

Self-Reported Weight and Body Weight Dissatisfaction: Their Conjoint Role in Dieting and Health Complaints of Adolescents

Diana Tăut, Carmina Chițu, and Adriana Băban

Babeș-Bolyai University, Cluj-Napoca, Romania

Abstract

This study's aim was to examine the joint influence of self-reported weight and body weight dissatisfaction on weight control strategies and physical and psychological complaints. A number of 5404 Romanian adolescents, aged between 13 and 15 years (50.6% girls) participated in a larger study assessing health risk behaviors and attitudes in youth. Participants were asked to fill in their weight and height (in order to calculate the BMI). Questions regarding body weight dissatisfaction, unhealthy weight control and physical and psychological health complaints were also addressed. We used logistic regressions to test the associations between BMI, body weight dissatisfaction, unhealthy weight control behaviors, and health complaints. The proportion of adolescents who reported being too fat was 21% with 10% of normal weight boys and 20% of normal weight girls adolescents being dissatisfied with their body weight. The most common health complaints reported by adolescents were headaches (23.3%), sleep problems (16.7%) and feeling low (32%). There were significant interactions between BMI and body weight dissatisfaction in predicting unhealthy weight control and physical and psychological symptoms. Non-overweight adolescents who perceived themselves as being too fat were more likely to engage in unhealthy weight control behaviors and more likely to report both physical and psychological symptoms compared to their overweight or those who considered themselves as being too thin. The present study suggests that the use of unhealthy weight control methods is not uncommon among adolescents who believe they are too fat but who have BMIs within the normal range. Interventions informed by research should aim to address boy weight concerns and to equip adolescents with skills in order to critically appraise body weight ideals.

Keywords: body dissatisfaction, health complaints, diet, obesity

Introduction

Research on body image increased in the last 30 years due to its importance in explaining well being and health related issues. A broader definition of body image refers to one's subjective, mental representation of his/her body (Lowery et al., 2005)

✉ Adriana Băban, Babeș-Bolyai University, Department of Psychology, Republicii 37 Street, 40015 Cluj-Napoca, Romania. E-mail: adrianababan@psychology.ro

and encompasses a person's perceptions, thoughts and feelings about his/her body (Grogan, 1999; Muth & Cash, 1997). It is constructed through both self-observation and socialization and includes complex interactions among attitudes, emotions, memories and experiences, just to name a few (Lowery et al., 2005).

However, most research focused on body image approached a narrower definition of the concept: dissatisfaction with weight, more exactly desire to be thinner (Grogan, 1999). Following this line, Stice and Shaw (2002) defined body dissatisfaction as negative subjective evaluations of one's physical body. This evaluation can refer to figure, weight, stomach or hips or it is operationalized as the difference between current and ideal weight (Cash, 2012). However, this conceptualization is limited and not very accurate because someone can be satisfied with his or her body even if it is far away from the ideal weight (Polivy & Herman, 2002). A more appropriate way to assess body dissatisfaction is to ask people directly how satisfied/ dissatisfied they are when it comes to their bodies. While most studies in the last 30 years have focused on disentangling the psychosocial correlates and consequences of body images in girls and women, this is changing since recent work also includes boys and men (Tiggemann, 2004). The need to understand the impact of body image on health for both men and women is not questionable anymore.

Body dissatisfaction is influenced by a series of variables, summarized in the Tripartite Model (Stice & Shaw, 2002). According to this model, the risk factors that directly influence body dissatisfaction are body mass, thin-ideal internalization, and perceived pressure to be thin. Regarding body mass, there are studies showing that it explains only a small variance of body dissatisfaction (Stice, Hayward, Cameron, Killen, & Taylor, 2000) while the majority of others have shown a positive relation between these two concepts with high body mass being predictive for increased body dissatisfaction. More exactly, women and girls who are objectively heavier tend to be less satisfied with their bodies, and also have lower global self-esteem than thinner women (Schwartz & Brownell, 2004).

The second factor, pressure to be thin is the result of a wide variety of sociocultural sources such as mass media, family, peers, partners (Byely, Archibald, Graber, & Brooks-Gunn, 2000). Thin-ideal internalization is considered to be a causal risk factor for body image dissatisfaction. The concept refers to the extent to which an individual cognitively "buys into" socially defined ideals of attractiveness and engages in behaviors designed to produce an approximation of these ideals (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). The thin-ideal body image for women is reinforced by the social environment. Sources such as mass media, family (e.g. Mellor, McCabe, Ricciardelli, & Merino, 2008) and peers set a series of expectations that highlight the benefits of thinness such as social acceptance and academic success (Stice & Shaw, 2002). Studies analyzing the relation between perceived pressure to be thin, body dissatisfaction and initial body concerns arrived at mixed results. While a part of the research showed stronger effects for individuals with initial body image concerns (Hamilton & Waller, 1993; Heinberg & Thompson,

1995; Irving, 1990; Posavac, Posavac, & Posavac, 1998), others could not replicate these effects (Richins, 1991; Thornton & Maurice, 1997).

Among the main consequences of body dissatisfaction, as proposed by Stice and Shaw (2002), are dieting and negative affect. Body dissatisfaction leads to dieting via the belief that this is an effective way to lose weight. However, repeated dieting increases the risk for subsequent health problems. Following this line, some authors investigated the impact of body dissatisfaction on dieting. Not only that body dissatisfaction is a risk factor for developing eating disorders, but studies consistently showed that body dissatisfaction is a key element of maladaptive eating (Cooley & Torey, 2001). Moreover, longitudinal studies identified body dissatisfaction as one of the predictors of eating and dieting problems (Attie & Brooks-Gunn, 1989; Heatherton, Mahamedi, Striipe, Field, & Keel, 1997; Killen et al., 1996; Stice & Agras, 1998). Whereas adolescents engage in both healthy weight control strategies (healthy eating and regular exercise) and unhealthy weight behaviors (skipping meals, laxative/diuretic use, vomiting, increase in smoking) (Neumark-Sztainer, Story, Resnick, & Blum, 1996), longitudinal studies showed that unhealthy weight control behaviors predict increases in body mass index (Neumark-Sztainer, Wall, Story, & Standish, 2011). Although in the short-term a restrictive diet may be helpful in losing weight, when it comes to longer term, benefits are questionable. What is more, dysfunctional weight control strategies are associated with other risk behaviors such as substance use, risky sexual behaviors and suicide attempts (French, Perry, Leon, & Fulkerson, 1994; Neumark-Sztainer et al., 1996; Patton, Johnson-Sabine, Wood, Mann, & Wakeling, 1990). These are, in turn, related to an increased prevalence of depression (Denniston, Roth, & Gilroy, 1992), anxiety, and lowered self-esteem (Thompson & Altabe, 1991) in these adolescents. Problems in body image, also have a negative influence on self-reported health of adolescents, due to increased awareness of bodily changes as the attention becomes focused more to self (Field, 2004). A study of Meland, Haugland, and Bredablik (2007) showed, in a Health Behavior in School-Aged Children (HBSC) study of Norway adolescents, that body dissatisfaction was associated with poorer self-reported health, even after controlling for potential confounders such as age or gender. A more recent survey using HBSC data from 2002 to 2014 in 33 countries showed that for girls in 12 countries and for boys in 4 countries, the association between self-reported overweight status and adolescents' health complaints increased with time. Teens who considered their body as being too fat reported more psychosomatic health complaints compared to those who did not experience body dissatisfaction (Whitehead et al., 2017).

However, to this date, there are no studies to examine the relationships between body weight, weight dissatisfaction (considering oneself as being too thin or too fat) and health concerns in representative samples of youth. The present study closes this gap by specifically tapping into the relationships between these variables. Thus, our aim is to examine the joint influence of body mass index (BMI) and body weight

dissatisfaction on weight control strategies and physical and psychological complaints. Our assumptions are that, adolescents who consider themselves as being too fat will display more dysfunctional weight control strategies and report more psychological and physical complaints than those considering themselves as being too thin, regardless of the self-reported BMI.

Methods

The present study draws on the Romanian data (for 2014) collected in Health Behavior in School-Aged Children (HBSC) study, a cross-national survey that collects data every 4 years regarding 11 to 15 years old adolescents' self-reported health and health behaviours, well-being, social capital etc. (Currie et al., 2014). The study received the ethical approval of Babes-Bolyai University prior to collecting the data and individual informed consents were obtained from the school principal, parents and adolescents participating in the study.

Participants and Procedure

A total of 5404 adolescents from 150 schools across Romania ($M_{age} = 13.23$, $SD = 1.65$), from which 50.6% were girls, filled in, during school classes, the questions regarding height and weight, body weight dissatisfaction, weight control behaviours, and health complaints. The answers were anonymous and sealed in envelopes after completion and adolescents were informed that they could choose not to answer or withdraw from the study at any point.

Measures

In order to calculate the **BMI**, participants were asked to indicate their height in meters (without shoes) and approximate body weights (without clothes) in kilograms. Body mass index was calculated by dividing the participants' weight in kilograms by their height in meters squared (kg/m^2). In addition, there were questions regarding **body weight dissatisfaction** (*Do you think your body is ... 1 - much too thin; 2 - too thin; 3 - about the right size; 4 - too fat; 5 - much too fat?*), **unhealthy weight control** (*Which of the following things have you done in the last 12 months in order to lose weight?*). Participants had to tick (*Yes/No*) whether they ever used *skipping meals, smoking, vomiting, using pills, and restricting diet to one or more foods*, respectively, in order to lose weight. The test-retest stability of the responses to weight control practices was very good in previous studies, while the stability of responses in attempts to control weight during the previous 12 months was found to be excellent ($ICC = .90$; 95% $CI = .87-.92$) (Currie et al., 2006).

Health complaints were tapped into by asking adolescents *How often you experienced health complaints such as: (1) headache, (2) stomach-ache, (3)*

backache, (4) feeling dizzy, (5) feeling low, (6) irritability or bad temper, (7) feeling nervous, and (8) difficulties in getting to sleep, (on a scale ranging from 1 - about every day; 2 - more than once a week; 3 - almost every week; 4 - almost every month; 5 - rarely or never). The first four health complaints were defined as somatic and the latter four as psychological health complaints. Health complaints were further coded into absent (if were reported rarely or never) and present (scale answers ranging from 1 to 4).

Data Analysis

First, we reported the percentages of adolescents who reported body dissatisfaction, by computing a dichotomic variable with two modalities: too thin (aggregate of *much too thin* and *a bit too thin*) and too fat (*much too fat* and *a bit too fat*) and removed from the analysis the participants who thought their weight was fine. These percentages were reported based on weight status (normal weight or overweight and obese), calculated using Cole, Bellizzi, Flegal, and Dietz (2000) cut-off points for overweight and obesity.

In order to address the main objectives of this study, we retained for the analyses all cases ($N = 5404$), regardless of the BMI status. Further, we reported the percentages of adolescents using unhealthy weight control strategies (those answering "yes" to using one of the above mentioned strategies) and those reporting health complaints (on a weekly basis or more frequently). Multinomial logistic regressions were run to test the possible joint effects of BMI and body dissatisfaction on unhealthy weight control behaviours as well as on types of health complaints.

Results

Prevalence of Body Weight Dissatisfaction, Unhealthy Weight Control Strategies and Health Complaints

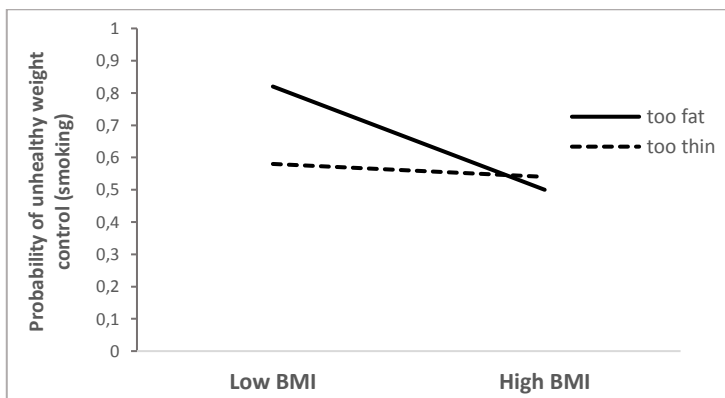
In the total sample (aged 11-15), 26.6% of the boys and 11.6% of the girls were classified as overweight and obese according to the cut-offs used for this study. Moreover, in the total sample, 19% of adolescents felt they were too thin, whereas 21% thought they are too fat. Interestingly, when we split data by BMI status (normal weight vs. overweight/obese), the results showed that 20% of the girls and 10% boys within the range of normal weight considered themselves 'too fat'. Unsurprisingly, the percents within the overweight/obese group were higher with 50% of the boys and 66% of the girls perceiving themselves as being "too fat".

Adolescents had been used the following weight control strategies in the previous year as follows: skipping meals 24.6%, smoking 7.25%, vomiting 4.4%, using pills 2%, restriction of diet to one or more foods 11.55%.

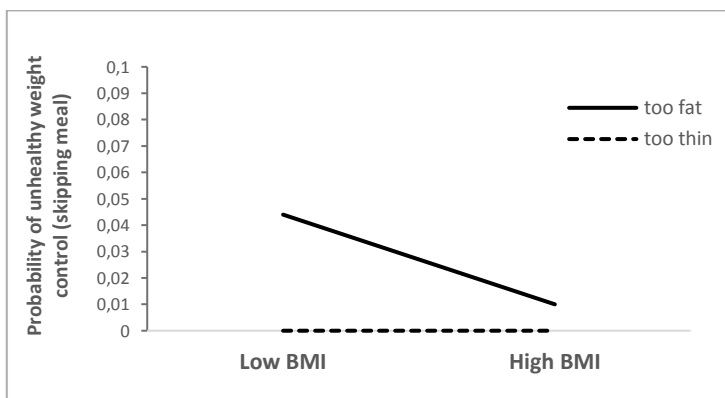
The most common health complaints reported by adolescents were headaches (23.3%) and sleep problems (16.7%). As for psychological health complaints, about one third (32%) of adolescents reported "feeling low" during the past week.

BMI, Body Weight Dissatisfaction and Unhealthy Weight Control Strategies

In a second step, we investigated the relationship between BMI and unhealthy weight control strategies as moderated by body weight dissatisfaction (being too thin/too fat). In these analyses, we used BMI as a continuous variable, from lower to higher values.



Panel A. Smoking to lose weight as a function of BMI x Body weight dissatisfaction



Panel B. Skipping meals to lose weight as a function of BMI x body weight dissatisfaction

Figure 1. BMI and body weight dissatisfaction as predictors for unhealthy weight control strategies (Panel A and B).

The results of the multinomial logistic regression show that when using smoking to lose weight as criterion, all variables were significant predictors, with BMI ($B = -.22, p = .01, OR = .76$) and body weight dissatisfaction ($B = -1.14, p = .039, OR = .31$) contributing significantly to it. The interaction term of BMI x body weight dissatisfaction (considering body as being either too thin/too fat) reached statistical significance also, $B = .05, p = .05, OR = 1.05$ (*Figure 1 - Panel A*). The figure shows an inverse relationship between BMI and weight control, modulated by body weight dissatisfaction. In particular, the effect was observed for those who had lower BMIs but considered themselves too fat and who were more likely to smoke in order to lose weight.

Separate regression analyses revealed that there was also a joint effect of BMI x body weight dissatisfaction on skipping meals (as unhealthy weight control strategy), $B = -.03, p = .02, OR = .93$, beyond the effects of BMI and dissatisfaction alone, which did not contribute significantly to the criterion ($Bs < .41, ps > .13$). *Figure 1 - Panel B* shows an inverse relationship between BMI and skipping meals modulated by body weight dissatisfaction (believing that one is too fat): among adolescents who considered themselves as being too fat, those with lower BMIs were more likely to skip meals as a way to control their weight compared to those with higher BMIs.

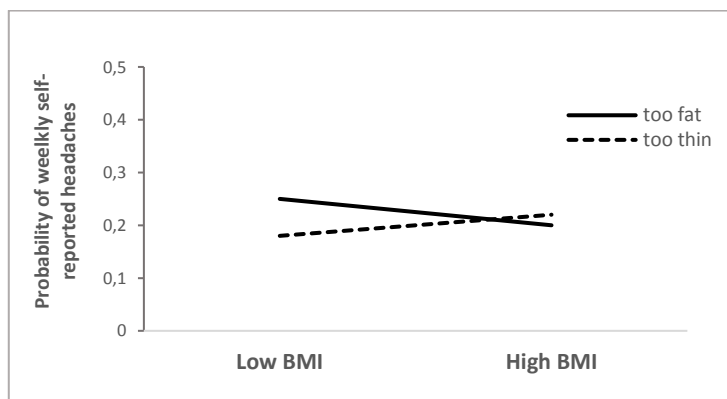
BMI, Body Weight Dissatisfaction and Health Complaints

Finally, we ran multinomial logistic regression to assess the relative contribution of BMI, body weight dissatisfaction (too thin/too fat) and their interaction on physical (weekly headaches) and psychological (feeling low and having sleeping difficulties). For the sake of brevity, we detailed only the significant results, since BMI and body weight dissatisfaction were not predictive (alone or in combination) for *stomach-ache, backache, feeling dizzy, irritability or bad temper, and feeling nervous*.

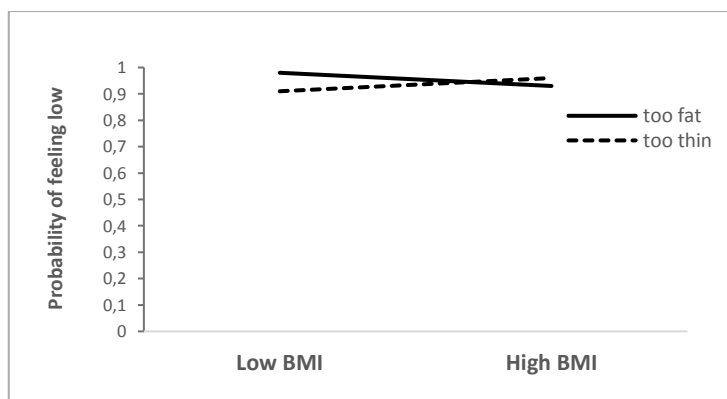
For the physical health complaints, in particular headaches, the results show that while BMI did not contribute significantly to this criterion ($B = -.07, p = .09, OR = .92$), both weight dissatisfaction ($B = -.54, p = .033, OR = .57$), as well as the interaction of BMI x weight dissatisfaction ($B = .02, p = .03, OR = 1.02$) proved significant predictors. Thus, weekly headaches were more likely to be experienced by adolescents with lower BMIs but who perceived themselves as being too fat rather than too thin. There were no differences in those scoring higher in BMI, regardless of whether they considered themselves too fat or too thin (*Figure 2 - Panel A*).

In what regards psychological health complaints, the results showed that BMI ($B = -.76, p = .001, OR = .45$), body weight dissatisfaction ($B = -.14, p = .001, OR = .86$) and their interaction ($B = .04, p = .001, OR = 1.04$) predicted adolescents' reports of feeling low. Those with lower BMIs who perceived themselves too fat rather than too thin were more likely to report also feeling low. There were no differences in

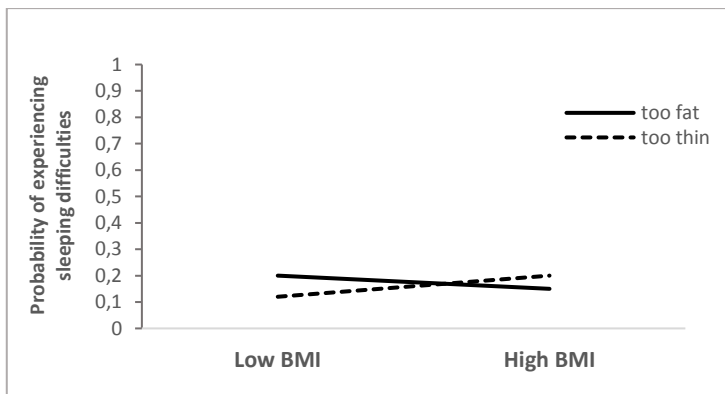
those scoring higher in BMI (regardless if they considered themselves too fat or not) (*Figure 2 - Panel B*). Finally, a similar pattern of results are observed when entering sleep difficulties as criterion: while BMI was not significant as a predictor ($B = .08$, $p = .07$, $OR = .91$), body weight dissatisfaction ($B = -.63$, $p = .02$, $OR = .52$) and the interaction between BMI x body weight dissatisfaction ($B = .03$, $p = .03$, $OR = 1.03$), respectively, were significant in accounting for the variance in self-reported sleep difficulties. Again, adolescents with lower BMIs and who considered themselves too fat had a higher risk of experiencing sleeping difficulties compared to their counterparts with higher BMI (*Figure 2 - Panel C*).



Panel A. Weekly headaches as a function of BMI x Body weight dissatisfaction



Panel B. Feeling low as a function of BMI x Body weight dissatisfaction



Panel C. Sleeping difficulties as a function of BMI x Body weight dissatisfaction

Figure 2. BMI and body weight dissatisfaction as predictors for health complaints (Panel A, B, and C).

Discussion

The present study sought to investigate the intricate relationship between dissatisfaction with body weight and different physical and psychological health complaints in a representative cohort of Romanian adolescents. This brings a valuable contribution to the literature, as it is the first research to investigate the relationship between weight status and dieting, further deepening into the interrelations between BMI, dissatisfaction and unhealthy dieting. We showed that BMI and weight dissatisfaction - evaluating oneself as being too fat, jointly contributed to predicting both physical and psychological health complaints, which is consistent to previous reports in the literature.

The first results point to the fact that there are a relatively high number of adolescents who think they are "too fat" (15% of both genders) even though their BMI falls within the normal range. Still, the majority of adolescents feeling dissatisfied with their body were in the overweight/obese category (50% of boys and 66% of girls). These findings are difficult to compare with international data, as the studies on the prevalence of body weight dissatisfaction in normal weight adolescents are scarce. Still, related data in Ireland HBSC country report points to similar conclusions, showing that 13% of non-overweight Irish children aged 10-17 said they were on a diet in 2010 (Kelly, Molcho, Doyle, & Nic Gabhainn, 2010); which increased to 16% in 2014 (Gavin et al., 2015). Our results are also in line with those reported in the meta-analysis conducted by Weinberger, Kersting, Riedel-Heller, and Luck-Sikorski (2016) in which body weight dissatisfaction was considerable higher in overweight and obese compared to non-obese adults and in women rather than in men. Overall, these results are worrisome, as body

dissatisfaction is not only a consequence of obesity but also a well-known trigger of strict dieting practices which are often unhealthy (Goldfield et al., 2010). It is also a starting point of well-documented risk of eating disorders (Polivy & Heatherton, 2015) and of further depressive symptoms (Brausch & Gutierrez, 2009).

Indeed, our study shows that in adolescents with lower BMIs, body dissatisfaction was associated with a higher risk of using smoking and skipping meals in order to lose weight. Still, the same relationship was not evident for adolescents with higher BMIs. This delineates an at-risk group for eating disorders, who despite not having weight-related problems, have body image preoccupations and make use of problematic dieting strategies bearing consequences for health on the long term (Wertheim, Koerner, & Paxton, 2001). The present results should not come as a surprise, as previous research showed that body image disturbance increased the risk for smoking initiation in adolescent girls (Clark et al., 2005). Also, dissatisfaction with weight and shape was associated with excessive physical activity (Holland, Brown, & Keel, 2014) and use of laxatives, diuretics or diet pills even if adolescents were aware of their potentially harmful effects (Rudd & Lennon, 2000).

Adolescents with normal body weights who think they are too fat also report somatic and psychological complaints. In particular, those feeling "too fat" had more headache complaints and sleeping difficulties, but more important, they reported "feeling low" more often than those satisfied with body weight. Although we did not assess the prevalence of depressive symptoms, the present results suggest that body weight dissatisfaction is associated with a range of complaints similar to depression, a replica of a well-documented relationship between depression and body weight concerns (Goldfield et al., 2010). Interestingly, previously described relationships between body weight dissatisfaction, dieting strategies and health complaints in the overweight and obese groups were not evident in our research, even though there was a higher percentage of overweight/obese adolescents who were dissatisfied with their body weight. One explanation would be that we took into consideration both genders even though body ideal is different for boys and girls. Whereas girls value a thin ideal, boys learn to value muscular body shapes, are concerned more with the weight of their abdominal, back, and arm muscles, and are less likely to endorse attitudes of body dissatisfaction when questions regarding general weight are addressed (Karazsia, Murnen, & Tylka, 2017; McCreary, 2007; McCreary, Saucier, & Courtenay, 2005). Coupled with a relatively low representation of the overweight and obese population in our sample, this might lead to the conclusion that a relationship between dissatisfaction and high BMI was too weak to reach conventional significance. We plan to conduct a further study to investigate the dynamics of these constructs for boys and girls separately.

Although there are some important advances brought by this study, it also bears some limitations. As it is a cross-sectional cohort study, we cannot draw inferences regarding the temporal sequence in which the relations occur between BMI, weight dissatisfaction, dieting strategies, and health complaints. Although there is ample

literature discussing the role of body image and weight dissatisfaction in the onset of dieting and further psychological complaints, studies should test longitudinally how these variables influence each other. Also, BMI was calculated based on self-report data, which might lead to problems in detecting the actual prevalence of overweight/obesity in the selected sample. Finally, other types of psychopathology (e.g. depression, anxiety disorders), medical conditions, and developmental changes associated with puberty and adolescents, or perceived stress/exposure to stress were not tested or controlled and might have influenced the pattern of results. In particular, bodily changes associated with maturation might explain various health complaints including those specific to depression (Patton & Viner, 2007).

Conclusion

The present results point to the need of paying more attention to non-obese adolescents, who also seem to display body weight concerns, associated dieting behaviours, and health complaints. What might begin as an effort to lose weight or gain the approval of peers may become a long term habit, more difficult to tackle. Interventions informed by research should aim to address body weight concerns and to equip adolescents with skills in order to critically appraise body weight ideals and to seek informed help when dealing with overweight and obesity.

References

- Attie, I., & Brooks-Gunn, J. (1989). Development of eating problems in adolescent girls: A longitudinal study. *Developmental Psychology*, 25(1), 70.
- Brausch, A. M., & Gutierrez, P. M. (2009). The role of body image and disordered eating as risk factors for depression and suicidal ideation in adolescents. *Suicide & Life-Threatening Behavior*, 39(1), 58-71.
- Byely, L., Archibald, A. B., Graber, J., & Brooks-Gunn, J. (2000). A prospective study of familial and social influences on girls' body image and dieting. *The International Journal of Eating Disorders*, 28(2), 155-164.
- Cash, T. F. (2012). Cognitive-behavioral perspectives on body image. In T. F. Cash (Ed.), *Encyclopedia of body image and human appearance* (pp. 334-342). London, UK, and San Diego, CA: Academic Press.
- Clark, M. M., Croghan, I. T., Reading, S., Schroeder, D. R., Stoner, S. M., Patten, C. A., & Vickers, K. S. (2005). The relationship of body image dissatisfaction to cigarette smoking in college students. *Body Image*, 2(3), 263-270.

- Cole, T. J., Bellizzi, M. C., Flegal, K. M., & Dietz, W. H. (2000). Establishing a standard definition for child overweight and obesity worldwide: International survey. *British Medical Journal*, 320(7244), 1240-1243.
- Cooley, E. J., & Torey, T. (2001). Disordered eating in college freshman women: A prospective study. *Journal of American College Health*, 49(5), 229-235.
- Currie, C., Inchley, J., Molcho, M., Lenzi, M., Veselska, Z., & Wild, F. (Eds.) (2014). *Health behaviour in school-aged children (HBSC), study protocol: Background, methodology and mandatory items for the 2013/14 Survey*. St Andrews: Child and Adolescent Health Research Unit (CAHRU), University of St Andrews.
- Currie, C., Nic Gabhainn, S., Godeau, E., Roberts, C., Smith, R., Currie, D., ... Barnekow, V. (Eds.) (2006). *Health behaviour in school-aged children: A WHO cross-national study (HBSC), research protocol for the 2005/06 Survey*. Edinburgh: Child and Adolescent Health Research Unit (CAHRU), The University of Edinburgh.
- Denniston, C., Roth, D., & Gilroy, F. (1992). Dysphoria and body image among college women. *International Journal of Eating Disorders*, 12(4), 449-452.
- Field, A. E. (2004). Risk factors for eating disorders: An evaluation of the evidence. In K. Thompson (Ed.), *Handbook of eating disorders and obesity* (pp. 17-32). Hoboken, NJ: John Wiley and Sons.
- French, S. A., Perry, C. L., Leon, G. R., & Fulkerson, J. A. (1994). Food preferences, eating patterns, and physical activity among adolescents: Correlates of eating disorders symptoms. *Journal of Adolescent Health*, 15(4), 286-294.
- Gavin, A., Keane, E., Callaghan, M., Molcho, M., Kelly, C., & Nic Gabhainn, S. (2015). *The Irish health behaviour in school-aged children (HBSC) study 2014*. Department of Health. Retrieved from http://health.gov.ie/wp-content/uploads/2015/12/HBSC2014_web2.pdf
- Goldfield, G., Moore, C., Henderson, K., Buchholz, A., Obeid, N., & Flament, M. (2010). Body dissatisfaction, dietary restraint, depression, and weight status in adolescents. *Journal of School Health*, 80(4), 186-192.
- Grogan, S. (1999). *Body image: Understanding body dissatisfaction in men, women and children*. London: Routledge.
- Hamilton, K., & Waller, G. (1993). Media influences on body weight estimation in anorexia and bulimia. An experimental study. *The British Journal of Psychiatry*, 162(6), 837-840.
- Heatherton, T. F., Mahamedi, F., Strieppe, M., Field, A. E., & Keel, P. (1997). A 10-year longitudinal study of body weight, dieting, and eating disorder symptoms. *Journal of Abnormal Psychology*, 106(1), 117.
- Heinberg, L. J., & Thompson, J. K. (1995). Body image and televised images of thinness and attractiveness: A controlled laboratory investigation. *Journal of Social and Clinical Psychology*, 14(4), 325-338.

- Holland, L. A., Brown, T. A., & Keel, P. K. (2014). Defining features of unhealthy exercise associated with disordered eating and eating disorder diagnoses. *Psychology of Sport and Exercise, 15*(1), 116-123.
- Irving, L. M. (1990) Mirror images: Effects of the standard of beauty on the self-and body-esteem of women exhibiting varying levels of bulimic symptoms. *Journal of Social and Clinical Psychology, 9*(2), 230-242.
- Karazsia, B. T., Murnen, S. K., & Tylka, T. L. (2017). Is body dissatisfaction changing across time? A cross-temporal meta-analysis. *Psychological Bulletin, 143*(3), 293-320.
- Kelly, C., Molcho, M., Doyle, P., & Nic Gabhainn, S. (2010). Psychosomatic symptoms among school children. *International Journal of Adolescent Medicine and Health, 22*(2), 229-236.
- Killen, J. D., Taylor, C. B., Hayward, C., Haydel, K. F., Wilson, D. M., Hammer, L., ... Strachowski, D. (1996). Weight concerns influence the development of eating disorders: A 4-year prospective study. *Journal of Consulting and Clinical Psychology, 64*(5), 936-940.
- Lowery, S. E., Kurpius, S. E. R., Befort, C., Blanks, E. H., Sollenberger, S., Nicpon, M. F., & Huser, L. (2005). Body image, self-esteem, and health-related behaviors among male and female first year college students. *Journal of College Student Development, 46*(6), 612-623.
- McCreary, D. R. (2007). The Drive for Muscularity Scale: Description, psychometrics, and research findings. In J. K. Thompson & G. Cafri (Eds.), *The muscular ideal: Psychological, social, and medical perspectives* (pp. 87-106). Washington, DC: American Psychological Association.
- McCreary, D. R., Saucier, D. M., & Courtenay, W. H. (2005). The drive for muscularity and masculinity: Testing the associations among gender role traits, behaviors, attitudes, and conflict. *Psychology of Men & Masculinity, 6*(2), 83-94.
- Meland, E., Haugland, S., & Breidablik, H. J. (2007). Body image and perceived health in adolescence. *Health Education Research, 22*(3), 342-350.
- Mellor, D., McCabe, M., Ricciardelli, L., & Merino, M. E. (2008). Body dissatisfaction and body change behaviors in Chile: The role of sociocultural factors. *Body Image, 5*(2), 205-215.
- Muth, J. L., & Cash, T. F. (1997). Body image attitudes: What difference does gender make? *Journal of Applied Social Psychology, 27*(16), 1438-1452.
- Neumark-Sztainer, D., Story, M., Resnick, M. D., & Blum, R. W. (1996). Correlates of inadequate fruit and vegetable consumption among adolescents. *Preventive Medicine, 25*(5), 497-505.
- Neumark-Sztainer, D., Wall, M., Story, M., & Standish, A. R. (2011). Dieting and unhealthy weight control behaviors during adolescence: Associations with 10-year changes in body mass index. *Journal of Adolescent Health, 50*(1), 80-86.

- Patton, G. C., Johnson-Sabine, E., Wood, K., Mann, A. H., & Wakeling, A. (1990). Abnormal eating attitudes in London schoolgirls - a prospective epidemiological study: Outcome at twelve month follow-up. *Psychological Medicine*, 20(2), 393-394.
- Patton, G., & Viner, R. (2007). Pubertal transitions in health. *The Lancet*, 369(9567), 1130-1139.
- Polivy J., & Heatherton, T. (2015) Spiral model of dieting and disordered eating. In T. Wade (Ed.), *Encyclopedia of feeding and eating disorders* (pp. 791-793). Singapore: Springer.
- Polivy, J., & Herman, C. P. (2002). Causes of eating disorders. *Annual Review Psychology*, 53(1), 187-213.
- Posavac, H. D., Posavac, S. S., & Posavac, E. J. (1998). Exposure to media images of female attractiveness and concern with body weight among young women. *Sex Roles*, 38(3-4), 187-201.
- Richins, M. L. (1991). Social comparison and the idealized images of advertising. *Journal of Consumer Research*, 8(1), 71-83.
- Rudd, N. A., & Lennon, S. J. (2000). Body image and appearance-management behaviors in college women. *Clothing & Textiles Research Journal*, 18(3), 152-162.
- Schwartz, M. B., & Brownell, K. D. (2004). Obesity and body image. *Body Image*, 1(1), 43-56.
- Stice, E., & Agras, W. S. (1998). Predicting the onset and remission of bulimic behaviors in adolescence: A longitudinal grouping analysis. *Behavior Therapy*, 29(2), 257-276.
- Stice, E., Hayward, C., Cameron, R. P., Killen, J. D., & Taylor, C. B. (2000). Body-image and eating disturbances predict onset of depression among female adolescents: A longitudinal study. *Journal of Abnormal Psychology*, 109(3), 438-444.
- Stice, E., & Shaw, E. H. (2002). Role of body dissatisfaction in the onset and maintenance of eating pathology. A synthesis of research findings. *Journal of Psychosomatic Research*, 53(5), 985-993.
- Thompson, J. K., & Altabe, M. (1991). Psychometric qualities of the Figure Rating Scale. *International Journal of Eating Disorders*, 10, 615-619
- Thompson, J. K., Heinberg, L. J., Altabe, M. N., & Tantleff-Dunn, S. (1999). *Exacting beauty: Theory, assessment and treatment of body image disturbance*. Washington, DC: American Psychological Association.
- Thornton, B., & Maurice, J. (1997). Physique contrast effect: Adverse impact of idealized body images for women. *Sex Roles*, 37(5-6), 433-439.
- Tiggemann, M. (2004). Body image across the adult lifespan: Stability and change. *Body Image: An International Journal of Research*, 1(1), 29-41.
- Weinberger, N. A., Kersting, A., Riedel-Heller, S. G., & Luck-Sikorski, C. (2016). Body dissatisfaction in individuals with obesity compared to normal-weight individuals: A systematic review and meta-analysis. *Obesity Facts*, 9(6), 424-441.

- Wertheim, E. H, Koerner, J., & Paxton, S. J. (2001). Longitudinal predictors of restrictive eating and bulimic tendencies in three different age groups of adolescent girls. *Journal of Youth and Adolescence*, 30(1), 69-81.
- Whitehead, R., Berg, C., Cosma, A., Gobina, A., Keane, E., Neville, F., ... Kelly, C. (2017). Trends in adolescent overweight perception and its association with psychosomatic health 2002-2014: Evidence from 33 countries. *Journal of Adolescent Health*, 60(2), 204-211.

Autoinforme de peso e insatisfacción con el peso corporal: Su papel común en la dieta de adolescentes y sus quejas sobre la salud

Resumen

El objetivo de este estudio fue examinar la influencia común del índice de masa corporal (IMC) e insatisfacción con el peso corporal en las estrategias del control de peso y quejas físicas y psicológicas. Un total de 5404 adolescentes rumanos a la edad de entre 13 y 15 años (50.6% chicas) participaron en un estudio más grande que examinaba las conductas y actitudes de riesgo de salud en los jóvenes. Los participantes tenían que dar su peso y altura (para calcular el IMC). También respondieron a las preguntas sobre su insatisfacción con el peso corporal, control de peso insalubre y quejas sobre molestias de salud física y psicológica. Hemos usado la regresión logística para examinar la relación entre el IMC, la insatisfacción con el peso corporal, el control de peso insalubre y las molestias de salud. 21% de adolescentes autoevaluaron que padecen sobrepeso, con 10% de adolescentes de peso normal insatisfechos con su peso corporal. Las molestias de salud más frecuentes reportadas por los adolescentes fueron dolor de cabeza (23.3%), problemas con el sueño (16.7%) y mal humor (32%). Hubo una interacción significativa entre el IMC y la insatisfacción con el tamaño corporal para predecir el control de peso insalubre y síntomas físicos y psicológicos. Los adolescentes sin sobrepeso pero insatisfechos con su cuerpo mostraban más tendencias a las conductas de control de peso insalubre y reportaban tanto síntomas físicos como psicológicos en comparación con sus compañeros con el sobrepeso o aquellos más satisfechos con su cuerpo. El presente estudio sugiere que el uso de métodos del control de peso insalubre no es poco común entre los adolescentes con niveles altos de insatisfacción, y que tienen el IMC dentro de lo normal. Las intervenciones deberían tratar de abordar las preocupaciones sobre el peso corporal y proporcionar a los adolescentes habilidades para valorar críticamente ideales de peso corporal.

Palabras clave: insatisfacción con el cuerpo, quejas sobre la salud, dieta, obesidad

Received: November 21, 2017

