British people were probably better nourished than ever before or after. Severe restrictions were put on each family, particularly regarding the amount of meat, butter, eggs, edible fat and other foods of animal origin in their diets. Fruits and vegetables were not rationed. The population benefited nutritionally and mortality rates from diabetes and heart disease were significantly lowered [44].

The Internet is already taking a big share of our time, keeping us seated and staring many long hours (days if we are talking about gamers) at a screen. Everyone fathoms what an important change the Internet had made in their communication, learning, and behaving patterns. We are talking already about a young generation surfing attitude related to learning and working and also about internet addiction. These constant exposures to the Internet have shaped how they search for and acquire information, how they learn and how they socially interact. In a short time, they will not need to memorize any more information, because everything will be accessible in one click. In the same time, it will be a challenge to act without technological backup. Handwriting will be as rare as a handmade lace and calligraphy will became an art like sculpture or ballet.

Making a small imagination, exercise we can figure out how the new technology will affect our daily lives. People already work, shop, pay taxes and entertain themselves online, spending less time for transportation and having less interpersonal interactions. For holydays, virtual travels in a personal paradise is already a project and feeling the breeze or a friend's handshake without leaving the room is an achievable dream. Domestic robots for housekeeping and easy conversations will be available on the Internet (where else?).

Meanwhile, because of Internet addiction, people could suffer a retrogression of imagination, memory, and discernment. The sedentary behavior, the indoor living in absence of sunlight and fresh air, in addition to unhealthy food will transform most adolescents into flaccid, wick adults with narrow shoulders, underdeveloped lungs, limited physical effort possibilities, but really quick in typing. This is not the most optimistic scenario, but in some points is a possible one [42].

The obsessive informatic and communication technology use results in a progressive physical skills decay and less social interaction. Today, when the inteligent phones are shaping our daily life, our bodies are also shaped by bending the neck and back in a "tapping position." Among the technology use consequences could be mentioned the posterior musculature atrophy because the prolonged sitting position and the postural deficiencies associated

with “text neck.” Bending the head forward and down in a hunched position over a device for typing or gaming causes a higher pressure in the spine. This pressure increases with every degree of head flexing; at 45°, the head exerts 22.5 kg comparing with 5.5 kg in normal position [28]. Typing and computer work could cause pain and stiffness in the wrist and fingers of preferred hand. A prolonged mouse using for example could cause carpal tunnel syndrome (CTS). The swollen flexor tendons of the hand compress the median nerve in the wrist and may result in tingling, numbness, weakness, or pain in the fingers or hand. Women are three times more likely to experience CTS than men. This may be because women and obvious children generally have smaller wrists, creating a tighter space for nerves and muscles.

Poor posture can have wide-ranging detrimental effects on our body, the most common being: shoulder, neck, and back pain, degenerative disc diseases, kyphosis, tension headache, restricted breathing, depression, increased stress, and diminished levels of energy [29]. A hunch posture compresses the internal organs restricting their function and making the body appear heavier.

A bad posture has not only physical consequences, but psychological also: an upright, open, expansive posture is associated with power, self-confidence, and good mood. When sitting in a collapsed position and looking downward to a smart phone or other screen device, participants in a study found it much easier to recall hopeless, helpless, powerless, and negative memories, than empowering, positive memories [30].

Constant playing of console and computer games has an influence in reducing the inhibition level of children. They are more self-confident and eager to experience risky situation, similar with virtual characters. This opinion is supported by a study about potential signals for addictive behavior, which reveals that inhibitory control deficit (similar to impulsivity) was significantly related to high intercept levels of both video gaming and high calories and low nutrients intake. Boys exhibited higher levels of both video gaming and HCLN intake than girls [31].

This lower level of self-protection instinct or maybe a rush for excitement generates a new approach in physical activities, especially in urban locations. Leisure time activities have their own place in this contemporaneous trend and are in tight relationship with web cultural elements, exploring new spaces and possibilities. The architectural structures and elements are used by rollers, skate-boarders, bikers, and free runners who use their own body for creating acrobatic, original but also risky movements, and tricks.

## **5. The benefits of physical activities on subjective well-being**

Physical activity is fundamentally important for the maintenance of life functions, and it is an essential part of having a healthy lifestyle, as it has been proven to have a protective role against the development of cardiovascular disease, metabolic disorders, skeletal disorders, and even mental illness.

Researchers and physicians, and even non-specialists in physical education and sport domain recommend regular physical exercises for their substantial and sustainable health benefits.

Practical interventions and scientific studies demonstrate without any doubt the potential positive effect for exercise to improve both physical and psychological well-being. In the psychological well-being category, we can frame the perceptions, opinions and feelings related to body image, health condition, self-esteem, etc., most of them improvable through physical activity.

Scientific evidence suggests that exercise enjoyment is positively associated with body image change. A pleasant and supportive work climate will help people to take part enthusiastically in fitness, aerobic, dance or climbing classes. Working in a friendly group, watching other people exercising, receiving constructive feedback and assistance could motivate people to join a physical activity.

Investigating the potential of music in managing health and well-being is a new research approach, considering human beings holistically, as bio-cultural persons. Music can provide a resource for enhancing well-being, understood as the positive flourishing of identity, relationship and community, regardless of “objective” health status [32]. Among the most popular physical activities, using music support is aerobic gymnastics with its variants (zumba, taekbo, step aerobics, etc.) dance therapy, Pilates or yoga. Non-competitive aerobic gymnastics’ goal is to produce the optimal function of the human body, redefining body image, individual and social identities and facilitate social interaction. It offers a large variety of moves and multiple possibilities for structuring the motion sequences by combining various elements and positions. The variety of technical elements, which are permanently combined in a multitude of dynamic structures, combinations, compositions, rhythms and various choreographies, usually develop in conjunction with a dynamic musical background.

An inspired choice of musical pieces adds an esthetic component to the physical benefit. A controversy regarding the influence of music over body and the overall well-being is provided by Dr. Masaru Emoto’s water experiments. His experiments revealed the responsive nature of water to human emotions and music. Since water in human body takes 70% is more likely that music has an effect on us, therefore a good music selection could increase the physical activity effect and restore body well-being. Beneficial effects of music listening on subjective well-being and physical health outside clinical contexts have been reported by a number of reputed researchers also [33–35].

Dance therapy is an alternative way to cure people emotionally and mentally through movement, appealing the sensorial motor system. Using different dance movement dynamics, practitioners become aware themselves of their emotional, mental, and physical immediacy. The philosophy of this therapy is to consider that we are in constant change and adaptation, and the movement is the very thing that reflects this process. The practitioners can observe the body shape or some movement patterns, but the dancer should become aware about his own physical, mental, or emotional malaise. It is this self-awareness that brings acceptance, change and healing and helps them improve their psychic and somatic consciousness of their body image.

In South America, the dance ritually use for healing is a heritage from the pre Columbian ancestors, having important spiritual connotations. In Europe, dance therapy is a practice, with scientific reports, used in improving the mental representations linked to body image

among obese patients. The authors have drawn encouraging conclusions: “Obese patients enrolled in the dance therapy workshop displayed a significant improvement in health-related quality of life ( $p < 0.03$ ), body consciousness ( $p < 0.001$ ), and mental representations linked to self-body image ( $p < 0.001$ )” [36]. Dance therapy is turned out to be a useful means for Parkinson patients to alleviate pain and help them maintain control over increasingly uncooperative bodies.

Dance and movement have encouraging results in emotional disorders caused by domestic violence. In those cases, the reconstruction of own body image is crucial for victims emotional healing. The poor self-image results from the constant critical and negative reflection in their partner abusive behavior. Someone constantly worried about their safety or depressed, instinctively adopts a collapsed posture, tends to look smaller and powerless, and having a defensive attitude. Dance and movement therapy enable the domestic abuse victims to shape a better self-image perception and to experience stronger poses. Our body perception seems to influence our mind and our mind further change our attitude.

A possibility to mediate the I-Generation fascination for technology and the beneficial effects of physical activity are the exergames. The energy expenditure from exergaming is similar to skipping, walking, or jogging on a treadmill [37] being preferred by children who are already overweight or obese. The main critic against using these means in replacing traditional physical activities is that turns over more energy than sedentary gaming, but not as much as authentic sports, are mainly indoor activities and over time children lose interest in exergaming due to the repetitive and predictable nature of some of the games [38]. Another use of intelligent phones, which stimulates the people interest for physical activities, can be recording their heart rate, step counts and energy expenditure, among other things, demonstrating increases in physical activity and fitness level.

Urban sports have the potential to appeal mainly to teenagers in the 14–18 age group, who often have little interest in more structured team sports activities. They can contribute to skill building, self-confidence, social inclusion, and healthy active lifestyles. Urban sports and leisure are parts of city’s young generation culture. They are a kind of adaptation to the build environment in which most of us are living. First of all inline skates, skateboards and bikes are vehicles and are used for transportation in the urban space. At least from this point of view, they differ fundamentally from other sports like football, rugby or cross country which suppose the field idea, a natural surface, or an unmodified soil, with a natural texture.

The spectacular character of tricks and series of acrobatic elements and the speed of performing requires an impressive volume of practice. The training develops all types of physical skills and especially balance, spatial awareness in unusual conditions, a good reaction and execution speed. In skate parks, the beginners practice with advanced people and they learn together and one from another. Instead of explanations, they use the mobile phone to video recorder the drills and the internet connection for instant sharing the hits. The young people communities formed by common interests, sharing experiences and knowledge in a genuine active learning process, have a certain social and cultural value.

The high speed, the use of IT applications, and most of the time a high level of adrenaline are, in my opinion, the three main factors that define the spirit of this new generation physical

activities. Urban sports and leisure are mainly outdoors activities, during which air, sunlight and (sometimes) water can act to harden and strengthen the immunity system and body vigor. Beside these positive aspects, the risk of injuries especially in a lower level of self-protection instinct conditions is higher than in traditional physical activities.

## 6. Motives and possible solution

### 6.1. Man has to be encourage to live

*“Man is the only animal who has to be encouraged to live”* as Nietzsche said in the nineteenth century. The extensive promotion and use of pharmaceutical products permit the avoidance of any physical pain or stress, inducing anxiety and reluctance against effort or suffering in physical challenges. People lose the capacity to invest hard work for a postpone reward and to enjoy the success. The balance between effort and joy perishes in a insensable, boring oscillation [39]. As a consequence people might sink into a greedy lethargy, fitting in the large frame of the consumerism culture. Due the effort and sometimes the pain suffered while exercising, motivation for physical effort is an important issue in attracting and maintaining young people involved in physical activities. On the interpersonal level, the teacher should maintain a dialogue with performers; this ensures awareness, cognitive achievement, and commitment [17]. The means of pedagogical communication applied in physical education classes like giving feedback related to tasks; recognition of accomplishments; encouragement and support in difficult moments could have good results with students of all ages. These means of communication and motivation have also a beneficial effect on youngster's confidence in their own skills and strengths and self-esteem for physical appearance.

### 6.2. Exercise, stress management and diet can prevent 90% of chronic illness

In the past years of twenty-first century, mounting research has shown how lifestyle changes, including exercise, stress management, and diet can prevent almost 90% of chronic illnesses in our society and improve the quality of life and well-being. Promoting physical activity as a well-being component in schools and universities targets the enhancement of vigor, resilience, employment and social outcomes for graduates and communities. Further, health is conditioned by our own habits and behavior and the accumulation of positive and negative effects on health and well-being is for over the life-course. Therefore, cognitive acquisition related to a healthy and active lifestyle would be a useful support for physical activity.

Improved well-being in youth should contribute to reducing school and college/university dropout on short term, strengthening personal confidence and cognitive function, improving educational efforts and enhancing employability on long term. The education level is correlated with health; educated individuals report higher sense of control which conducts to a better health.

Integrating physical and health education in preventative strategies would have a real effect in reducing the occurrence of physical and mental disorders and co-morbidities associated

with these later, over the life time. Lasting acquisition of behavior is through social learning and a team sport or a walking, yoga or jogging group could be a proper social context for learning and eventually behavior and attitude changes.

### **6.3. “Adds are propaganda too” (Konrad Lorincz – Nobel Prize laureate)**

Often youth and children are the targets of advertising for high-calorie, high-fat snacks, and sugary drinks. The goal of these ads is to sway people to buy these high-calorie foods, and often they do. Children are easily tempted by instantaneous pleasures, for example, sweets, candies or chocolate bars, and they are not necessarily in a position to balance their short-term satisfaction versus the long-term consequences. Companies are exploiting this lack of self-control and discernment by the way they provide information to consumers, and for children are not easy to understand the permeable boundaries between education, advertising, and entertainment. Research shows that exposure to food advertisements produces significant increases in calorie intake in all children and the increase is largest in obese children [40].

As a biological entity, the body has a functional role, but as a social entity it conveys important messages about social status, personality or cultural group membership. For an overweight person, the awareness of his or her body size and volumen will determine a social reluctance, timidity, and low self-confidence reflected in her/his posture, attitudes and non-verbal communication (gesture, body language, tone of voice). Beside, the sociocultural patterns associate fatness with laziness and overweight persons are easily labeled as indolent, careless or greedy. The isolation, emotional insecurity or being bullied sometimes can induce anxiety or even depression symptoms.

Children and young people are often afraid they will be blamed or ridiculed because of their weight and size. Therefore, a safe, non-threatening approach to tackling overweight and obesity in a productive pedagogical climate is the recommended inclusive method. Studies proved that in a positive emotional situation, information is easier memorized, and on the contrary, a stressful situation (fear, excessive effort, tension) gets along inhibition and forgetfulness. Tension, anxiety or fatigue can cause a breakdown of physical skills and increase the risk of injury [45]. The students' involvement in physical tasks is gained by showing concern for their executions; giving them positive or negative feedback as appropriate, making suggestions to solve difficulties, listening actively and making sure that recommendations have been understood.

### **6.4. Acceptance and cooperation in teams and groups**

Being part of a supportive team is a good motivator for an overweight or just sedentary person. Building a team is a process that starts at the individual level, and the first step is accepting the idea that everyone has a different set of values, skills, and needs. While individual qualities and skills will be used for team goals, each member will receive from the team honest feedback on which he or she can assess his/her strengths and weaknesses. Team and its spirit are built on interpersonal relationships and through a communication based on respect and trust among teammates. The team leader, through his attitude and style, will determine the climate in which these relations will be favored or hampered [41].

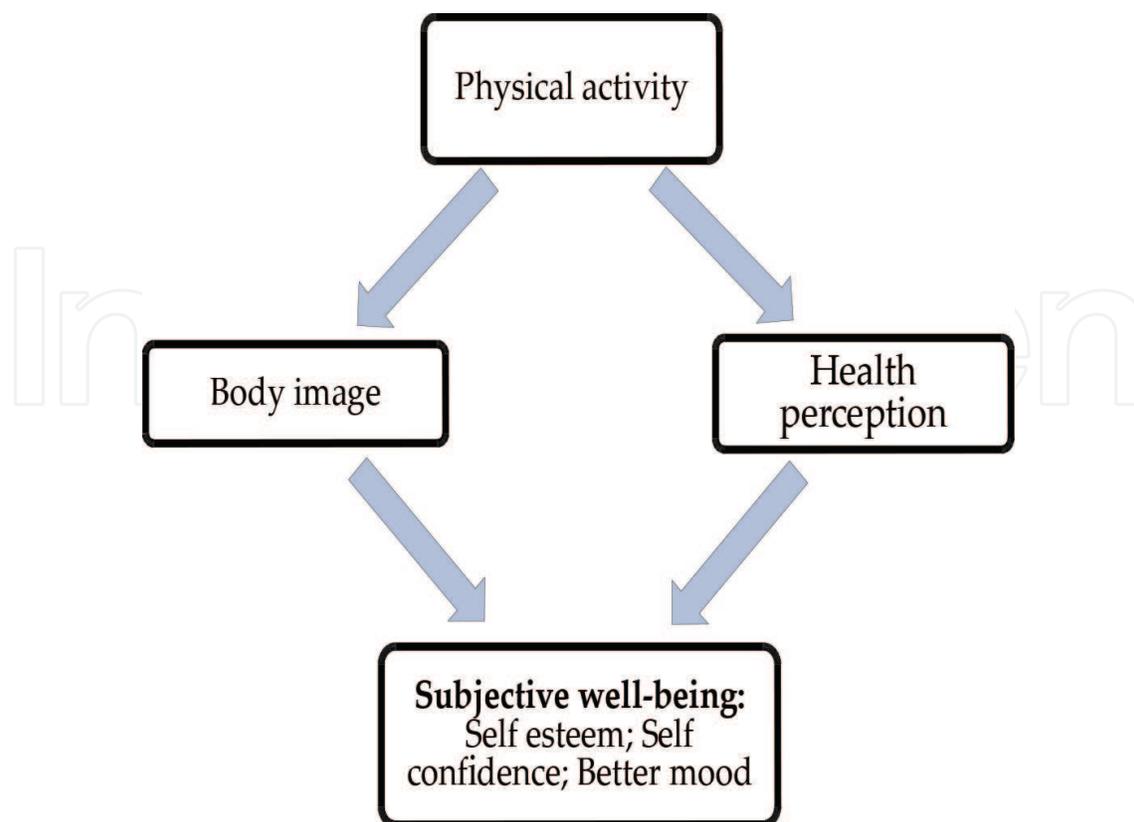
Experiences shared by team members resonate differently in each of their consciences. If the observations, thoughts, and feelings that these experiences determine will remain to an individual level, the team will remain a sum of individuals [43]. Sharing with others the effects of what common experience causes at intimate level, helps creating interpersonal relationships, mutual understanding, and finally embracing the idea of acceptance and cooperation. Supportive relationships diminish the exposure to stress. For individuals, a physical activity in a group or team is an entertaining way to achieve knowledge and social skills as an active form of learning, especially for a generation which is set on “fast-forward” pattern.

An increased number of adequate physical activities, spending time outdoors, healthy lifestyle programs, or cutting out unhealthy foods on children meals are a few examples of remedial measures taken in schools and families. Other critical changes could be part of the solution for a better active life:

- Take care of children to spend a maximum of 2 h of screen activities especially if they are in primary school.
- Parents are responsible for adopting a healthier lifestyle, being aware of personal example they give their sons and daughters.
- Encourage the youngsters to set and assume realistic goals and motivate them to manage their weight by combining diet and physical activities.
- Develop critical thinking which enable young people to choose exercises and practice methods suited to their age and personal goals.
- Enhance individuals understanding of their own and others corporeality.
- Recommend ergonomically suitable physical activities for overweight and obese persons.
- Establish a good relationship between effort and recovery and between stress and leisure.
- Make clear that individuals are responsible for their own task success or failure [45].

## 7. Conclusions

Changes in objective indices of physical fitness play a minor role in body image change, whereas improvements in perceived fitness and self-efficacy appear to be important mechanisms by which exercise improves body image. There is no direct correlation between objective progress in fitness level and the subjective perception of being fit or more functionally efficient. Paradoxically shifting the focus away from appearance and emphasizing the physical and mental benefits of exercise, we can inspire our students with self-body acceptance, self-confidence and a better self-esteem. Body image and health perception are intermediate variables between physical activity and subjective well-being improvement [41] as next model shows:



Physical education may contribute more to young people's self-image acceptance if lessons are planned and delivered with this specific goal in mind. Having this intention and confident in the positive effect of physical activity on body image, I'll make a few recommendations with practical and managerial use for physical and health education, exercising, and other physical activities related to quality of life and well-being.

- Emphasize that the accumulation of positive and negative effects on health and well-being is for over the life-course and investing in prevention reduces personal and social health costs.
- Provide all young people, of all sizes, with meaningful, relevant and positive physical education and physical experiences and eventually deliver a healthy, valuable working force for society.
- Provide a safe exercising and emotionally environment for all practitioners.
- In improving body image, the perception of how fit or functionally efficient someone becomes is more important than the objective level of fitness. Body image is a subjective parameter and depends on feelings, beliefs, and the psychological context. By shifting the focus away from appearance and emphasizing the physical, mental, and social benefits of exercise, we can inspire practitioners with self-body acceptance, self-confidence, and improved self-esteem.

- There are positive changes in perceptions of body image when exercise is performed on more days per week and at moderate intensity. The exercise chosen depends on personality, preferences, and personal goals but the effect on improvements in body image is the same.
- Enjoyment of exercise is positively associated with changes in perceptions of body image. Teachers and trainers can enhance enjoyment by creating a good working environment, by adding variety to workouts, and by ensuring that fitness programs are physically challenging and respect the subject's preferences and personal goals.
- Physical activities program leaders should have a supporting and encouraging attitude and motivate practitioners for physical effort. The satisfaction gained from exercising can eventually become a motivation in itself, especially when the effort has positive effects on enhancing perceptions of body shape and self-image [41].

Many references I made in this chapter are about children and young people, having in mind that for an obese adult the chances to attain a normal weight are less than 1%. Also overweight children starting primary school have low odds in terms of having a normal BMI in future, in that 80% of them will become overweight and end up as obese teenagers and adults. In present days, when the daily pursuits of our young generation are mainly sedentary and the obesity is widely distributed, too, to spend time playing a sport could bring health and freshness in their life and the physical effort could provide enough satisfaction, in order to become an intrinsic motivation [45]. A good strategy against the sedentary and greedy life style, which tempts us nowadays, is promoting physical activities in preschools, schools, universities and among adults through active transportation (walking, cycling), spending time or exercising outdoors as leisure time, or joining sport competitions in a proper environment.

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