

Nutrition-related Media Attitudes of Hungarian Children Training Regularly

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Health-consciousness in everyday lifestyle is of high importance nowadays at most Western societies, but finding the best tool to deliver this message might be challenging to businesses and decision-makers alike. The aim of our research was to evaluate attitudes toward healthy dietary practices and social media use of children completing regular trainings. Our sample contained 146 children (8-17 years) playing basketball regularly at "Rátgéber Basketball Academy" in Hungary, with at least 3 trainings per week and attending competitions during weekends, and carry out compulsory sport activity within the elementary or secondary school schedule. Data was collected using a self-edited questionnaire that contained mostly closed-ended questions alongside a few open-ended questions. Filling the questionnaire was voluntary, and required a parental agreement declaration. Quantitative methods were used to analyse data: descriptive statistics and deductive analysis based on chi-square test, t-test and correspondence-analysis was applied. All analyses were carried out with IBM SPSS 20 software. Not one child in our sample claimed that his dietary practice is explicitly unhealthy. Our results show significant correspondence between the admitted importance of healthy dietary practice and the positive evaluation of one's own nutritional practice. However, our results based on the collected data do not support our assumption that the prevalence of physical activity of children effects the self-claimed perception of nutritional commercials targeted to the age group in question. Likewise, our results based on the collected data do not support our assumption that the prevalence of physical activity of children affects the self-claimed importance of healthy dietary practice among the age group in question. Although our sample was not nationally representative, the inquiry regarding social media use revealed that heavy majority of Hungarian school children own mobile devices with touchscreen and possess account on a social networking site. Regular physical activity is a major tool to establish health-consciousness, especially within young age groups. However, our results show that another important aim would be to raise awareness of the dietary practices within an active lifestyle, and also of the marketing messages that reach children and young adults concerning various nutritional products.

Keywords: health consciousness, health policy, nutrition knowledge

The notions of health awareness and health conscious behavior are appearing as the focus of a growing number of scientific investigations recently. The shift towards preventive and holistic approach in medicine and medical research is in symbiosis with social and behavioral studies exploring the complex factors affecting attitudes to healthy demeanor and a person's role in elaborating his own health status. This personal role in health maintenance is of growing importance as more and more scientific results support the assumption that several types of chronic diseases are caused by life-style characteristics such as unhealthy dietary practices, lack of regular physical activity, and permanent severe stress – all of which could be influenced by altered personal demeanor. The responsibility that needs to be undertaken by the given person (often several years before entering the healthcare system as a patient) is generally a natural path to a happier and better life, technically manifesting in minimizing quality-adjusted life years and also health-related costs.

The concept of health awareness is rooted in the theory of positive psychology. Pikó claims that the research of positive psychology focuses on opportunities for the improvement and correction in personal behavior, analyzing capabilities for successful solutions in adaptation. Positive psychology aims to find scientific-based methods for a well-balanced way of leading life, through a constant improvement of quality of life. Protective factors, such as valuable communal relationships, a supportive net of family and friends, religion and regular physical activity play a major role in the development of a person's health status. Thus health psychology – taking prevention as the leading approach to health-maintaining behavior – should base its hypotheses within the notion of positive psychology, planning researches and aiming for results that shed light on the "returns" of positive attitudes towards life, even if this seems to contradict the illusion of momentary pleasures provided by various types of self-destructive passions (Pikó, 2002). Fundamental aim of positive health psychology is parallel to that of health awareness, as a goal for a human being is to utilize the given natural capabilities of the person and use these advantages to reach a better quality in life (Pikó, 2002).

Focusing on generally healthy practices in life and having an overall conscious attitude to health behavior stays in the center of a healthy life-style – a much needed approach in Eastern-European countries and specifically in Hungary, where the number of the population has been in steady decrease since the early 1980's. Changing the behavior of elderly members of the society is always a great challenge, although the same task may offer more possibilities among younger citizens. Government policy making in pursuit of this goal should consider the following issues: taught materials of elementary school subjects such as biology, physics and chemistry need to focus on personal health while regular sporting activities should be made natural to kids from the youngest age groups. Specific healthy practices should be taught not only in terms of nutrition and dietary routine, but also regarding the use of explicitly unhealthy, additive substances such as alcohol and drugs. Thus it is easy to recognize that any official, nation-wide policy aiming to bring a significant change in the question should be prepared for and also resemble this

complexity in its structure and implementation. Only to list a few, possible effective territories for the execution of such official campaign on health-awareness may be the school canteens, the sport clubs and associations with teams and competitions organized according to age groups, and possibly also the points-of-purchase of tobacco and alcoholic beverages in terms of proper control of purchase.

This complexity has been recognized by various scientific studies in the past. From one approach, factors influencing health-awareness of a household and a family include the household's income, the ownership of the property, the employment status and education level of male household head, the presence of young children in the household, and also the ethnicity of the household (Prasad, Strijnes & Zhang, 2008). Other socioeconomic factors influencing the likelihood of carrying out healthy behaviors could be health locus of control, future salience, and conscious awareness of the influence of lifestyle on health – all of which are related to social class (Wardle & Steptoe, 2003). A Hungarian research finding claims that based on university students' views, components of a healthy lifestyle are regular physical activity, optimal diet consisting of proper amount of vegetables, fruits and other nutritious components, fresh air, avoidance of stress, recreation, proper sleeping and regularity in generally all aspects of life, regular health examinations and the hygiene of the mouth (Szántó & Barkai, 2012). Previously mentioned research by Pikó lists among the most often examined health behavioral patterns the following factors: smoking, alcohol consumption, drug consumption, physical activity, conscious dietary practices, traffic behavior, and safe sexual behavior (Pikó, 2002). Other research explores another territory and claims that health consciousness among people in young age groups is also heavily connected to various personality characteristics (Kikuchi, Inoue, Ito, Masuda, Yoshimura, Watanabe & 1998).

But complexity can not only be observed within the many factors influencing health consciousness – it is also the characteristic of the individual health-shaping modules. As an example, examining young peoples attitudes to healthy food products and healthy dietary practices, scientific results show that variables such as school types, age, sex and region of habitation also affect how young people judge the health characteristics of various foodstuffs alongside media and the opinion of friends and schoolmates (Horváth, Lajos, Szira & Varga, 2005). Yet another study claim that health consciousness is also in interrelation with the determinants of health, since results show that university students with more positive attitude to physical activities bare significantly better anthropometrical characteristics, and physiological and productivity values than those with a less motivated attitude (Konczos, 2012). This latter finding leads us to the otherwise generally underlying conclusion of the importance of regular physical activity, especially from a young age on. This is also the basis of recent policy changes concerning the introduction of 5-times-a-week P.E. lessons in 1st, 5th and 10th grade of Hungarian schools.

In light of all the above findings from the field's scientific literature, our specific goal with the currently presented work was to make preliminary research exploring nutrition behavior of children completing regular trainings and to recognize patterns in their attitude particularly towards healthy and

desirable dietary practices. The exploratory work's focus was to map children's relationship to food advertisements; their understanding of self-perceived effects food-related content in commercial media has on food choices; and also the specific circumstances of the nutrition process. Our data collection was extended to consider the effect of parental dietary advice on children's food choices and to try drawing a picture of school kids' evaluation of personal dietary practices. Furthermore, in search of possibly effective tools to promote characteristics of healthy life-style to young but regularly active children, we aimed to explore their attitudes and practices regarding modern technical tools and the concept of social media.

Our aim in the current study was to answer the following specific research questions: do sports-children for whom healthy dietary practices are important eat more wholesome according to their own declaration, than those for whom this is not a priority? Does the prevalence of physical activity of children have influence on the self-claimed conscious perception of nutritional commercials targeted to the age group in question? Is there any significant correlation between the prevalence of physical activity of children and the self-claimed importance of healthy dietary practice of the age group in question?

Proposed Design

All respondents of the currently analyzed survey are basketball players attending trainings of the *Rátgéber Basketball Academy in Pécs*, Hungary. The institution's ambition is to build an internationally acknowledged basketball training center, to educate and train players according to the highest quality standards, partly fulfilling the needs of those who are not interested in professional sports but would like to maintain regular physical activity, and also to play a major role in sport-related cultural life of the city of Pécs, Hungary. Children taking part in the current study were aged between 8 and 17 (mean age was 12.452 years), and most importantly were attending trainings or matches at the Rátgéber Basketball Academy 3 to 9 times a week (the average number of trainings per week among the whole sample was 4.945 trainings). This amount of activity consists not only of basketball or complementary fitness training, but also may include the weekend tournaments, and does not include the obligatory P.E. lessons in children's elementary or secondary schools, which takes places 3 to 5 times a week. Altogether 146 respondents completed the questionnaire (n=146), which was self-edited and contained mostly closed-ended questions with the exception of two open-ended questions. The inquiry considered children's encounter with food-related marketing coverage in various types of commercial media, their opinion whether these campaigns affect their food choices, and how they evaluate the health-focus of these campaigns. Specific questions asked if they used the canteen or shop in their school to collect food and whether they perceived their parents were determining what dietary behavior they should follow. Important questions tried to map children's perception of their own eating habits and whether they consider them to be healthy. The final part of the questionnaire collected data on children's

possession of mobile phone devices and the prevalence of their use of online social media sites.

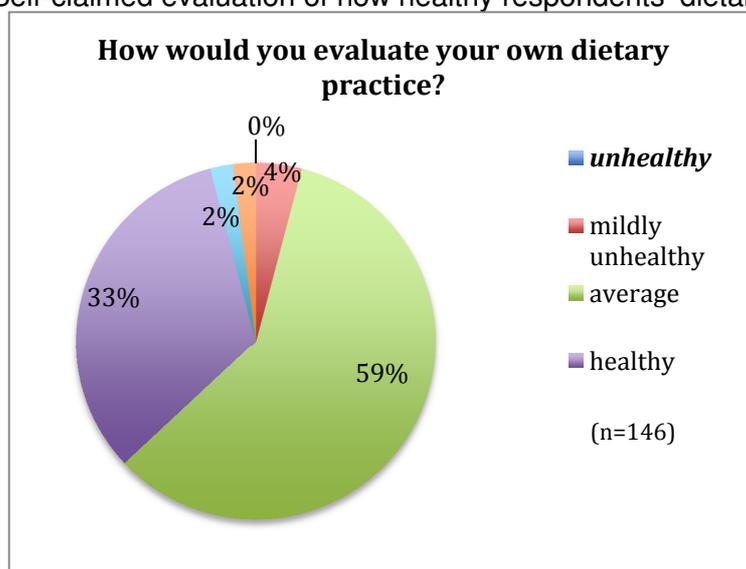
Questionnaires were completed by those attendants that were holding a parental agreement declaration on 24 March 2013, when a demonstration program of the Rátgéber Basketball Academy was held at the city's central basketball stadium. Children were completing the questionnaires before attending various other measurements for scientific purposes, being together with their teammates in a room, asked to process the questions by themselves. These particular circumstances of completion imply certain limitations of the study, which will be looked at in the forthcoming paragraphs.

Regarding the statistical examination of our data, several quantitative methods were used: the applied evaluation contained descriptive statistical analysis, and deductive analysis based on chi-square test, t-test and correspondence-analysis. All the statistical examination was carried out with the help of the IBM SPSS software nr. 20.

Results

As a very important and forward-pointing finding, we can state that not one child in our sample claimed that his or her dietary practice is explicitly unhealthy – the sample contains children who carry out focused physical activity at least 3 times a week outside their school's P.E. lessons. Figure 1. illustrates the distribution of evaluative answers for this question.

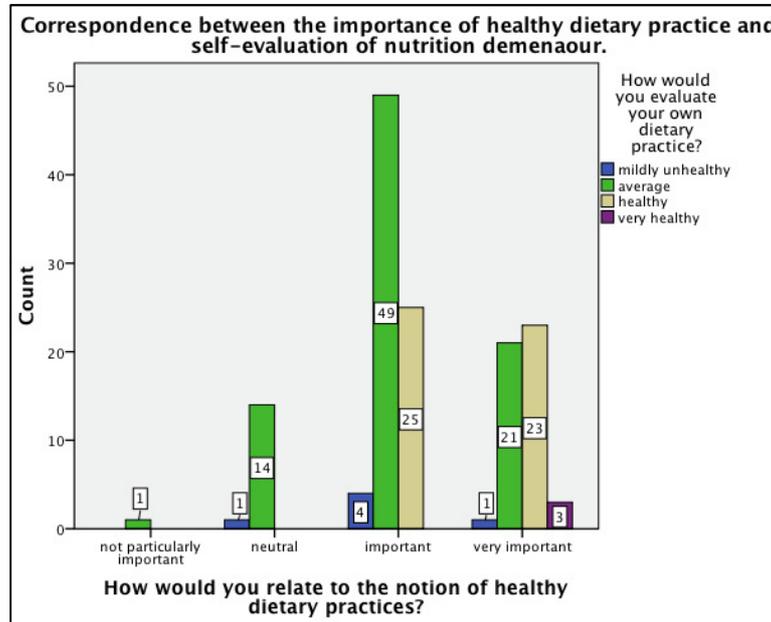
Figure 1. Self-claimed evaluation of how healthy respondents' dietary practice is



As depicted below, our results show significant correspondence between the admitted importance of healthy dietary practice and the positive evaluation of one's own nutritional demeanour (Figure 2.). These findings provide a positive, supportive answer for our first research question, namely that sports-children for

whom healthy dietary practices are important eat more wholesome according to their own declaration, than those for whom this is not a priority.

Figure 2. Relationship between the importance of healthy dietary practice and the evaluation of own nutritional demeanor

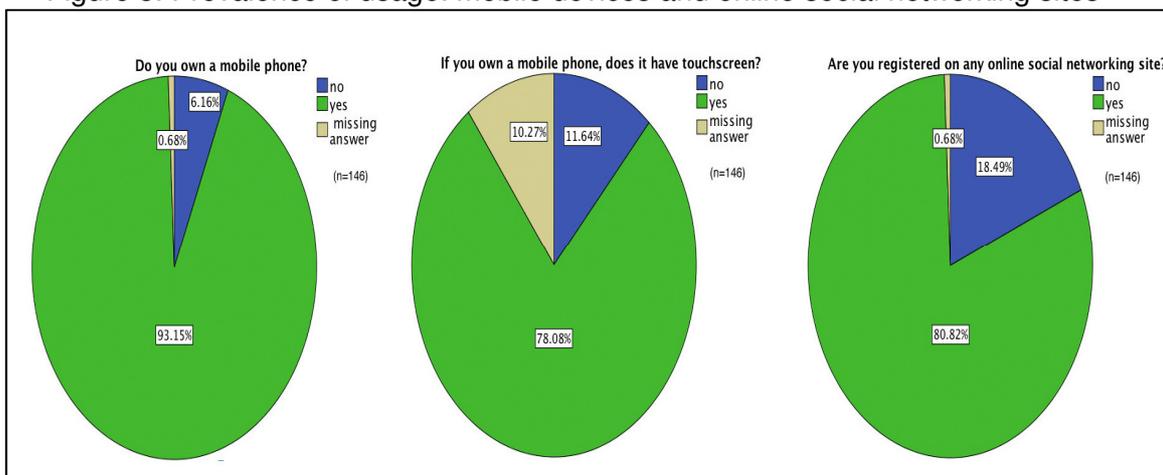


This outcome may reflect the importance of enhancing health-consciousness from an early age on. However, our results based on the collected data do not support our assumption that the prevalence of physical activity of children effects the self-claimed conscious perception of nutritional commercials targeted to the age group in question, thus the data collected in this study provide rejective answer for our second research question.

Likewise, statistical analysis of the collected data do not support our assumption that the prevalence of physical activity of children affect the self-claimed importance of healthy dietary practice of the age group in question, which finding provides a dismissive answer for the study's third research question.

The final part of the questionnaire contained items about the mobile device ownership and prevalence of social media use among our sample. Statistical analysis of the answers revealed that the use of mobile devices, especially cell phones with touchscreen are highly popular among school children, as almost 80% of the children in this study's sample own one (Figure 3).

Figure 3. Prevalence of usage: mobile devices and online social networking sites



Discussions

Due to the relatively small sample size, the currently presented findings can only be considered as a preliminary study regarding the dietary-focused attitudes of children completing regular physical activity. The data and statistical analysis of our sample claim that it is indeed very important for the youth that their attention is drawn to the desirable and medically approved nutrition techniques and principals of a healthy life-style, as recognising the need for a healthy dietary practice is the first step to nutrition-based prevention of several chronic diseases, thus to a greater level of health awareness. Although it may be a challenge to find the most effective tools to reach younger age groups with easily accessible information that they are able to incorporate into their everyday dietary practices, this is a goal policymakers should strive for. Regular physical activity is another fundamental component of health consciousness, and our aim during the current research was to evaluate what ways this activity influences children's attitudes to healthy dietary practices. Based on the data revealed in the current study, we could not find significant correlation between prevalence of physical activity and dietary attitude; however, another important aim for policy makers could be to raise awareness of the dietary practices within an active lifestyle, and also of the marketing messages that reach children and young adults concerning various nutritional products.

As it was indicated earlier, there are particular limitations to the interpretation of the above findings. The questions tested were edited and collected by our research team and are not part of any validated questionnaires. Thus our results are only a starting point for further evaluation of dietary attitudes and are only informative and comparable with caution in their present form. Circumstances of the questionnaire's completion also indicate limitation for our findings. On the day of data collection, respondent children were in groups when they were given the questionnaires and they were not completely separated while answering. Given their young age and the fact that they were not strangers to each other, there is a great possibility that they have discussed

many of the answers, which could thus be influenced by the other children's point of view.

The findings of the currently presented study are only preliminary. A follow-up to this study should include increased sample size, and a questionnaire that is better customized for children's understanding. Further research of the topic is much needed, since examining dietary attitudes of children (especially those who are doing regular sporting activity outside the P.E. lessons held in their school) can provide fundamental insights to effectively developing health consciousness among youth.

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