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Ideal body stereotype internalization and sociocultural attitudes towards appearance: a preliminary cross-national comparison between Czech, Polish and American women

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Summary

Aims: The aims of the study were: (1) to evaluate an ideal body stereotype internalization and a sociocultural attitudes towards appearance, (2) to assess the relationship between an ideal body stereotype internalization and a sociocultural attitudes towards appearance, (3) to analyze the predictor of an ideal body stereotype internalization, (4) to verify if nationality is a significant mediator in the relationship between pressure to conform to the Western ideals exhibited by the media and ideal body stereotype internalization among Polish, Czech and American women.

Methods: The research sample consisted of 213 women aged 18–35. We used the Sociocultural Attitudes Towards Appearance Questionnaire 3 [19] and the Ideal-Body Stereotype Scale–Revised [20]

Results: American women report higher internalization of general body shape ideal and athletic-ideal internalization, and feel stronger pressure to conform to the Western ideals compared to Polish and Czech women. Polish women report the highest ideal body stereotype internalization. Pressure to conform to the Western ideals is a statistically significant predictor of ideal body stereotype internalization for each group. Moreover, mediation analysis indicates that nationality partially mediates the relationship between pressure to conform to the Western ideals to have a slim figure and ideal body stereotype internalization.

Conclusions: Societal and cultural influences on body image are present among Polish, Czech and American women. They considerably determine their efforts in pursuit of an ideal body shape.

thin-ideal internalization, physical appearance, body image, culture

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INTRODUCTION

'Body image is a multidimensional phenomenon consisting of one's attitudes, perceptions, and experiences pertaining to one's own physical appearance' [1]. Sociocultural factors are strong determinants which may influence body image development and evaluation [2]. Cash [3] claims that ideal forms and concepts of beau-

ty vary between cultures and are internalized by individuals. A beauty ideal and standards of body size are culturally determined [4]. Culture may define the kind of messages and aspects of body image portrayed as desirable [5] and may influence differences in internalization of body ideal stereotype standards [3]. The Tripartite Influence Model created by Keery et al. [6] identifies three main sources of body image and body image disturbances: the media, peers and family. A study by Levine & Harrison highlights the role of the media in creating appearance standards and expectations towards the body [7].

The media convey a social message and a value of body and appearance [8]; they focus on (usually thin) representations of ideal body standards [9]. This is connected with internalization, a process by which individuals assimilate and extend aspects of an ideal body shape (size) and beauty to themselves, and begin associating positive states (for example, happiness or success) with possessing an ideal body [10]. The literature recognizes two means of internalization: (1) thin-internalization, in which an individual wants to be thin or skinny (many times underweight) [11], and (2) athlete-internalization, which is the desire to possess a lean but muscular body shape [12,13]. In women, both types of internalization focus on the desire to achieve an appearance which for most is unnatural and unhealthy [14]. Research indicates that the media puts pressure on women to change their body shape and achieve an ideal [13,15], which may lead to growing body dissatisfaction [13].

Both Western and Eastern cultures distinguish a type of ideal beauty [16]. The majority of existing data pertains to sociocultural factors and media influence in the United States [13], but researchers claim that the US beauty ideals may be carried to Europe by advertising and globalization processes [17]. In Western countries, research focuses on the influence of a thin body image on a variety of factors, but there are no data about the impact of the Western type of beauty on other cultures [18].

Our study examined the following hypotheses:

- American women will internalize a general ideal as well as an athletic ideal more strongly than Czech and Polish women.
- American women will internalize more strongly an ideal body stereotype and will feel more pressure to conform to Western ideals than Czech and Polish women.
- In three groups of female participants, an ideal body stereotype internalization will be positively associated with pressure to conform to Western ideals, internalization of a general body shape ideal and athletic-ideal internalization.
- Pressure to conform to the Western ideals will result in an ideal body stereotype internalization among Czech, Polish and American women.
- Nationality will mediate the relationship between the pressure to conform to Western ideals and ideal body stereotype internalization.

METHOD

Participants

The study population consisted of 213 women aged 18–35 years (N_{Polish} = 111, N_{Czech} = 30, N_{Amer-} _{ican} = 72). We carried out our study in different Czech, Polish and American institutions (Masaryk University, California State University, University of Silesia) from January to July 2016. At first the Czech population was larger (N = 45), but some respondents withdrew without giving a reason. We suspect that it may have been related to a lack of gratification – American students participating in the study were awarded ECTS points, but this was not possible in the Czech Republic and Poland. The mean age of the sample was 23.53 years (SD = 3.60) and the average body mass index (BMI) was 23.39 kg/m² (SD = 5.03). More detailed information is presented in Table 1.

	Czech women M (SD)	Polish women M (SD)	American women M (SD)
Age, years	24.82 (2.87)2	24.95 (3.73) ¹	20.78 (1.46) ^{1,2}
Weight, kg	64.96 (14.44)	62.92 (12.93)	67.03 (17.79)
Height, cm	167.48 (6.99)	166.72 (7.19)	164.53 (8.45)
Body mass index	23.05 (4.34)	22.60 (4.21) ³	24.74 (6.12) ³

Table 1. Characteristics associated with participants' age, weight, height and body mass index

Note: All women were compared using ANOVA and *post hoc* Games-Howell. All statistically significant differences are noted: 1,2(p < 0.001), 3(p < 0.005).

Of all the women, 12.21% (N = 26) were underweight (BMI \leq 18.5 kg/m²), 58.22% (N = 124) had normal weight (BMI 18.5–24.99 kg/m²), 17.84% (N = 38) were overweight (BMI 25.0–29.99 kg/

m²) and 11.74% (N = 25) were obese (BMI \geq 30.0 kg/m²). Detailed information about BMI is presented in Figure 1.

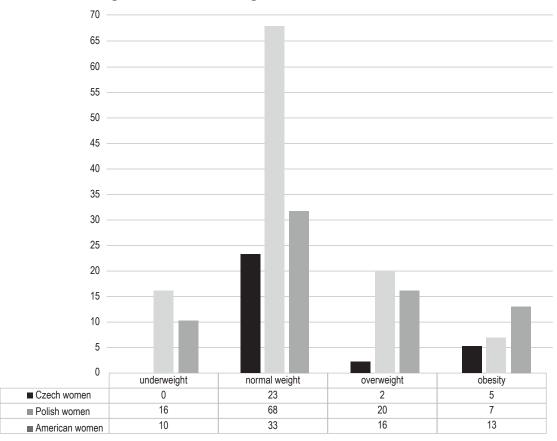


Fig. 1 Characteristics associated with BMI among all female individuals

MATERIALS

Two questionnaires were used in the study, both translated into Polish in parallel back-translation: the Sociocultural Attitudes Towards Appearance Questionnaire 3 (SATAQ-3)

[19] and the Ideal-Body Stereotype Scale – Revised (IBSS–R) [20]. First, two Polish speakers translated the English versions into Polish. Then, two English speakers translated the Polish versions. Next, the two English language versions were compared in order to ensure that

there were no errors of meaning in the Polish versions.

SATAQ-3

SATAQ-3 [19] is a 30-item questionnaire that measures the sociocultural factors which influence attitudes towards appearance. Items are rated on a Likert scale ranging from 1 (definitely disagree) to 5 (definitely agree). The questionnaire contains the following subscales: general internalization (e.g. 'I do not care if my body looks like the body of people who are on TV'; Cronbach's α = 0.89), athlete internalization (e.g. 'I do not wish to look as athletic as the people in magazines'; α = 0.81), pressures (e.g. 'I've felt pressure from TV and magazines to be thin'; α = 0.89), and information (e.g. 'TV programs are an important source of information about fashion and "being attractive"; α = 0.83).

IBSS-R

The IBSS–R [20] assesses how participants have internalized a thin ideal body image (e.g. 'Women with long legs are more attractive', 'Slender women are more attractive'). It consisted of 6 items with a 5-point Likert response scale ranging from 'strongly disagree' to 'strongly agree'. The IBSS-R has been shown to have a very good internal consistency (α = 0.91) and temporal stability (test-retest r = 0.80). In the current study, IBSS-R has good internal consistency reliability with Cronbach's alpha at 0.86.

STATISTICAL ANALYSES

The first step in data analysis was to compare three groups of female participants. We used a one-way ANOVA. Due to unequal group sizes and the disturbed assumption of homogeneity of variance, a *post hoc* Games-Howell test was introduced. It was applied to four different variables in order to reveal any differences owing to participants' nationality. To test whether the relationship between the pressure to conform to Western ideals and an ideal body stereotype internalization was mediated by nationality (Czech, Polish or American), we performed multiple mediation analyses with sequential mediators using PROCESS with 1000 bootstraps [21].

RESULTS

The results indicate a stronger internalization of a general body shape ideal in American women in comparison with Czech and Polish women (F(2, 210) = 3.33, p < 0.05, η^2 = 0.03). No significant differences were found between Czech and Polish women. With regard to the subscale assessing the athletic-ideal internalization, American women again scored the highest and the difference was significant (F(2, 210) = 10.68, p < 0.001, η^2 = 0.09). There was also a significant difference in athletic internalization between Czech and Polish populations. The American women felt the most pressure to conform to Western ideals in comparison with Czech and Polish women (F(2, 210) = 5.54, p < 0.05, $\eta^2 = 0.05$). There were no statistically significant differences between Czech and Polish participants on this subscale. However, Polish women showed a higher level of ideal body stereotype internalization than Czech and American women (F(2, 210) = 14.21, p < 0.001, η^2 = 0.119) (Table 2).

	Czech, Poli	sn and American wo	men	
	I	II	III	Pairwise comparisons
	Czech women	Polish women	American women	
General internalization	26.40	27.60	30.32	l vs II
				I vs III*
				II vs III ¹
Athlete internalization	13.77	16.62	18.28	l vs II**
				l vs III***
				II vs III*
Ideal body stereotype	25.83	32.05	29.06	I vs II***
internalization				I vs III ²
				vs ***
Pressure to conform to Western	20.43	21.32	24.60	l vs II
ideals				l vs III**

Table 2. Sociocultural attitudes towards appearance and ideal body stereotype internalization among Czech. Polish and American women

Note: 1 tendency: p = 0.07; 2 tendency: p = 0.06; * p < 0.05; ** p < 0.01; *** p < 0.001.

The second step in data analysis was to find a relationship between ideal body stereotype internalization, internalization of general body shape ideal, athletic-ideal internalization and pressure to conform to Western ideals. Pearson's correlation coefficient was used to investigate the relationship between the variables among the samples (Table 3).

II vs III**

Table 3. Correlations between measured variables among Czech, Polish and American women

	Ideal body stereotype internalization		
	Czech women	Polish women	American women
Internalization of general body shape ideal	0.450*	0.456***	0.457***
Athletic-ideal internalization	0.355	0.330***	0.322**
Pressure to conform to Western ideals	0.604**	0.454***	0.473**

Note: * p < 0.05; ** p < 0.01; *** p < 0.001.

We used linear regression to estimate pressure to conform to Western ideals as a significant predictor of ideal body stereotype internalization in each group. In the Czech sample, this explained 36.50% of the variation (F(1,28) = 16.104,

p < 0.001, $R^2 = 0.365$), in the Polish female sample -20.60% (F(1,109) = 28.278, p < 0.001, $R^2 = 0.206$) and in the American sample -22.40% (F(1,70) = 20.225, p < 0.001, $R^2 = 0.224$) (Table 4).

Table 4. Model of regression for ideal body stereotype internalization

Variable	Female population	β
Pressure to conform to Western ideals	Czech	0.604***
	Polish	0.454***
	American	0.473***

Note: *** p < 0.001.

Mediation analysis indicated that nationality partially mediated the relationship between the pressure to conform to Western ideals and internalization of an ideal body stereotype (p < 0.001) (Figure 2).

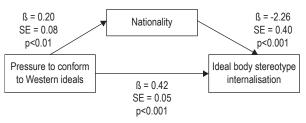


Fig. 2 Nationality effect on internalisation of an ideal body stereotype through pressure to conform to Western ideals Note: DIRECT EFFECT: β = 0.42, SE = 0.048, t = 8.6,0 p < 0.001; INDIRECT EFFECT: β = -0.048, SE = 0.02, LL BCA = -0.10, UL BCA = -0.02.

DISCUSSION

Our results revealed differences in internalization of a general body shape ideal between American, Czech and Polish women. American women strive the hardest to look like people on TV, in magazines and in music videos. They also compare their body with others on social media. Living in a culture that puts an emphasis on the media and uses it to create beauty standards may lead to higher internalization processes and a desire to achieve ideal beauty standards [22]. Both traditional and social media in the West portray norms and behaviors associated with an ideal appearance that are emulated by a number of women [23,24]. What is more, American culture emphasizes that physical attractiveness helps to achieve success in every area of life [22]. Studies show that American women (and the American culture in general) are surrounded by a multitude of appearancefocused images that trigger actions and behaviors towards the body which have become normative characteristics [22]. Owing to globalization, one beauty image ideal may be transmitted all over the world and through different cultures [23,25], but some cultures may value different elements of beauty and define beauty in different ways (e.g. as a normative characteristic and an element of success) [18].

Our findings confirm the first hypothesis, namely that American women internalize an athletic body ideal more strongly than Czech and Polish women. On various levels, participants make social comparisons with a media prototype of an athletic body shape and are determined to have a fit body shape, which is promoted in the media. This is related to media pressure for excessive and intensive physical training [24]. Research shows that a modern ideal body shape is both thin and very fit [26]. The media have started to promote a fit and athletic body as an ideal body look [27]. Thus, internalization of an athletic ideal may appear only when the presented ideal body shape is both athletic and very lean [28].

The second study hypothesis has also been confirmed. American women feel a stronger pressure to conform to Western ideals than Czech or Polish women. This pressure is related to looking thin and attractive and having a body which is congruent with the body shape ideal promoted by the media. This leads to dieting and other compensatory behaviors. An explanation for this may be found both in participants' age and their social media usage. New social media, such as Instagram, Pinterest or Tumblr, were created in the United States; they are image based and encourage women to achieve an ideal body shape [29]. The use of these types of websites is very common in the United States [30], more so than in Eastern European countries like the Czech Republic and Poland. Many studies suggest that the United States is a model for other countries in various areas and also in the creation of an ideal body shape as well as trends associated with changes to the body (e.g. new diet and exercise regimes) [31,32].

Interestingly, Czech and Polish women internalize an ideal body shape presented in the media and feel pressure to conform to Western ideals to a similar degree. This may be related to similarities in the development of a cultural and historical body shape ideal in the Czech Republic and Poland as well as in Central Europe. But women differ in the degree of athletic-ideal internalization and ideal body stereotype internalization. Polish women reported higher results on both variables. In addition, Polish women internalize a stronger ideal body stereotype than American and Czech women. Polish participants

associated feminine beauty with a slim and athletic silhouette and sexual attractiveness on the highest level. Kim [24] claims that local cultures are dominated by the Western model of beauty. The explanation for our results may be the development of Polish society and culture. An increasingly strong influence of the mass media affects the worldview of Polish women. Research shows that Polish women have a similar body ideal to American women – both groups have a strong tendency to strive for thinness [33]. Previous studies have shown that the body ideal in Poland is changing to a slimmer one compared, for example, with British women [34]. Polish women living in Poland have a higher weight discrepancy than Polish migrants living in Britain and then British women. Interestingly, Polish women living in Poland choose a thinner body as an ideal body shape compared with British women. Polish women living in Poland also consider a thinner body shape as the most attractive, contrary to Polish women living in Britain [34].

Our results reveal that in all groups the higher the internalization of an ideal body stereotype, the higher the internalization of a general body shape ideal, athletic ideal, and the greater the pressure to conform to Western ideals (except in the case of the relationship between ideal body stereotype internalization and athletic-ideal internalization among Czech women). Previous data confirm a positive association between media consumption and the pressure to change one's body shape [35]. An explanation may be found in the normalization of body image messages as well as in self-objectification theory [36].

We have provided evidence that pressure to conform to Western body image ideals is a significant predictor of ideal body stereotype internalization among Czech, Polish and American women. The media nowadays pay increased attention to the body in their message [37]. What is more, our results show that nationality partially mediates the relationship between a pressure to conform to Western body ideals and ideal body stereotype internalization. Not only do these results support the hypothesis concerning globalization of a thin body ideal, but they also illustrate the importance of nationality in the relationship between media influence and a sociocultural ideal of body shape.

Finally, it is worth noting that a negative body image is a predictor of eating disorders [38]. High level of body dissatisfaction and internalization of a pressure to change one's body shape is related to incorrect eating habits and maladaptive body image coping strategies and eating [39]. Our results show that American women have the most negative body image compared with Czech and Polish women. This is consistent with global epidemiology statistics of eating disorders [40].

It is worth noting the changing direction of research on body image. The past years focused on finding positive aspects or positive predictors that may determine the body image and positive perception of the body [41]. Even though the number of social campaigns promoting body acceptance has increased, many women are dissatisfied with their body and what it looks like [42]. Our research conducted on a sample drawn from three nationalities seems to support the view that the body image phenomenon is a multidimensional structure. It is necessary to verify universal positive determinants that can influence body image.

LIMITATIONS

The findings of this study have to be interpreted with caution, because of the low effect size. The limitations are a small sample size and equipotent groups. The second limitation is that we used a female-only sample. In addition, the study lacks generalizability, especially to populations at different stages in life. Future studies should take this into consideration. It is worth noting that there is a study showing that social status is an important element in the context of body image and it may be important to include this variable in subsequent studies [43].

Finally, we wish to emphasize that there are many possible explanations of the results obtained. For example, in contrast to our conclusions, statistics from the past century show that eating disorders and body image problems do exist in Europe and are at least at the same level as in the USA [44-46]. In addition, Rathner [44] points out that economic policy reinforces stereotypical views of women and men and draws attention to transplanting of Western Europe-

an stereotypes into Eastern Europe due to the transformation after the fall of the Soviet Union. The media supports an economic policy that leads to the objectification of the female body [44], which in turn contributes to a unification of the body ideal, weight perceptions and engages in weight management practices in Poland, Czech Republic and the United States [33,46].

CONCLUSIONS

Societal and cultural influences on body image are present among Czech, Polish and American women. They considerably affect their efforts in the pursuit of an ideal body shape. Ideal body stereotype internalization might be considered as a risk factor for the development of body image disturbances and eating disorders. Therefore, it is important to pay attention to the way a beauty ideal spreads among women and how this is defined by both cultural and globalization processes.

REFERENCES

- Cash TF, Pruzinsky T. Body Image: A Handbook of Theory, Research, and Clinical Practice. New York: Guilford Press; 2002.
- Cash TF, Fleming EC, Alindogan J, Steadman L, Whitehead A. Beyond body image as a trait: The development and validation of the Body Image States Scale. Eat Disord. 2002; 10(2): 103–113.
- Cash TF. Encyclopedia of Body Image and Human Appearance. London, UK, San Diego, CA: Academic Press (Elsevier); 2012.
- Halliwell E, Dittmar H. Does size matter? The impact of model's body size on women's body-focused anxiety and advertising effectiveness. J Soc Clin Psychol. 2004; 23: 104–122.
- Scharf M, Wiseman H, Farah F. Parent-adolescent relationships and social adjustment: the case of a collectivistic culture. Int J Psychol. 2011; 46(3): 177–190.
- Keery H, Van den Berg P, Thompson JK. An evaluation of the Tripartite Influence Model of body dissatisfaction and eating disturbance with adolescent girls. Body Image. 2004; 1(3): 237–251.
- Levine MP, Harrison K. Effects of media on eating disorders and body image. In: Bryant J, Oliver MB, editors. Media Effects: Advances in Theory and Research. New York: Routledge; 2009. pp. 490–516.
- 8. Abraczinskas M, Fisak B, Barnes RD. The relation between parental influence, body image, and eating behaviors in a non-clinical female sample. Body Image. 2012; 9(1): 93–100.

- Perloff RM. Social media effects on young women's body image concerns: theoretical perspectives and an agenda for research. Sex Roles. 2014; 71(11-12): 363–377.
- Thompson JK, Heinberg LJ, Altabe MN, Tantleff-Dunn S. Exacting Beauty: Theory, Assessment and Treatment of Body Image Disturbance. Washington, DC: American Psychological Association: 1999.
- Stice E, Presnell K. The Body Project: Promoting Body Acceptance and Preventing Eating Disorders, Facilitators Guide. New York: Oxford University Press; 2007.
- Homan K. Athletic-ideal and thin-ideal internalisation as prospective predictors of body dissatisfaction, dieting, and compulsive eating. Body Image. 2010; 7(1): 240–245.
- 13. Markula P. Firm but shapely, fit but sexy, strong but thin: the postmodern aerobicizing female bodies. Sociol Sport J. 1995; 12: 424–453.
- 14. Kilbourne J, Jhally S. Killing us Softly 4: Advertising's Image of Women. U. S.: Media Education Foundation; 2010.
- Sepúlveda AR, Calado M. Westernization: the role of mass media on body image and eating disorders. In: Jáuregui-Lobera I, editor. Relevant Topics in Eating Disorders. Rijeka, Croatia: Intech; 2012. pp. 47–62.
- Bryant SL. The beauty ideal: the effects of European standards of beauty on Black women. Columbia Soc Network Rev. 2013; 4: 81–91.
- Frith K, Shaw P, Cheng H. The construction of beauty: a cross-cultural analysis of women's magazine advertising. J Communication. 2005; 55(1): 56–70.
- Lemanski JL. Western media meets Eastern tradition: examining the views of Chinese-American women on beauty. Arts Soc Sci J. 2012; 43: 1–10.
- Thompson JK, van den Berg P, Roehrig M, Guarda AS, Heinberg LJ. The Sociocultural Attitudes Towards Appearance Scale-3 (SATAQ-3): development and validation. Int J Eat Disord. 2004; 35(3): 293–304.
- Thompson JK, Stice E. Thin-ideal internalisation: mounting evidence for a new risk factor for body-image disturbance and eating pathology. Curr Dir Psychol Sci. 2001; 10(21): 181–183.
- Hayes AF. Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach. New York: The Guilford Press; 2013.
- Yan Y, Bissell K. The globalization of beauty: how is ideal beauty influenced by globally published fashion and beauty magazines? J Intercult Communication Res. 2014; 43(3): 194–214.
- 23. Brytek-Matera A, Probst M. Psychometric properties of the Polish version of the Body Attitude Test. Arch Psychiatr Psychother. 2014: 16(1): 39–46.
- 24. Kim Y. A content analysis of the normalization of plastic surgery in the news: a comparative study between Korea and the US. Paper presented at the annual meeting of the Inter-

- national Communication Association, Suntec City, Singapore; 2010. Available from: http://citation. allacademic.com/meta/p404193_index.html
- 25. Gerbner G, Gross L, Signorielli N, Morgan M, Jackson-Beeck M. The demonstration of power: violence profile no. 10. J Communication. 1979; 29(3): 177–196.
- Grogan S, Masterson D. using appearance concerns to promote health. In: Rumsey N, Harcourt D, editors. The Oxford Handbook of The Psychology of Appearance. Oxford: Oxford University Press; 2012. p. 594.
- 27. Wasylkiw L, Emms AA, Neuse R, Poirier KF. Are all models created equal? A content analysis of women in advertisements of fitness versus fashion magazines. Body Image. 2009; 6: 137–140.
- Daniels EA. Sex objects, athletes, and sexy athletes: how media representations of women athletes can impact adolescent girls and women. J Adolesc Res. 2009; 24(4): 399–422.
- 29. Lewallen J, Behm-Morawitz E. Pinterest or thinterest? Social comparison and body image on social media. Social Media Soc. 2016: 8: 2–9.
- Mittal S, Gupta N, Dewan P, Kumaraguru P. The Pin-Bang Theory: Discovering the Pinterest World. Delhi: Indraprastha Institute of Information Technology; 2013. Available at: https://arxiv.org/pdf/1307.4952v1
- Casanova MD. The relationship of body image satisfaction and self-esteem among Southern California college women: a cross-cultural study. Diss Abstracts Intern Section A: Hum Soc Sci. 2016; 76: 7–A, E.
- Lee HR, Lee HE, Choi J, Kim JH, Han HL. Social media use, body image, and psychological well-being: a cross-cultural comparison of Korea and the United States. J Health Commun. 2014; 19(12): 1343–1358.
- 33. Forbes GB, Doroszewicz K, Card K, Adams-Curtis L. Association of the thin body ideal, ambivalent sexism, and self-esteem with body acceptance and the preferred body size of college women in Poland and the United States. Sex Roles. 2004; 50(5-6): 331–345.
- 34. Taylor D, Szpakowska I, Swami V. Weight discrepancy and body appreciation among women in Poland and Britain. Body Image. 2013; 10: 628–631.

- 35. Homan K, McHugh E, Wells D, Watson C, King C. The effect of viewing ultra-fit images on college women's body dissatisfaction. Body Image. 2012: 9(1): 50–56.
- Fredrickson B, Roberts T. Objectification theory, toward understanding women's lived experiences, and mental health risks. Psychol Women Quart. 1997; 21: 173–206.
- McCabe MP, Butler K, Watt C. media influences on attitudes and perceptions toward the body among adult men and women. J Appl Biobehav Res. 2007; 12(2): 101–118.
- 38. Scheffers M, van Busschbach JT, Bosscher RJ, Aerts LC, Wiersma D, Schoevers RA. Body image in patients with mental disorders: characteristics, associations with diagnosis and treatment outcome. Compr Psychiat. 2017; 74: 53–60.
- The National Eating Disorders Collaboration. Eating Disorders Prevention, Treatment and Management: An Evidence Review. Sydney: NEDC; 2010.
- National Association of Anorexia Nervosa Associated Disorders. Eating Disorders Statistics; 2016. Available from: http://www.anad.org/get-information/about-eating-disorders/eating-disorders-statistics/
- 41. Andrew R, Tiggemann M. Predicting body appreciation in young women: an integrated model of positive body image. Body Image. 2016; 18: 34–42.
- Johnston J, Taylor J. Feminist consumerism and fat activists: a comparative study of grassroots activism and the Dove real beauty campaign. Signs J Women Culture Soc. 2008; 33(4): 941–966.
- Wlodarczyk-Bisaga K, Dolan B, McCluskey S, Lacey H. Disordered eating behaviour and attitudes toward weight and shape in Polish women. Eur Eating Disord Rev. 1995; 3: 1–12.
- 44. Rathner G. Post-communism and the marketing of the thin ideal. In: Nasser M, Katzman MA, Gordon RA, editors. Eating Disorders and Cultures in Transitions. New York: Taylor & Francis; 2001. pp. 93–104.
- 45. Page RM, Ihász F, Kalabiska MUI, Johnson E, Hantiu I, Klarova R, et al. Self-perception of body weight, weight management practices and goals, and other weight-related factors in Central and Eastern European adolescents. Intern Quart Community Health Educ. 2007; 27(1); 39–58.