THE RELATION BETWEEN THE SOCIOCULTURAL ATTITUDES TOWARDS APPEARANCE AND THE LIFESTYLE AND SELF-ESTEEM OF ADOLESCENTS

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ABSTRACT

Background. The adolescents seeking to conform to the ideal appearance associate the reduction of weight with smoking and alcohol consumption (Haley, Hedberg, & Leman, 2010) or go on a diet instead of increasing their physical activity (Liechty, 2010). The adolescents dissatisfied with their body have lower self-esteem (Neumark-Sztainer et al., 2006). In this study we assumed that the sociocultural attitudes towards appearance would be associated with adolescents' harmful lifestyle and lower self-esteem. Research aim was to disclose the relation between the sociocultural attitudes towards appearance of adolescents and their lifestyle and self-esteem.

Methods. The research was carried out in Kaunas schools (n = 16) using the method of written survey. In total, 805 adolescents were surveyed, 329 (41.1%) out of them were boys. The mean age (SD) of the respondents was 17.23 (0.6) years. *Instruments:* Sociocultural Attitudes Towards Appearance Questionnaire-3 SATAQ-3-L (Thompson, van den Berg, Roehrig, Guarda, & Heinberg, 2004), Rosenberg Self-Esteem Questionnaire (Rosenberg, 1989). Physical activity (PA) was determined using the questions from the international study Health Behaviour in School-Aged Children. The frequency of dieting and having harmful habits were determined by individual questions.

Results. The weight of the majority of adolescents (75.5%) was normal. The numbers of adolescents were as follows: those who smoked (39.8%), consumed alcohol (80.5%), were on diet (36.8%), and had low levels of physical activity (74.4%). The adolescents who smoked, consumed alcohol and were on diet had significantly higher scores in all SATAQ subscales. Physically active adolescents were more striving to meet the Internalization of athletic body image. In the groups of boys and girls, BMI was related to more frequent sociocultural pressures ($p < .01$) and more frequent dieting ($p < .01$). In the group of boys, the frequency of smoking was related to lower self-esteem ($p < .05$). In the group of girls, sociocultural pressures were related to lower self-esteem ($p < .05$).

Conclusion. The sociocultural attitudes towards appearance of adolescents are related to more harmful lifestyle and lower self-esteem. Therefore, health literacy of the adolescents has to be increased by teaching proper attitudes towards their bodies, appropriate diet, and exercising.

Keywords: sociocultural attitudes towards appearance, body image, lifestyle, physical activity, self-esteem.

INTRODUCTION

With the prevalence of cult of the body in the Western society, more and more adolescents feel pressure to conform to social expectations. The majority of studies state that girls experience more pressure to conform to the socially idolized appearance; however, many studies confirm that the sociocultural environment also has an effect on boys (Bearman et al., 2006). The adolescents striving to conform to the ideal appearance associate the reduction of weight with smoking and alcohol consumption (Haley et al., 2010) or go on a diet instead of increasing their physical activity (Liechty, 2010). The adolescents dissatisfied with their body have lower self-esteem (Neumark-Sztainer et al., 2006).

Young people often start using addictive substances to fit in with their friends who behave this way and due to the inability to resist negative

influence of others (Jaruševičienė, Valius, Veryga, & Žemaitis, 2009). According to the data of the international study Health Behaviour in School-Aged Children (HBSC) aged 11–15, in the survey of 2010, 21.2% of the boys and 15.0% of the girls admitted they were smoking. In the study, the adolescents smoking every day, at least once per week and less than once per week are attributed to smokers. Among the children aged 11–15 who participated in the HBSC study in 2010, approximately every tenth respondent admitted they were consuming alcoholic beverages on a regular basis (12.9% of the boys and 8.1% of the girls). This is a considerably higher age than ten or more years ago (Currie et al., 2012).

According to the data of the studies, the peers may have an effect on the development of attitude towards the body, especially in the adolescence. It was noticed that the mockery of peers was related to dissatisfaction with the body and dieting (Shroff & Thompson, 2006). Although both the boys and the girls mock each other, the boys tend to criticise the weight and shape of girls more than the girls do. When the body weight of the girls increases during puberty, they take on the means of weight loss because they feel increasing sociocultural pressures. Meanwhile the boys aspire for a muscular and strong body and take measures to gain body weight (Bearman, Martinez, Stice, & Presnell, 2006).

During adolescence, physical activity is an important factor of good health. However, dissatisfaction with the body may prevent from engaging in physical activity. In Lithuania, in 1994–2010, on the average, every second boy (45.2%) and only every fifth girl (20.2%) could have been considered having a sufficient level of physical activity. Regardless of such low indicators of physical activity of school-aged children, the proportion of physically active boys has been gradually decreasing since 1998, and the proportion of physically active girls has also decreased in 2010 (Zaborskis & Raskilas, 2011).

The insults of peers, hurting remarks and bullying affect self-esteem of the adolescents (Zaborskis & Vareikienė, 2008), which may later have negative repercussions on their mental and physical health. There is a lack of studies analysing the relation between the social and cultural environment and the peculiarities of adolescents' lifestyle and self-esteem in the country. These studies are useful for the practitioners engaged in health promotion in the schools of the country.

Research aim was to disclose the relation between the sociocultural attitudes towards appearance of adolescents and their lifestyle and self-esteem. We hypothesize that the sociocultural attitudes towards appearance would be associated with adolescents' harmful lifestyle and lower self-esteem.

METHODS

The research was carried out in 2009 in Kaunas secondary schools (n = 10) and gymnasiums (n = 6) using the method of written survey. In total, 805 adolescents were surveyed, 329 (41.1%) out of them were boys and 476 (59.1%) were girls. The age of the respondents was between 16 and 19, the mean age (SD) was 17.23 (0.6) years.

Out of the general list of schools of Kaunas city, which included 39 secondary schools and 9 gymnasiums in 2009, every third school was selected using systematic random sampling. In every selected school, two-three classes of eleventh-year students were surveyed. The permit of the Department of Education of Kaunas City Municipality Administration was obtained for the research. The heads of the schools had given vernal consent to carry out the research in their schools. The research was based on the principles of goodwill and anonymity. The students who did not want to participate in the research could refuse to do so. The questionnaires were filled in during lessons at the presence of the researcher. It took approximately 30 minutes to fill in the questionnaire, but the students could take the whole lesson to do it. In total, 856 adolescents were questioned, but after analysing the responses, it was found that 51 questionnaires were spoiled and/or filled in carelessly and therefore, the data of 805 adolescents was used for the research.

A questionnaire comprising several blocks of questions was used for the survey. The Sociocultural Attitudes Towards Appearance Questionnaire-3 (SATAQ-3-L) was used (Thompson et al., 2004). The questionnaire comprised four subscales: The Subscale of General-Internalization (e. g. "I would like my body to look like the one of the people who are in movies"), The Subscale of Athletic-Internalization (e. g. "I wish I looked as athletic as sports stars"), The Pressures Subscale (e. g. "I've felt pressure from TV or magazines to change my appearance"), The Subscale of Information (e. g. "TV programs are an important source of information about fashion and "being attractive").

The responses to the questions were arranged on the Likert scale from "completely disagree" (1 point) to "completely agree" (5 points). The mean score was calculated on each subscale. A higher score indicated a higher expression of the variable. The General-Internalization, Athletic-Internalization, Pressures and Information subscales showed good internal consistency reliability (Cronbach's alpha = .70, Cronbach's alpha = .68, Cronbach's alpha = .77 and Cronbach's alpha = .68, respectively).

Self-esteem was determined using the Rosenberg's Self-Esteem Scale (Rosenberg, 1989), which is comprised of a scale of 10 statements with 4 versions of responses from "completely agree" (4) to "completely disagree" (1). A higher score represented higher self-esteem. The respondents who scored from 0 to 28 were attributed to the group of low self-esteem. The Lithuanian version of the questionnaire is used in the Health Behaviour in School-Aged Children study coordinated by WHO (Currie, Samdal, Boyce, & Smith, 2002). Cronbach's alpha = 0.75.

Physical activity (PA) was determined using the questions from international study Health Behaviour in School-Aged Children coordinated by WHO: "Over the past 7 days, how many days were you physically active for a total of at least 60 minutes per day?" and "In an ordinary week, how many days on average are you physically active for a total of at least 60 minutes?" with versions of responses on the scale from "none" to "seven days per week". Physical activity was considered sufficient if the respondents were active for at least one hour for five or more days per week (Petronytė & Zaborskis, 2009).

The frequency of dieting was determined by the question "Have you ever tried to lose weight by fasting/going on extremely strict diets?" with variants of responses from "never" (1) to "very often" (5). The respondents who scored 1–3 points were attributed to the group of adolescents who did not diet and the ones who scored 4–5 points were attributed to the group of adolescents who dieted.

Harmful habits were determined by questions about smoking, alcohol and drug use and its frequency from the international study Health Behaviour in School-Aged Children coordinated by WHO (Zaborskis & Vareikienė, 2008), for instance, "Have you consumed alcoholic beverages in the last 3 months?" with the variants of responses from "never" to "every day". The respondents who admitted having consumed any of the following alcoholic beverages were attributed to the group of adolescents who consumed alcohol: beer, wine, vodka and other beverages several times per week or more often. We determined the habit of smoking by the question: "How many cigarettes do you smoke in a day?" with ten versions of responses from "I do not smoke" to "3–4 packs a day". The respondents who smoked every day, several times per week or less were attributed to the group of smokers.

Body mass index (BMI) was calculated based on the height and weight specified by the respondents. The respondents were divided into three groups based on the recommendations of WHO (Flegal, Graubard, Williamson, & Gail, 2005). The respondents with BMI below 18.5 kg/m² were considered to be underweight and the ones with BMI equal to or exceeding 25 kg/m² were considered to be overweight.

Statistical data analysis was carried out using a software package *SPSS 20.0 for Windows*. To identify the differences between values in two independent groups, Mann-Whitney U Test was used. To determine the correlation between the variables, Spearman's rank correlation coefficient was used. The statistical relation between qualitative features was evaluated by χ^2 (chi-square) criterion. To analyse the dependence of dependent variables on independent variables logistic regression was performed and the confidence interval (CI) was calculated. The results were considered to be significant if 1 was not in the confidence interval. The differences of results were considered to be statistically significant, if the value of error probability was $p < .05$ with the confidence of 95%.

RESULTS

The body mass of the majority of adolescents (75.5%) was normal. 136 adolescents (17.5%) were underweight and 54 adolescents (7%) had too high BMI (equal to or exceeding 25 kg/m²). BMI of 81% of the boys was normal, 11.1% were overweight and only 7.9% of the boys had too low BMI. 71.7% of the girls had normal weight, 24.1% were underweight and only 4.1% of the girls had too high BMI.

Comparing the intensity of expression of harmful habits (smoking, alcohol consumption, dieting) and insufficient level of physical activity in the groups of boys and girls (Table 1), we found that dieting and insufficient level of physical activity were more prevalent among girls.

In the research, we analysed how the sociocultural attitudes towards appearance were expressed in the groups of harmful habits and physical activity (Table 2). Mann-Whitney U test demonstrated that he adolescents who smoked and consumed alcohol more often felt sociocultural pressures. The adolescents consuming alcohol expressed higher general internalization of sociocultural attitudes, sociocultural pressures and they were more susceptible to information than the adolescents who refrained from alcohol. In these subscales, dieting adolescents also had significantly higher general internalization of sociocultural attitudes. However, the adolescents with sufficient level of physical activity had considerably higher internalization of athletic body image.

Research variables	Total n (%)	Boys n (%)	Girls n (%)	Significance
Smokes	320 (39.8)	141 (44.3)	177 (55.7)	$\chi^2 = 2.253$; $df = 1$; $p = .133$
Consumes alcohol	647 (80.5)	267 (41.5)	377 (58.5)	$\chi^2 = 0.288$; $df = 1$; $p = .591$
Diets	294 (36.8)	55 (18.8)	237 (81.2)	$\chi^2 = 92.337$; $df = 1$; $p = .001$
PA (insufficient, if up to 5 d./week)	563 (74.4)	215 (38.4)	345 (61.6)	$\chi^2 = 6.308$; $df = 1$; $p = .012$

Table 1. **The expression of harmful habits and insufficient level of physical activity in the total sample and in the groups of boys and girls, %**

Note. PA – physical activity.

Table 2. **The expression of the sociocultural attitudes towards appearance in the groups of harmful habits and physical activity**

Research variables	General-Internalization	Athletic-Internalization	Pressures	Information
	M		M	M
Smokes Does not smoke	2.69 2.67	2.82 2.79	2.37 2.24	2.73 2.67
	U = 71409; p = .810	*U = 69469; p = .422*	*U = 68282; p = .047*	*U = 71213; p = .294*
Consumes alcohol Does not consume alcohol	2.71 2.51	2.82 2.74	2.32 2.19	2.73 2.58
	U = 40617; p = .02	*U = 44796; p = .287*	*U = 44402; p = .05*	*U = 43342; p = .028*
Diets Does not diet	3.10 2.43	3.00 2.68	2.67 2.06	2.94 2.55
	U = 40898; p = .001	*U = 54850; p = .001*	*U = 41183; p = .001*	*U = 49660; p = .001*
Insufficient level of PA Sufficient level of PA	2.73 2.51	2.74 2.97	2.34 2.15	2.72 2.63
	U = 42962; p = .004	*U = 42666; p = .002*	*U = 44382; p = .004*	*U = 48518; p = .14*

Note. PA – physical activity.

Table 3. **Correlation (Spearman's coefficients) among sociocultural attitudes towards appearance, harmful habits, physical activity and self-esteem in the groups of boys and girls**

Research variables	1	2	3	4	5	6	7	8	9	10
1. BMI	1	0.13**	.15**	.18**	.06	.09	.04	.40**	–.02	-.02
2 General-Internalization	.04	1	.54**	.58**	.52**	.09	-.01	.37**	–.03	-.03
3. Athletic-Internalization	–.02	.57**	1	.46**	.47**	.06	.002	.29**	.03	.05
4. Pressures	.20**	.53**	.39**	1	.47**	.10*	.03	.37**	–.08	–.10*
5. Information	.02	.56**	.44**	.41**	1	.07	.01	.29**	.06	–.04
6. Frequency of alcohol consumption	.11	.02	–.06	.04	.02	1	.28**	.18**	–.08	–.11*
7. Frequency of smoking	.06	.07	.06	.15**	.06	.35**	1	.04	–.01	–.08
8. Dieting	.32**	.18**	.11	.22	.10	.001	.11*	1	.03	–.11*
9. PA	.04	.01	.13*	.002	.02	–.04	–.05	–.05	1	.07
1. Self-esteem	.04	–.004	.09	–.04	–.04	–.02	–.11*	–.07	.08	1

Note. PA – physical activity, BMI – body mass index. The data of the girls is presented over the diagonal and the data of the boys – below the diagonal. * – $p < .05$, ** – $p < .01$.

The correlation analysis in the group of boys revealed (Table 3) that BMI was related to more frequent sociocultural pressures and dieting. The general internalization of sociocultural attitudes was related to all subscales of sociocultural attitudes towards appearance well as dieting. The internalization of athletic body image was related to the sociocultural pressures, information, and more frequent smoking. The frequency of alcohol consumption increased the frequency of smoking. The frequency of smoking was related to dieting and lower self-esteem.

Having performed linear correlation in the group of girls, we found (Table 3) that BMI was related to the general internalization of sociocultural attitudes, internalization of athletic body image, sociocultural pressures, and more frequent dieting. General internalization of sociocultural attitudes was related to all subscales of sociocultural attitudes towards appearance as well as dieting. The internalization of athletic body image was related to more frequent sociocultural pressures, information, and physical activity. The sociocultural pressures were related to the information, more frequent consumption of alcohol, dieting, and lower self-esteem. The information was related to more frequent dieting. Alcohol consumption was related to more frequent smoking, dieting, and lower self-esteem. Dieting had negative correlation with self-esteem. As dieting gets more frequent, self-esteem gets poorer.

In order to determine what complex of factors explaind the frequency of smoking, alcohol consumption, physical activity, and dieting, we performed logistic regression. The frequency of smoking was statistically significantly prognosticated by BMI GS = 1.08; CI = [1.02–1.15]. For this model, $\chi^2 = 22.46$; df = 8; p = .004 (*Nagerkelke* R^2 = .018). Sociocultural attitudes towards appearance statistically significantly prognosticated the consumption of alcohol GS = 1.38; CI = [1.04–1.85]. For the model, $\chi^2 = 10.08$; df = 8; p = .26 (*Nagerkelke* R^2 = .02). Physical activity was statistically significantly prognosticated by self-esteem GS = 1.09; CI = [1.04–1.13]. For the model, $\chi^2 = 2.42$; df = 8; p = .97 (*Nagerkelke* R^2 = .05). Dieting was also statistically significantly prognosticated by BMI GS = 1.39; CI = [1.28–1.52]. And sociocultural attitudes towards appearance tripled the frequency of dieting GS = 3.19; CI = [2.36–4.32]. For this model, $\chi^2 = 8.76$; df = 8; p = .36 (*Nagerkelke* R^2 = .39).

DISCUSSION

The research attempted to disclose the relation between the sociocultural attitudes towards appearance of adolescents and their lifestyle and self-esteem. The research revealed that smoking and alcohol consumption of the adolescents was related to more frequent sociocultural pressures. Alcohol consumption was related to more frequent general internalization of sociocultural attitudes and the information. The authors claim that young people often start using addictive substances to fit in with their friends who behave this way and due to the inability to resist negative influence of others (Jaruševičienė et al., 2009). Other authors believe that the adolescents striving to conform to the ideal appearance may associate the reduction of weight with smoking and alcohol consumption (Haley et al., 2010).

In the research, dieting adolescents aspired to conform to the sociocultural attitudes towards appearance. In the group of girls, significant correlation between dieting and all four scales of sociocultural attitudes towards appearance was found. In the group of boys, dieting only correlated with the general internalization of sociocultural attitudes. The obtained results indicate that the girls seeking recognition among the peers and striving to conform to the ideal body created by society exhaust themselves by dieting and incorrect exercise (Jankauskienė, Pajaujienė, & Mickūnienė, 2010; Pajaujienė, Jankauskienė, & Mickūnienė, 2010).

The adolescents with insufficient level of physical activity more often are prone to general internalization of sociocultural attitudes and more often feel pressure about it. In our research, internalization of athletic body image was related to higher physical activity. Other studies also revealed that the dissatisfaction of the adolescents with their bodies was not related to exercising to control weight (Liechty, 2010), which allows concluding that the adolescents who are dissatisfied with their bodies more often go on a diet than increase their physical activity.

We expected that lower self-esteem of the adolescents would be related to higher sociocultural attitudes towards appearance. In the group of girls, significant correlation between self-esteem and sociocultural pressures was found. In the group of boys, we did not find significant correlation between self-esteem and all four scales of the sociocultural attitudes towards appearance. The obtained results were confirmed by other authors (Pokrajac-Bulian, Ambrosi-Randic, & Kukic, 2008).

The limitation of the research is that it is momentary. Such studies have both pros and cons. It allows evaluating the prevalence of risk factors, but does not allow determining the causality. Further research observing the change of the relation of sociocultural attitudes towards appearance and lifestyle and self-esteem of the adolescents over time would be beneficial.

CONCLUSIONS

The sociocultural attitudes towards appearance of adolescents are related to more harmful lifestyle and lower self-esteem. Therefore, health literacy of the adolescents has to be increased by teaching proper attitudes towards their bodies, appropriate diet, and exercising.

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