The view of pupils of the first stage on primary schools on physical attractiveness

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Abstract

A man since his birth is formed by society. It is a process of mutual acquaintance and building new relationships. With whom we enter into new relationship often depends on how we look at other people. It is up to every one whether to favour the personal (mental) or physical attractiveness of others when selecting friends and partners. The aim of this paper is to present the results of the research, which examines the view of children to physical attractiveness. The data were obtained through a questionnaire survey. The research took place at primary schools in the Olomouc region. The selected survey respondents were pupils in primary schools in the age range 9–11. This paper is a part of the wider context of the project currently being conducted in the Czech Republic at the Faculty of Education of the Palacky University in Olomouc IGA_PdF_2017_002.

Keywords: Primary school, children, physical attractiveness, body mass index, obesity.

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1. Introduction

‘Is my weight OK?’ It is a simple question which most people put sometimes in their life. The answer they received from someone else was that they are slim while others evaluated them as a fat person. Where is the truth? And how we evaluate ourselves?

Many people give more importance not only to their weight but also to their physical attractiveness. Physical attractiveness includes the height, weight, symmetry of face and the whole body, proportionality, postural habits, waist-to-hip ratio, neatness and body movement particularities of a person. However, there are two aspects that need to be taken into account: physical appearance and health. This paper deals with how children evaluate their physical attractiveness and especially how they look at their weight.

2. Theoretical background

As mentioned above, body weight means also physical attraction. Adults who are overweight or obese often consider themselves physically unattractive. Nevertheless, the number of obese people is rising worldwide. According to the World Health Organization (WHO), it is estimated that the number of obese and overweight people is now higher than the number of hungry people worldwide. This pandemic of obesity also leads to an increase in studies dealing with issues of overweight and obesity. Obesity is a multi-factorial chronic disease caused by the interaction of genetic pre-dispositions with environmental factors. Obesity leads to an increased risk of a number of serious illnesses that can significantly shorten the life (Hainerová, 2009; Marinov, Kytnarova & Lebl, 2014).

Unfortunately, obesity has become a global epidemic and a growing trend among children and youth aged 2–19. Overweight and obesity in children are perceived by parents as an aesthetic problem. However, child obesity is a major health problem, as up to 80% continues in adulthood obesity. Childhood obesity affects not only the physical and mental health of children but also affects their health in adulthood, which can significantly affect the quality of life or reduce its average length. Many health complications in adulthood are not related to the current weight but rather to the weight at the time of adolescence (Hainerova, 2009; Ling, King, Speck, Kim & Wu, 2014; Marinov et al., 2014).

It has long been assumed that the complications of obesity are not related to children. However, the complications associated with obesity of varying severity are already seen in children and adolescents (Hainerova, 2009). Obesity is a part of the so-called metabolic syndrome, which includes increased blood lipid levels (dyslipidemia), high blood pressure (hypertension), increased insulin resistance and pre-diabetes. Previously, the development of metabolic syndrome and related diseases was considered as a problem of an older age, but nowadays the onset of these diseases has shifted to lower age groups. Metabolic syndrome may already occur in obese juveniles. Child obesity can lead to impaired glucose tolerance, cardiovascular and orthopedic complications. In severe forms of obesity, sleep apnea syndrome may occur (Hainerova, 2009; Marinov et al., 2014).

The main source of childhood obesity in the civilised world is the lifestyle of the family. The child is an image of its genes and, above all, the lifestyle of the family. The body reflects the shortcomings and failures of family regimes that lead to imbalance between energy needs and energy supply. The child is fully dependent on the family’s lifestyle (Marinov et al., 2014). Childhood is a crucial moment when one can learn about healthy behaviour and accept changes in his lifestyle (Ling et al., 2014). The whole family can change attitudes and lifestyle to prevent inappropriate eating habits, incorrect relation to food and introduce suitable physical activity. In this way, the family develops a healthy lifestyle and nutritional habits since very early childhood (Marinov et al., 2014).

Overweight and obesity are becoming increasingly prevalent among children. This is also caused by the fact that many children cannot eat regularly, consume unhealthy food and sweet drinks. Children also lack sports, active movement and live a sedentary lifestyle, all of which promote the development of not only obesity, but also diseases of the musculo-skeletal system and then enormously a defective
posture occurs in children. Children spend up to 14 hours a week watching TV, videos and playing computer games. Long-term watching of the monitor can also lead to headache, cervical spine disorders, eye disease and the so-called computer vision syndrome (Rehulka, 2011; Strnadlova, 2011).

Children should increase their physical activity not only to reduce overweight and obesity. A child of school age and adolescence should spend at least 60 minutes a day in adequate physical activity. Physical activity also improves physical appearance and posture, has an effect on reducing pre-mature mortality and helps prevent cardiovascular diseases, diabetes and osteoporosis. Even mild physical activity improves the individual’s mood and self-confidence. Significant improvements in health and physical attractiveness can be achieved by having 30 minutes a day of physical activity at moderate intensity, such as a brisk walk at least five days a week. Healthy eating habits associated with exercise have the best effect for good health. In addition, physical activity with the family can enhance family cohesion. In order to increase the interest of children in physical activity, it is important not only to create the conditions for its realisation but also to support and help to strengthen the positive relationship of children with physical activity (Marinov et al., 2014; Parizkova & Lisa, 2007; World Health Organization, 1999).

3. Research

The following are the aims of the research:

– compare and evaluate the relationship between body mass index (BMI) of children and the evaluation of their own physical appearance and attributes (PHY).

Research question:

Do pupils with low and average BMI assess better than obese students?

3.1. Research group

The research group consisted of 110 pupils from lower primary schools (64 girls and 46 boys). The average age of pupils of the research group was 9.67 ± 0.91 years (girls 9.77 ± 0.96, boys 9.54 ± 0.84). The height and weight of children corresponded to the standards for child development (WHO & Department of Nutrition for Health and Development [Coordinating team: Mercedes de Onis ...], 2006). None of the children showed disability. The research was authorised by the Ethical Committee of the Faculty of Education Palacky University in Olomouc. Legal representatives (children’s parents) signed confirmation about participation in the project. The obtained data were evaluated anonymously. The questions of the children were answered in a way adequate for their age. During testing, children could pause or terminate their participation at any time. Data were collected within the Project IGA_PdF_2017_002. Data collection were carried out from March to May 2017.

3.2. Used research methods and techniques

Data from the evaluation of the physical appearance were received by means of the questionnaire Piers-Harris Children’s Self-Concept Scale 2 (Piers & Herzberg, 2009), which is standardised for children aged 9–18. The scale PHY has 11 items and measures how the child evaluates its appearance and physical capabilities. Based on the received T-score, probands were categorised as above average (≥56T, big satisfaction with his/her appearance and physical capabilities), average (40–55T, balanced self-review of typical child), low (≤39, low self-esteem at the area of physical capabilities) and very low range (≤29T). If the child receives evaluation ≤29T, it means that he/she evaluates itself very negative and can have the feeling that peers do not like him/her. It can mean problems in socialisation in the class.
BMI has been evaluated according to WHO categories. Data about height and weight of children for BMI calculation were obtained from the legal representatives (parents). Probands were divided based on BMI into the following categories: below average (<25 percentile; thin, underweight), average (25–75 percentile) and above average (>75 percentile; overweight, obese).

3.3. Statistic methods

Basic statistical data concerning the research file were expressed by the average and standard deviation. Score for PHY was evaluated based on the currently used methodology (Piers & Herzberg, 2009). The relationship between the level of BMI and PHY was detected by Spearman's correlation coefficient. Differences between categories BMI were detected by Mann–Whitney U-test. The importance of the relation of received variables was determined at $p < 0.05$. Data were processed by means of the software STATISTICA, version 12.0 (StatSoft).

4. Results

This chapter presents the results of the research survey using graphical representation. The aim of the study was to find the relationship between the BMI and children' view on their PHY.

The single charts illustrate how children assess their physical attractiveness in the individual groups created by BMI values.

In each graph, the x-axis shows the individual rating categories of own appearance.

Meaning of individual abbreviations:
cat. 1 (≥56T) = category 1 – above average range (≥56T)
cat. 2 (40T–55T) = category 2 – average range (40–55T)
cat. 3 (≤39T) = category 3 – low range (≤39)
cat. 4 (≤29T) = category 4 – very low range (≤T)

y-axis shows the number of answers in individual categories.

Figure 1. Assessment of own physical attractiveness by children with reduced weight
Figure 1 shows how their own physical appearance evaluates children with reduced weight. A total of 23 children were enrolled in the reduced weight category. The chart shows that most children rate their own physical appearance as average. There are others who express both positive and negative assessments of their own appearance. No child with reduced weight was completely negative.

![BMI - Average (25 - 75)](image)

**Figure 2. Assessment of own physical attractiveness by children with normal weight**

Figure 2 illustrates how children with normal or average weight evaluate their own physical appearance. In total, 53 children were included in the category of children with normal weight. Most children rate their physical appearance and characteristics as average. An interesting finding is that 11 children have a rather low self-confidence in the area of physical appearance and physical strength. Three children even rate their appearance very negatively.

![BMI - Above average (> 75)](image)

**Figure 3. Assessment of own physical attractiveness by overweight and obese children**

Figure 3 shows how overweight or obese children assess their physical attractiveness. A total of 31 children were enrolled in the category of children with increased weight. Again, most children rated their physical attractiveness as average. Only one overweight child evaluated his physical properties as
very negative, while 10 children expressed overall satisfaction with their appearance. These results can be evaluated as positive.

The graph in Figure 4 is a summary of all the results. It compares each category of BMI with the self-assessment of children.

![Figure 4. Summary and comparison of physical attractiveness of all BMI categories](image)

5. Conclusion

Most children in all BMI categories evaluate their physical appearance and attributes as average. These children express both positive and negative evaluations of their own appearance and personal qualities, with positive reviews prevailing over the negative ones. It could be assumed that overweight and obese children will rate their physical appearance worse than those with average and lower BMI. However, this assertion was not confirmed. No relationship was found between BMI values in children and the assessment of their own physical appearance and characteristics (PHY). Children around the age of 9 do not deal with their physical appearance. For a child of this age, worrying about appearance is not so important. Physical attractiveness is more important for children when they are older. This is mostly with the onset of puberty. At this time, children are even more critical of their appearance. This topic is up-to-date and needs to be further explored and dealt with.

References


