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Weight Status and Mental Well-Being Among Adolescents: The Mediating Role of Self-Perceived Body Weight. A Cross-National Survey

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ABSTRACT

Background: Adolescents' overweight and obesity are associated with poor mental health. However, little is known whether the influence of overweight and obesity on mental well-being is influenced by self-perceived body weight. Exploring underlying mechanisms behind the relationships between obesity and mental well-being is of interest for policy makers and others working in the field of adolescent health.

Methods The study is based on national representative data from adolescents (15 y) participating in the 2017/2018 Health Behaviour in School-aged Children study (47 countries, n = 76998). Mixed regression models including gender and socio-economic status as covariates were used to analyze associations between weight status and mental well-being (life satisfaction and subjective health complaints) and to explore the mediating effect of self-perceived body weight (feeling too thin or too fat). Country differences were further assessed by multiple factor analysis.

Results: Self-perceived body weight mediated the observed associations between overweight, obesity and mental well-being. Perceiving own body weight as "too thin" or "too fat" was associated with lower mental well-being, regardless of weight status. Self-perceived body weight varied by gender, socio-economic status and country.

Discussion: Self-perceived body weight may, to a greater extent than BMI, explain the variation in mental well-being among adolescents. The results are important to policy makers, clinicians and others targeting adolescents' health.

Implications and contribution statement: The present results should be considered when developing policy actions aiming to regulate external pressure related to body weight. Fostering appreciation of the body in relation to its functionality instead of size and shape may improve young people's mental well-being.

Keywords: Weight status; Self-perceived body weight; Mental well-being; Adolescents

Introduction

Overweight and obesity are considered important determinants of poor mental health in the adolescent population. Previous studies report on associations between overweight and obesity and mental illness (1) as well as subjective mental health (2). Self-perceived weight perception is suggested to explain why higher BMI tends to be associated with poor mental health (3). However, few studies have focused on associations between weight status, self-perceived weight and positive mental health, e.g., mental well-being in the adolescent population. The decline in adolescent mental well-being observed in many countries over the last decades (4) has developed in the context of high and even increasing prevalence of overweight, obesity (5) and weight reduction behaviours (6). Addressing associations between young people's weight status, mental well-being and underlying pathways is thus relevant for clinicians and public health professionals.

Mental well-being is a non-clinical measure of positive mental health and a fundamental component of World Health Organization (WHO)'s definition of health (7). Mental well-being is associated with self-rated health (8), perceived stress and anxiety (9), but is not a proxy of mental illness. It encompasses a more global dimension of people's psychological well-being (10). Good mental well-being during younger years is critical to ensuring healthy transitions to adulthood, with implications for overall well-being, growth and development (5), and thus an important health issue. Concern is devoted to the observed declines in adolescent mental well-being during the last two decades, which has developed in the context of increased prevalence of overweight and obesity (5). Examining the associations between weight status and mental well-being may provide a broader understanding of adolescent health with important implications for policy and practice.

Mental well-being can be measured by indicators of life satisfaction and subjective health complains (4, 5). Lower life satisfaction is reported among people living with overweight and obesity compared to normal weight, in different age groups (12) including adolescents (13). The possible link between subjective health complaints, weight status is so far understudied. However, subjective health complaints are inversely associated with physical activity levels and healthy food habits (14), both correlates of overweight and obesity. The impact of weight status on mental well-being are highlighted also in studies showing that youths living with obesity report lower quality of life than do their counterparts with cardiac conditions, diabetes and gastrointestinal conditions (15), and at the same level as those with cancer (16). These findings reflect that living with overweight and obesity may have a significant impact on young people's lifes and suggest a link between weight status and mental well-being, either directly through BMI or through other associated health issues. In the project "Confronting obesity: Co-creating policy with youth", in which adolescents' views on the drivers of obesity are identified (17), adolescents strongly emphasised perception of own body weight as an important factor in the relationship between weight status and mental health. An Iranian study (13) suggested that self-perceived overweight was a stronger predictor of life satisfaction than was actual weight and hypothesized that self-perceived weight may be a mediator in the relationship between BMI and mental well-being. Similarly, a Germany study (18) suggested that adolescent's weight perceptions, rather than actual weight, were associated with personal resources such as self-esteem, self-efficacy, optimism, and sense of coherence. However, evidence for associations in cross-national population-based samples are limited. A research gap of particular interest is whether associations between weight status, self-perceived body weight and mental well-being are generic phenomena or determined by gender, socioeconomic status (SES) or other sociocultural differences. Adolescents' weight status and mental health varies by gender, country and SES (5), and studies exploring these relationships, including mediating factors, may be useful for policymakers, adolescent health service providers and others working in the field of adolescent health.

The present study aims to explore associations between weight status (assessed by BMI-z-score for age and sex) and mental well-being (life satisfaction and subjective health complaints), with a particular focus on the mediating role of self-perceived body weight, and differences related to gender, SES and country, in national representative samples of 15-year-olds from 47 countries participating in the Health Behaviour in School-aged Children study

(HBSC) 2017/2018. To the best of our knowledge, this is the first time such associations are studied in a large, cross-national sample of adolescents.

Methods

The study is based on national representative data from the HBSC study, a World Health Organization (WHO) collaborative cross-national study, with an overall aim to generate increased understanding of health and health behaviour, and their context in the lives of young people aged 11, 13 and 15 years (5). For this paper, in order to reduce complexity, we considered samples of only 15-year-old students from 47 countries/regions, collected in the school year 2017/2018. The primary sampling unit was the school class or, in some countries, the school. The students answered an internationally standardized questionnaire at school after receiving instructions from their teacher. Oral and written information on the confidentiality of their responses were provided and participation was anonymous and voluntary. School and student's response rates varied between the countries. Schools/classes that declined to participate, as well as students absent on the day the survey was carried out, were the two main sources of non-response and were not followed up. Ethical consent from the institutional ethics committee(s) or any relevant board at country level was required. Informed consent of parents (guardians) and adolescents participating in the study was required in the majority of countries included (a minority of countries used informed passive consent). Researchers followed the standardised international research protocol to ensure consistency in survey instruments, data collection and processing procedures. The HBSC Data Management Centre checked the quality of the data collected, performed appropriate cleaning of the data and merged national data sets into an international data file. Detailed information about the study is available at www.hbsc.org.

Measures

Weight status was based on self-reported weight and height measured by the questions: "How much do you weigh without clothes?" and "How tall are you without shoes?" BMI (in kg/m^2) was calculated and classified into "thinness", "normal weight", "overweight" and "obesity" based on the international standardized age- and sex-specific cut off points proposed by Cole and Lobstein (20) for the International Obesity Task Force. Self-reported BMI is considered a reliable proxy measure across age, sex and race/ethnicity subpopulations of adolescents (21). Implausible values were identified as system missing data by The HBSC Data Management Centre.

Self-perceived body weight, the subjective interpretation of an individual's weight status, was measured by the following measure: "Do you think your body is...? "Much too thin", "A bit too thin", "About the right size", "A bit too fat", "Much too fat". This item was developed by the HBSC study and has shown good test–retest stability (ICC = 0.81; 95% CI = 0.76–0.85) (22). Similar questions have been used in several other health-related questionnaires of proven validity (23). For the presented study, responses were recoded into three categories: "too thin"," about the right size", and "too fat". Norway and Macedonia used different response categories and were therefore excluded from the respective analyses.

Life satisfaction is defined as "A cognitive global judgement of one's life as a whole" (10). Participants rated their life satisfaction in a single item question referred to as the Cantril Ladder (24): "Here is a picture of a ladder. The top of the ladder "10" is the best possible life for you and the bottom "0" is the worst possible life for you. In general, where on the ladder do you feel you stand at the moment?" The Cantril Ladder has shown good reliability and convergent validity among adolescents (25).

Subjective health complaints is a subjective measure of complaints that may have both psychological and somatic origins, with higher prevalence of complaints associated with psychological than somatic health (26). Based on the HBSC Symptom Checklist (HBSC-SHC), the adolescents were asked how often they experienced the following symptoms over the last six months: headache, abdominal pain, backache, feeling low, irritability or in a bad mood, feeling nervous, sleeping difficulties and dizziness. The five response categories were: "About every day", "More than once a week", "About every week", "About every month" and "Rarely or never". The HBSC-SCL has adequate test-retest reliability and validity properties (27). For the presented study, the average of the sum score was used ranging from 1 (all eight symptoms about every day) to 5 (rarely or never any symptoms). Data on subjective health complaints were not available in the Macedonian sample and therefore excluded from the analysis of subjective health complaints.

Socioeconomic status was assessed using the family affluence scale (FAS) (28). FAS is a measure of material affluence derived from the characteristics of the family's household and consists of six items. The individual FAS responses were combined and standardized by using ridit transformation to give a linear SES-score (0–1) within each country with an overall mean

score of 0.5. The scores where then categorized in lowest 20%, middle 60 % and highest 20% within each country.

In the total sample, 16.6% had missing data on BMI and were excluded from the analysis. In the remaining sample, the percentage of missing data were as follows: self-perceived body weight 1.2%, life satisfaction 1.5%, subjective health complaints 2.5% and SES 4%.

Statistics

Mixed linear regression models (for the total sample as well as for each country included) were used to assess the relationship between weight status, gender and SES as independent variables and mental well-being indicators (i.e., life satisfaction and subjective health complaints) as dependent variables (model 1). Self-perceived body weight was included in a second model (model 2).

Mixed logistic regression models were used to assess the relationship between weight status, gender and SES as independent variables and self-perceived body weight ("feeling too thin" as well as "feeling too fat") as dependent variables. In all mixed models, country and school class nested in country were included as random effect variables.

Formal testing of the categorical mediator (self-perceived weight) was performed as suggested by Iacobucci (29). As the independent variable (weight status) was multi-categorical variable, mediation was estimated for the relevant paths separately (30) using indicator coding with "normal weight" as base level for weight status and "about right size" as base level for self-perceived body weight. $z_{Mediation}$ score was calculated based on the parameters, illustrated in Fig 1; path **c** was estimated by Model 1 (Table 2), path **b** and **c'** were estimated by Model 2 (Table 2), path **a** was estimated by Model 3 (Supplementary Table 2) Statistical analysis was performed in R, version 4.0.4 (nlme package for mixed linear regression models, lme4 and emmeans for mixed logistic regression models.

Results

In the current study population (N = 64229) 51.4 % were girls, the median age was 15.5 years. Country specific sample characteristics and descriptive statistics are shown in Table 1.

Table 1

Sample characteristics and descriptive statistics (N = 64559)

Country	Sample size	% Girls	Median age	Weight status				Self-perceived body weight			Mental well-being	
				%Thinness	%Normal weight	%Overweight	%Obesity	% Feeling " too thin"	% Feeling " about right size"	%Feeling " too fat"	Median life satisfaction*	Median subj. health complaints**
Albania	710	54	14.9	8	76	14	2	16	62	22	8	4.1
Armenia	1180	56	15.4	17	70	11	2	21	64	15	8	4.1
Austria	1303	54	15.2	11	73	14	3	17	46	37	8	4.0
Azerbaijan	1324	57	15.3	21	70	7	2	21	69	9	8	4.6
Belgium (Flemish region)	1263	51	15.5	14	74	10	2	14	50	36	8	4.0
Belgium (Walloon region)	828	51	15.5	11	72	14	3	17	49	35	8	3.8
Bulgaria	1409	56	15.7	15	69	14	2	15	59	26	8	3.8
Canada	3092	52	15.4	8	68	17	7	15	55	30	7	3.9
Croatia	2068	50	15.6	8	77	14	1	17	58	24	8	4.1
Czech Republic	3559	50	15.3	9	73	15	3	24	51	25	8	4.0
Denmark	711	49	15.8	10	75	12	2	14	51	34	8	4.1
England	320	49	15.5	14	72	12	2	14	54	32	7	3.8
Estonia	1437	51	15.8	10	73	13	4	20	46	34	8	3.9
Finland	1016	50	15.8	7	77	13	3	12	59	29	8	3.8
France	1954	51	15.2	15	72	10	2	15	59	26	8	3.9
Georgia	1069	51	15.7	15	72	10	3	22	54	24	8	4.1
Germany	1389	57	15.3	10	72	15	3	16	46	38	8	4.0
Greece	1265	50	15.8	7	74	16	4	23	49	29	7	3.8
Greenland	155	48	15.2	3	71	22	5	12	52	36	8	4.0
Hungary	1065	56	15.6	10	71	14	5	16	54	31	7	3.6
Iceland	1852	51	15.7	7	75	14	4	13	63	24	8	3.9
Ireland	401	43	15.5	15	73	8	3	22	49	29	7	3.9
Israel	2442	57	15.5	12	71	14	3	20	53	27	8	3.5
Italy	1201	55	15.8	9	74	14	2	11	60	29	7	3.5
Kazakhstan	1464	51	15.3	20	75	5	1	17	69	15	9	4.5
Latvia	1319	51	15.6	10	77	11	3	17	50	33	7	3.9
Lithuania	1095	53	15.8	9	78	11	3	18	52	30	8	4.0
Luxembourg	1183	51	15.5	11	70	14	5	16	50	34	8	3.8
Macedonia	1370	51	15.6	9	68	18	5	*NA*	*NA*	*NA*	8	*NA*

Malta	500	55	15.7	10	58	23	10	14	62	24	7	3.4
Netherlands	1175	53	15.4	16	75	8	1	13	52	35	7	4.1
Norway	585	51	15.6	12	73	12	3	*NA*	*NA*	*NA*	8	4.0
Poland	1675	52	15.6	12	75	11	2	19	40	41	7	3.8
Portugal	1342	54	15.5	10	70	16	3	17	52	31	8	4.1
Republic of Moldova	1528	51	15.6	17	75	7	2	19	63	18	8	4
Romania	1265	52	15.1	11	70	16	3	19	56	26	8	3.8
Russia	1740	53	15.5	14	73	11	2	20	52	28	7	4
Scotland	542	46	15.7	15	66	15	3	17	51	32	7	3.8
Serbia	1522	51	15.8	9	72	16	3	56	37	7	8	4.1
Slovakia	1092	47	15.3	11	73	14	2	23	55	22	8	3.9
Slovenia	1656	47	15.7	7	75	15	4	17	51	32	8	4.1
Spain	1441	51	15.5	10	74	13	3	19	51	30	8	4.2
Sweden	1405	51	15.4	8	78	12	2	19	52	29	7	3.6
Switzerland	2251	49	15.3	10	75	12	2	18	48	34	8	4
Turkey	1483	51	15.8	13	70	14	3	18	64	17	6	3.4
Ukraine	1912	49	15.4	15	74	8	2	14	62	24	7	3.9
Wales	1671	42	15.7	11	71	14	4	16	51	33	8	3.9
Total	**64229**	**51**	**15.5**	**11**	**73**	**13**	**3**	**18**	**54**	**28**	**8**	**3.9**

* Life satisfaction: 0=worst possible life at the moment, 10=best possible life at the moment
** Subjective health complaints: 1=all symptoms frequently, 5=all symptoms never or rarely

Weight status, self-perceived body weight and mental well-being

Associations between weight status and mental well-being are shown in Table 2; model 1a for life satisfaction, model 1b for subjective health complaints. The intercepts estimate mental well-being among boys classified with normal weight and high SES (life satisfaction β=8.04, 95%CI 7.93, 8.15; subjective health complaints β=4.05, 95%CI 3.99, 4.11). Living with overweight and obesity, but not thinness, were associated with lower scores for both indicators of mental well-being, obesity having a larger negative effect (life satisfaction β=-0.47, 95%CI -0.55, -0.38; subjective health complaints β=-0.16, 95%CI -0.2, -0.12) than overweight (life satisfaction β=-0.18, 95%CI -0.22, -0.13; subjective health complaints β=-0.09, 95%CI -0.11, -0.07). Being a girl, as well as having medium or low SES, were also associated with lower scores for both indicators of mental well-being.

When self-perceived body weight was included (model 2), the negative association between overweight, obesity and mental well-being observed in model 1, was no longer present: no significant association were identified between living with obesity and mental well-being, and slightly positive associations were seen between overweight and mental well-being. Perceiving own body weight as "too fat" and "too thin" were negatively associated with both

indicators of mental well-being; feeling "too fat" having a larger negative effect (life satisfaction β=-0.73, 95%CI -0.76, -0.69; subjective health complaints β=-0.34 95%CI -0.35, -0.32) than feeling "too thin" (life satisfaction β=-0.36,95%CI -0.40, -0.32, subjective health complaints β=-0.19,95%CI -0.21, -0.17). Country specific estimates for these associations are presented in Supplementary Table 1, reporting that living with overweight or obesity was associated with lower scores at mental well-being in half of the countries, self-perceived weight was associated with mental well-being in the absolute majority of the countries examined.

Table 2

Mixed linear regression analysis of mental well-being, a) life satisfaction (0-10), b) subjective health complaints (1-5, 1 = all symptoms frequently, 5 = all symptoms never or rarely) as independent variables and fixed dependent variables: weight status (with "normal weight" as base level), gender ("boys" as base level), SES ("highest 20%" as base level) in model 1 and self-perceived body weight ("about right size" as base level) added in model 2.

Independent Variables	Dependent fixed Variables	Model 1			Model 2		
		Coef. (β)	95% CI	p-value	Coef. (β)	95%CI	p-value
a) Life satisfaction*	Intercept	8.04	[7.93, 8.15]		8.19	[8.08, 8.30]	
	Thinness	-0.03	[-0.08, 0.01]	0.132	-0.02	[-0.07, 0.03]	0.364
	Overweight	-0.18	[-0.22, -0.13]	**<0.001**	0.08	[0.04, 0.13]	**<0.001**
	Obesity	-0.47	[-0.55, -0.38]	**<0.001**	-0.07	[-0.16, 0.02]	0.132
	Girls	-0.45	[-0.48, -0.42]	**<0.001**	-0.37	[-0.40, -0.34]	**<0.001**
	SES interm. 60%	-0.36	[-0.40, -0.33]	**<0.001**	-0.35	[-0.38, -0.31]	**<0.001**
	SES lower 20%	-0.80	[-0.85, -0.76]	**<0.001**	-0.77	[-0.82, -0.72]	**<0.001**
	Too thin				-0.36	[-0.40, -0.32]	**<0.001**
	Too fat				-0.73	[-0.76, -0.69]	**<0.001**
b) Subjective health complaints**	Intercept	4.05	[3.99, 4.11]		4.14	[4.07, 4.2]	
	Thinness	-0.02	[-0.04, 0.00]	0.117	-0.01	[-0.03, 0.02]	0.568
	Overweight	-0.09	[-0.11, -0.07]	**<0.001**	0.03	[0.01, 0.05]	**0.004**
	Obesity	-0.16	[-0.2, -0.12]	**<0.001**	0.02	[-0.02, 0.06]	0.232
	Girls	-0.49	[-0.5, -0.47]	**<0.001**	-0.45	[-0.47, -0.44]	**<0.001**
	SES interm. 60%	0.01	[-0.01, 0.02]	0.562	0.01	[-0.01, 0.03]	0.283
	SES lower 20%	-0.05	[-0.07, -0.03]	**<0.001**	-0.04	[-0.06, -0.02]	**<0.001**
	Too thin				-0.19	[-0.21, -0.17]	**<0.001**
	Too fat				-0.34	[-0.35, -0.32]	**<0.001**

* Life satisfaction: 0=worst possible, 10=best possible
** Subjective health complaints: 1=all symptoms frequently, 5=all symptoms never or rarely
SES: Socioeconomic status
CI: Confidence interval

As shown in Table 3, all mediation paths (Fig 1) were significant. Based on these results, as well as the results presented in Table 2, self-perceived body weight was confirmed as a mediator in the relationship between weight status and mental well-being.

Figure 1

Model of mediation analysis
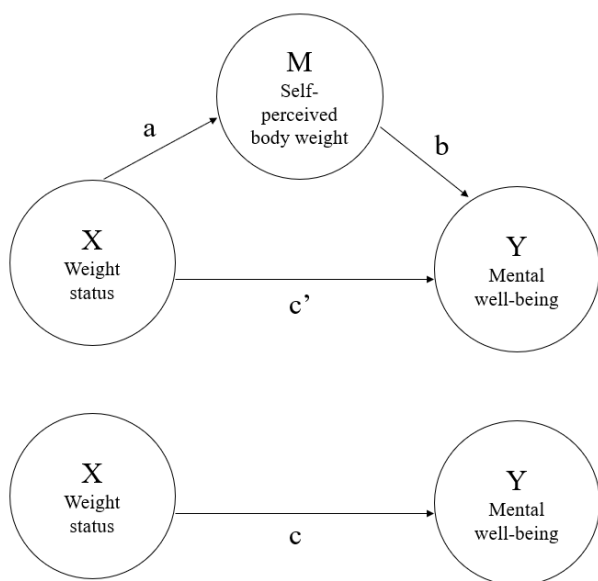
Table 3

Formal mediation test with categorical independent variables

Mediation path			Estimated effects from Model 1-3 (Standard error)				Mediation test	
Dependent variable (Y)	**Independent variable (X)**	**Mediator (M)**	**c**	**c'**	**b**	**a**	**ZMediation**	**p-value***
Life satisfaction	Thinness	Too thin	-0.03 (0.02)	-0.02 (0.02)	-0.36 (0.02)	1.90 (0.03)	-16.73	**<0.001**
	Overweight	Too fat	-0.18 (0.02)	0.08 (0.02)	-0.73 (0.02)	2.20 (0.03)	-34.37	**<0.001**
	Obesity	Too fat	-0.47 (0.04)	-0.07 (0.04)	-0.73 (0.02)	3.49 (0.07)	-30.37	**<0.001**
Subjective health complaints	Thinness	Too thin	-0.02 (0.01)	-0.01 (0.01)	-0.19 (0.01)	1.90 (0.03)	-19.22	**<0.001**
	Overweight	Too fat	-0.09 (0.01)	0.03 (0.01)	-0.34 (0.01)	2.20 (0.03)	-35.15	**<0.001**
	Obesity	Too fat	-0.16 (0.02)	0.02 (0.02)	-0.34 (0.01)	3.49 (0.07)	-30.90	**<0.001**

*Bonferroni correction for multiple testing: $\alpha = 0.017$

Y, X and M refers to the mediation model presented in Figure 1

As shown in Table 4, adolescents who perceived themselves as "too fat" were more likely to live with overweight (OR 9.06, 95%CI 8.44, 9.73) and obesity (OR 32.64, 95%CI 27.5, 38,68) than with normal weight, while those who perceived themselves as "too thin" were more likely to live with thinness (OR 6.69 95%CI 6.23, 7.19). Girls with normal BMI were more likely to feel "too fat" (OR 3.16, 95%CI 3.02,3.31) and less likely to feel "too thin" (OR 0.38, 95%CI 0.36,0.40) than were boys. Low SES was associated with feeling "too fat" (OR 1.11, 95%CI 1.03,1.20) as well as "too thin" (OR 1.13, 95%CI 1,03.1,22).

Table 4

Logistic regression analysis of self-perceived body weight dissatisfaction, a) "feeling too fat" b) "feeling too thin" as independent binary variables and fixed dependent variables: weight status (with "normal weight" as base level), gender ("boys" as base level), SES ("highest 20%" as base level).

Model 3					
Independent Variables	**Dependent fixed Variables**	**Coef. (β)**	**OR**	**95% confidence interval OR**	**p-value**
a) Feeling too fat	Intercept	-2.06	0.12		
	Thinness	-1.51	0.22	[0.19, 0.25]	**0.000**
	Overweight	2.20	9.06	[8.44, 9.73]	**0.000**
	Obesity	3.49	32.64	[27.55, 38.68]	**0.000**
	Girls	1.15	3.16	[3.02, 3.31]	**0.000**
	SES interm. 60%	0.06	1.06	[1.00, 1.13]	**0.026**
	SES lower 20%	0.11	1.11	[1.03, 1.20]	**0.002**
b) Feeling too thin	Intercept	-1.32	0.27		
	Thinness	1.90	6.69	[6.23, 7.19]	**0.000**
	Overweight	-2.05	0.13	[0.11, 0.15]	**0.000**
	Obesity	-2.23	0.11	[0.08, 0.15]	**0.000**
	Girls	-0.97	0.38	[0.36, 0.40]	**0.000**
	SES interm. 60%	0.02	1.02	[1.00, 1.10]	0.429
	SES lower 20%	0.12	1.13	[1.03, 1.22]	**0.002**

Discussion

The study suggests that associations between overweight, obesity and mental well-being can be explained by self-perceived body weight. Moreover, perceiving own body weight as "too thin" or "too fat" was associated with lower mental well-being, regardless of weight status, and associated with gender, SES and cross-country differences.

Weight status, self-perceived body weight and mental well-being

Adolescents living with overweight and obesity reported lower mental well-being than did their counterparts with normal weight. Self-perceived body weight was confirmed as a mediator in this relationship, suggesting that the psychological perception of being "too fat" explains the observed associations between overweight, obesity and mental well-being. The findings complement other studies in which high BMI was linked to lower levels of mental well-being (31-34), although these did not adjust for self-perceived body weight. Of note, one other study (13) found that the associations between overweight, obesity, and life satisfaction disappeared after adjusting for self-perceived weight, which is in line with our results. Likewise, the findings correspond with a systematic review of overweight, self-perceived weight and depressive symptoms, in which overweight was no longer associated with depressive symptoms after adding weight perception to the predictive model (2). The present

results add to the literature suggesting are that self-perceived weight is a predictor of mental health outcomes (2, 3, 18, 19)

It is conceivable that self-perceived body weight may lie on the causal pathway between weight status and mental well-being, playing a mediating role. However, the current study is based on cross-sectional data which limit the interference of causal relationships, and reverse causation may exist. Poor mental well-being may be a consequence of perceived overweight but also a predictor of weight gain (35). Furthermore, the study is based on self-reported data and the mediation effect may to some extent be explained by shared variance caused by responding bias (e.g., adolescents who rate their well-being lower may also rate their body weight more critically). Reverse causality may also play a role, as adolescents reporting lower well-being may judge their weight more critically. Also potential third confounding variables should be considered; depression symptoms may explain the link between perceived weight and well-being scores, as could perceived weight discrimination explain the link between self-perceived weight and mental well-being scores, as perceived weight discrimination is associated with higher odds of self-perceived overweight higher and poorer mental well-being (2).

Perceiving own body weight as "too thin" and "too fat" were associated with lower mental well-being, regardless of weight status, with the lowest scores among those perceived themselves as "too fat". The findings correspond with other studies (13, 36)(2). Feeling "too thin" or "too fat" may result in a myriad of psychological and emotional effects which may influence mental well-being. Feeling "too fat" may trigger social rejection concerns as internalisation of weight stigma, which may lead to physiological distress (2) and lower mental well-being, as well as weight reduction behavior (6). The relationship between self-perceived weight and mental well-being may furthermore be viewed in light of developmental changes, including onset of puberty, which may demand a constant restructuring of the adolescent's perception of their body which is important in the development of one's self-concept, self-esteem and interpersonal relationships with peers (37).

Girls seems to be vulnerable when it comes to processes related to body weight and mental well-being, maybe because of strong external body related pressures (38). The observed gender differences in self-perceived weight may reflect that girls tend to internalize a thin body ideal, while boys' ideals are geared towards muscularity (39). For boys, it is likely that

both obesity and lack of muscularity are of importance for how they perceive their weight. This should be followed up in future studies, as an increasingly number of boys engage in weight reduction behaviours (6). It should be noted however, that feeling "too thin" or "too fat" may be a sign of mental illness (e.g., eating disorders), which should be followed up in future studies. Furthermore, low SES appeared as a significant co-variate in the present analysis, indicating that socioeconomic resources may play a role in both weight perception as well as in fostering mental health in the younger population. This perspective should be further investigated.

Country differences

Country differences in the associations between weight status, self-perceived body weight and mental well-being may reflect that both sociocultural influence (e.g., social media, family, peers) and social weight comparisons play a role in weight perceptions and its influence of mental well-being. Overall, stronger associations between self-perceived weight and mental well-being were observed in countries with high prevalence of adolescents feeling "too fat" or "too thin". High prevalence of feeling "too fat" might reflect sociocultural focus and external pressure on a thin body ideal accompanied by negative stereotyping of overweight and obesity, and the importance of relative comparisons. Moreover, in countries with high prevalence of overweight/obesity, higher weight may be perceived as normal weight in terms of social body weight comparisons. These perspectives may be followed up with qualitative studies.

Implications

The findings that one in two adolescents perceived themselves as "too thin" or "too fat" is of great public health concern. Although this percentage has been relative stable in recent years, the associations between self-perceived body weight and mental well-being has changed; adolescents who perceived themselves as "too fat" have become increasingly likely to report lower mental well-being, relative to those perceiving their body weight as "about the right size" (41). Mental well-being has worsened in many countries recent years (5) which may be due to changes in associations between self-perceived weight and mental well-being (41).

Reducing overweight/obesity are stated as key public health priorities. However, the use of BMI as an indicator of normal or healthy weight is associated with challenges. While public

health professionals are concerned about the obesogenic environment, health psychologists and health promoters worry about the societal pressure for thinness. Concerns have been raised about potential negative psychological effects created by interventions addressing weight loss largely focusing on body shape and size, and of the extensive media coverage targeting individual level obesity measures Alternatively, fostering appreciation of the body in relation to its functionality as opposed to its appearance may encourage adolescents to feel positive about their bodies and at the same time engage in healthy behaviours (42). These implications are relevant for clinicians working with adolescents of all body weight and sizes, and adds to the work by Golding (43), in which is suggested that clinicians should assess weight perceptions more consistently and considering feeling "too thin" and "too fat" to be risk factors for poor mental well-being.

Social media may be of particular importance for development of young people's weight and size perception, and social media campaigns should consider image-related content in order to avoid heighten body weight dissatisfaction. Commercials for products promising weight reduction and larger muscles are commonly communicated to adolescents through social media, as are advertisements for cosmetic and plastic surgery. These perspectives are important when developing policy actions aiming to regulate external pressure related to body weight.

Strengths and limitations

Important strengths of the present study are the large dataset based on nationally representative sampling and the use of standardized measurements in all countries. The limitations include the use of self-reported height and weight, which may result in misclassification of BMI, but are considered valid measures for population studies (21) , due to underestimation of weight among both genders and overestimation of height among boys. Another possible limitation is that the perception of one's body weight may change considerably during adolescence, and associations between BMI, self-perceived body weight, and mental well-being might differ between age groups. Including another age group may have produced different results. Finally, race and ethnicity could potentially be important covariates. Unfortunately, these perspectives could not be assessed in the present study because of lack of adequate data within the study.

Conclusion

The present study suggests that associations between overweight and obesity and mental well-

being can be explained by self-perceived body weight. Perceiving own body weight as "too fat" was significantly associated with gender, SES and country, all of which contributed to explaining the variance of in the mental well-being of adolescents included in this study. Further research is needed to understand these relationships better and to develop effective intervention strategies.

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Supplementary Table 2

Mixed linear regression analysis of mental well-being, a) life satisfaction (0-10), b) subjective health complaints (1-5, 1 = all symptoms frequently, 5 = all symptoms never or rarely) as dependent variables and fixed independent variables: weight status (with "normal weight" as base level), gender ("boys" as base level), SES ("highest 20%" as base level) in Model 1 and self-perceived body weight ("about right size" as base level) added in Model 2. School / school class were included as random variables.

			a) Life satisfaction					
			Model 1			Model 2		
Country	N	Independent fixed Variables	Coef. (β)	95% CI	p-value	Coef. (β)	95%CI	p-value
Albania	710	Intercept	8.33	[7.84, 8.81]		8.54	[8.05, 9.04]	
		Thinness	-0.29	[-0.85, 0.28]	0.322	0.10	[-0.49, 0.68]	0.746
		Overweight	-0.54	[-1.01, -0.08]	**0.023**	-0.60	[-1.14, -0.06]	**0.032**
		Obesity	0.05	[-0.99, 1.1]	0.922	0.05	[-1.05, 1.14]	0.934
		Girls	-0.20	[-0.52, 0.13]	0.243	-0.27	[-0.6, 0.06]	0.107
		SES interm. 60%	-0.29	[-0.73, 0.14]	0.187	-0.31	[-0.74, 0.12]	0.155
		SES lower 20%	-1.40	[-1.96, -0.84]	< **0.001**	-1.34	[-1.9, -0.78]	< **0.001**
		Too thin				-1.00	[-1.45, -0.54]	< **0.001**
		Too fat				-0.21	[-0.66, 0.24]	0.371
Armenia	1180	Intercept	8.49	[8.21, 8.76]		8.54	[8.26, 8.82]	
		Thinness	-0.06	[-0.32, 0.2]	0.649	-0.01	[-0.3, 0.27]	0.929
		Overweight	0.11	[-0.21, 0.43]	0.490	0.16	[-0.19, 0.5]	0.373
		Obesity	0.49	[-0.14, 1.12]	0.128	0.53	[-0.14, 1.2]	0.121
		Girls	0.04	[-0.17, 0.25]	0.714	0.03	[-0.19, 0.24]	0.814
		SES interm. 60%	-0.47	[-0.74, -0.21]	**0.001**	-0.47	[-0.73, -0.2]	**0.001**
		SES lower 20%	-0.73	[-1.06, -0.41]	< **0.001**	-0.73	[-1.05, -0.4]	< **0.001**
		Too thin				-0.16	[-0.43, 0.11]	0.243
		Too fat				-0.18	[-0.48, 0.12]	0.242
Austria	1303	Intercept	8.38	[8.09, 8.67]		8.61	[8.32, 8.91]	
		Thinness	0.16	[-0.17, 0.5]	0.340	0.11	[-0.24, 0.46]	0.528

			Model 1			Model 2		
a) Life satisfaction								
Country	**N**	**Independent fixed Variables**	**Coef. (β)**	**95% CI**	**p-value**	**Coef. (β)**	**95%CI**	**p-value**
		Overweight	-0.16	[-0.46, 0.14]	0.304	0.17	[-0.15, 0.5]	0.295
		Obesity	-1.17	[-1.77, -0.57]	< **0.001**	-0.66	[-1.28, -0.05]	**0.034**
		Girls	-0.98	[-1.2, -0.75]	< **0.001**	-0.87	[-1.09, -0.65]	< **0.001**
		SES interm. 60%	-0.52	[-0.79, -0.25]	< **0.001**	-0.49	[-0.75, -0.23]	< **0.001**
		SES lower 20%	-0.96	[-1.31, -0.61]	< **0.001**	-0.94	[-1.29, -0.59]	< **0.001**
		Too thin				-0.40	[-0.7, -0.1]	**0.010**
		Too fat				-0.81	[-1.06, -0.56]	< **0.001**
Azerbaijan	1324	Intercept	8.48	[8.18, 8.79]		8.60	[8.29, 8.91]	
		Thinness	-0.09	[-0.35, 0.18]	0.525	-0.05	[-0.32, 0.22]	0.698
		Overweight	-0.29	[-0.72, 0.14]	0.190	-0.26	[-0.7, 0.18]	0.244
		Obesity	-0.37	[-1.15, 0.4]	0.347	-0.43	[-1.23, 0.36]	0.289
		Girls	0.00	[-0.22, 0.22]	0.985	0.01	[-0.21, 0.23]	0.909
		SES interm. 60%	-0.77	[-1.05, -0.49]	< **0.001**	-0.76	[-1.05, -0.48]	< **0.001**
		SES lower 20%	-1.02	[-1.36, -0.67]	< **0.001**	-0.98	[-1.33, -0.64]	< **0.001**
		Too thin				-0.48	[-0.75, -0.2]	**0.001**
		Too fat				-0.40	[-0.78, -0.01]	**0.043**
Belgium (Flemish region)	1263	Intercept	7.93	[7.72, 8.13]		8.08	[7.88, 8.29]	
		Thinness	0.04	[-0.17, 0.26]	0.705	0.03	[-0.2, 0.26]	0.823
		Overweight	-0.23	[-0.48, 0.02]	0.072	-0.04	[-0.3, 0.22]	0.765
		Obesity	-0.76	[-1.27, -0.25]	**0.004**	-0.51	[-1.02, 0]	0.052
		Girls	-0.34	[-0.49, -0.18]	**<0.001**	-0.24	[-0.4, -0.08]	**0.003**
		SES interm. 60%	-0.21	[-0.41, -0.01]	**0.036**	-0.19	[-0.38, 0]	0.054
		SES lower 20%	-0.50	[-0.74, -0.25]	< **0.001**	-0.43	[-0.67, -0.19]	**0.001**
		Too thin				-0.39	[-0.62, -0.15]	**0.001**
		Too fat				-0.54	[-0.72, -0.37]	< **0.001**
Belgium (Walloon region)	828	Intercept	7.81	[7.54, 8.09]		8.29	[7.99, 8.58]	
		Thinness	-0.14	[-0.52, 0.23]	0.451	-0.10	[-0.49, 0.29]	0.621
		Overweight	-0.10	[-0.43, 0.24]	0.563	0.22	[-0.12, 0.57]	0.208
		Obesity	-0.08	[-0.76, 0.6]	0.816	0.39	[-0.28, 1.07]	0.255
		Girls	-0.42	[-0.66, -0.19]	< **0.001**	-0.40	[-0.63, -0.17]	**0.001**
		SES interm. 60%	-0.27	[-0.55, 0]	0.051	-0.42	[-0.68, -0.16]	**0.002**
		SES lower 20%	-0.75	[-1.11, -0.39]	< **0.001**	-0.89	[-1.23, -0.55]	< **0.001**
		Too thin				-0.62	[-0.96, -0.28]	< **0.001**
		Too fat				-0.90	[-1.17, -0.64]	< **0.001**
Bulgaria	1409	Intercept	7.93	[7.63, 8.22]		8.08	[7.77, 8.38]	
		Thinness	0.16	[-0.13, 0.45]	0.292	0.20	[-0.09, 0.49]	0.184
		Overweight	0.08	[-0.22, 0.39]	0.591	0.12	[-0.19, 0.42]	0.457
		Obesity	-0.47	[-1.14, 0.21]	0.178	-0.36	[-1.03, 0.32]	0.303
		Girls	-0.06	[-0.28, 0.17]	0.624	-0.05	[-0.27, 0.17]	0.650
		SES interm. 60%	-0.16	[-0.43, 0.11]	0.254	-0.16	[-0.43, 0.11]	0.243

Country	N	Independent fixed Variables	Coef. (β)	95% CI	p-value	Coef. (β)	95%CI	p-value
					a) Life satisfaction			
				Model 1			**Model 2**	
		SES lower 20%	-0.73	[-1.04, -0.41]	< **0.001**	-0.71	[-1.02, -0.4]	< **0.001**
		Too thin				-0.52	[-0.81, -0.22]	**0.001**
		Too fat				-0.34	[-0.58, -0.1]	**0.006**
Canada	3092	Intercept	8.00	[7.79, 8.21]		8.25	[8.05, 8.46]	
		Thinness	-0.08	[-0.33, 0.17]	0.540	0.09	[-0.17, 0.34]	0.517
		Overweight	-0.51	[-0.7, -0.32]	< **0.001**	-0.21	[-0.41, -0.01]	**0.036**
		Obesity	-0.81	[-1.09, -0.52]	< **0.001**	-0.30	[-0.6, 0]	**0.047**
		Girls	-0.80	[-0.94, -0.67]	< **0.001**	-0.78	[-0.92, -0.64]	< **0.001**
		SES interm. 60%	-0.31	[-0.51, -0.11]	**0.003**	-0.24	[-0.44, -0.04]	**0.018**
		SES lower 20%	-0.81	[-1.04, -0.58]	< **0.001**	-0.70	[-0.93, -0.48]	< **0.001**
		Too thin				-0.92	[-1.13, -0.71]	< **0.001**
		Too fat				-1.00	[-1.17, -0.82]	< **0.001**
Croatia	2068	Intercept	8.41	[8.21, 8.61]		8.54	[8.33, 8.75]	
		Thinness	0.09	[-0.21, 0.38]	0.566	0.12	[-0.19, 0.43]	0.450
		Overweight	0.03	[-0.2, 0.25]	0.828	0.24	[-0.01, 0.49]	0.061
		Obesity	0.29	[-0.36, 0.93]	0.384	0.62	[-0.03, 1.27]	0.062
		Girls	-0.60	[-0.76, -0.44]	< **0.001**	-0.54	[-0.71, -0.38]	< **0.001**
		SES interm. 60%	-0.39	[-0.59, -0.19]	< **0.001**	-0.40	[-0.6, -0.19]	< **0.001**
		SES lower 20%	-0.78	[-1.03, -0.53]	< **0.001**	-0.78	[-1.03, -0.53]	< **0.001**
		Too thin				-0.29	[-0.52, -0.06]	**0.013**
		Too fat				-0.59	[-0.79, -0.38]	< **0.001**
Czech Republic	3559	Intercept	8.21	[8.06, 8.37]		8.30	[8.14, 8.47]	
		Thinness	-0.21	[-0.4, -0.02]	**0.028**	-0.23	[-0.43, -0.04]	**0.019**
		Overweight	-0.09	[-0.25, 0.06]	0.239	0.21	[0.04, 0.37]	**0.015**
		Obesity	-0.37	[-0.67, -0.07]	**0.015**	0.11	[-0.2, 0.42]	0.475
		Girls	-0.51	[-0.62, -0.4]	< **0.001**	-0.41	[-0.52, -0.3]	< **0.001**
		SES interm. 60%	-0.42	[-0.57, -0.26]	< **0.001**	-0.38	[-0.53, -0.22]	< **0.001**
		SES lower 20%	-0.84	[-1.02, -0.65]	< **0.001**	-0.78	[-0.96, -0.6]	< **0.001**
		Too thin				-0.19	[-0.33, -0.05]	**0.009**
		Too fat				-0.76	[-0.9, -0.61]	< **0.001**
Denmark	711	Intercept	8.19	[7.89, 8.48]		8.42	[8.13, 8.71]	
		Thinness	0.15	[-0.23, 0.52]	0.448	0.08	[-0.3, 0.45]	0.687
		Overweight	-0.24	[-0.6, 0.12]	0.188	0.25	[-0.11, 0.62]	0.178
		Obesity	-0.43	[-1.25, 0.39]	0.307	0.21	[-0.58, 1.01]	0.600
		Girls	-0.61	[-0.84, -0.38]	< **0.001**	-0.38	[-0.61, -0.15]	**0.001**
		SES interm. 60%	-0.25	[-0.56, 0.05]	0.106	-0.25	[-0.54, 0.04]	0.093
		SES lower 20%	-0.63	[-0.99, -0.26]	**0.001**	-0.52	[-0.87, -0.17]	**0.003**
		Too thin				-0.44	[-0.79, -0.09]	**0.014**
		Too fat				-1.13	[-1.39, -0.86]	< **0.001**
England	320	Intercept	7.94	[7.45, 8.43]		8.18	[7.68, 8.69]	< **0.001**
		Thinness	-0.22	[-0.74, 0.3]	0.414	-0.17	[-0.68, 0.35]	0.533

			Model 1			Model 2		
Country	N	Independent fixed Variables	Coef. (β)	95% CI	p-value	Coef. (β)	95%CI	p-value
		Overweight	0.06	[-0.5, 0.62]	0.828	0.17	[-0.41, 0.75]	0.570
		Obesity	-0.17	[-1.5, 1.16]	0.801	-0.12	[-1.43, 1.19]	0.859
		Girls	-0.55	[-0.93, -0.17]	**0.005**	-0.56	[-0.94, -0.18]	**0.005**
		SES interm. 60%	-0.41	[-0.88, 0.07]	0.096	-0.35	[-0.82, 0.11]	0.145
		SES lower 20%	-1.31	[-1.92, -0.7]	< **0.001**	-1.30	[-1.9, -0.7]	< **0.001**
		Too thin				-0.90	[-1.44, -0.37]	**0.001**
		Too fat				-0.48	[-0.91, -0.04]	**0.034**
Estonia	1437	Intercept	8.37	[8.13, 8.6]		8.51	[8.26, 8.76]	
		Thinness	0.11	[-0.2, 0.41]	0.493	0.05	[-0.27, 0.37]	0.776
		Overweight	-0.47	[-0.74, -0.2]	**0.001**	-0.16	[-0.45, 0.13]	0.274
		Obesity	-0.48	[-0.95, -0.01]	**0.045**	-0.04	[-0.53, 0.45]	0.872
		Girls	-0.69	[-0.88, -0.51]	< **0.001**	-0.59	[-0.78, -0.4]	< **0.001**
		SES interm. 60%	-0.53	[-0.76, -0.29]	< **0.001**	-0.51	[-0.74, -0.28]	< **0.001**
		SES lower 20%	-1.21	[-1.5, -0.92]	< **0.001**	-1.16	[-1.45, -0.88]	< **0.001**
		Too thin				-0.19	[-0.44, 0.07]	0.154
		Too fat				-0.67	[-0.9, -0.44]	< **0.001**
Finland	1016	Intercept	8.01	[7.75, 8.27]		8.18	[7.91, 8.45]	
		Thinness	-0.19	[-0.61, 0.23]	0.380	-0.27	[-0.68, 0.14]	0.204
		Overweight	0.08	[-0.24, 0.4]	0.624	0.45	[0.13, 0.77]	**0.007**
		Obesity	-0.42	[-1.1, 0.25]	0.223	0.25	[-0.42, 0.93]	0.468
		Girls	-0.61	[-0.82, -0.39]	< **0.001**	-0.42	[-0.64, -0.2]	< **0.001**
		SES interm. 60%	-0.13	[-0.41, 0.15]	0.368	-0.08	[-0.36, 0.19]	0.547
		SES lower 20%	-0.28	[-0.62, 0.05]	0.099	-0.22	[-0.54, 0.1]	0.183
		Too thin				-0.37	[-0.7, -0.04]	**0.029**
		Too fat				-1.07	[-1.32, -0.82]	< **0.001**
France	1954	Intercept	7.72	[7.52, 7.93]		7.88	[7.67, 8.09]	
		Thinness	0.22	[0.01, 0.43]	**0.044**	0.22	[0, 0.45]	0.055
		Overweight	-0.27	[-0.53, -0.02]	**0.035**	0.01	[-0.26, 0.27]	0.965
		Obesity	-0.39	[-0.91, 0.12]	0.137	0.10	[-0.43, 0.63]	0.710
		Girls	-0.35	[-0.5, -0.19]	< **0.001**	-0.26	[-0.42, -0.11]	**0.001**
		SES interm. 60%	-0.19	[-0.39, 0.02]	0.073	-0.18	[-0.38, 0.02]	0.074
		SES lower 20%	-0.64	[-0.9, -0.37]	< **0.001**	-0.63	[-0.89, -0.37]	< **0.001**
		Too thin				-0.38	[-0.61, -0.15]	**0.001**
		Too fat				-0.70	[-0.89, -0.5]	< **0.001**
Georgia	1069	Intercept	8.17	[7.85, 8.48]		8.26	[7.94, 8.58]	
		Thinness	0.10	[-0.19, 0.4]	0.495	0.15	[-0.16, 0.46]	0.337
		Overweight	0.37	[0.03, 0.72]	**0.033**	0.46	[0.1, 0.83]	**0.012**
		Obesity	0.72	[0.07, 1.37]	**0.031**	0.89	[0.22, 1.56]	**0.010**
		Girls	-0.02	[-0.23, 0.19]	0.847	0.03	[-0.19, 0.24]	0.810
		SES interm. 60%	-0.62	[-0.89, -0.34]	< **0.001**	-0.63	[-0.9, -0.35]	< **0.001**
		SES lower 20%	-1.14	[-1.48, -0.8]	< **0.001**	-1.11	[-1.45, -0.77]	< **0.001**

			Model 1			**Model 2**		
Country	**N**	**Independent fixed Variables**	**Coef. (β)**	**95% CI**	**p-value**	**Coef. (β)**	**95%CI**	**p-value**

Country	N	Independent fixed Variables	Coef. (β)	95% CI	p-value	Coef. (β)	95%CI	p-value
		Too thin				-0.28	[-0.55, -0.01]	**0.045**
		Too fat				-0.34	[-0.61, -0.07]	**0.015**
Germany	1389	Intercept	8.14	[7.89, 8.4]		8.36	[8.09, 8.62]	
		Thinness	-0.17	[-0.48, 0.13]	0.260	-0.09	[-0.41, 0.23]	0.590
		Overweight	-0.32	[-0.58, -0.07]	**0.012**	-0.08	[-0.34, 0.19]	0.579
		Obesity	-0.74	[-1.26, -0.23]	**0.005**	-0.35	[-0.88, 0.17]	0.189
		Girls	-0.36	[-0.54, -0.18]	< **0.001**	-0.30	[-0.48, -0.11]	**0.002**
		SES interm. 60%	-0.53	[-0.78, -0.29]	< **0.001**	-0.53	[-0.77, -0.28]	< **0.001**
		SES lower 20%	-1.06	[-1.37, -0.74]	< **0.001**	-1.02	[-1.33, -0.7]	< **0.001**
		Too thin				-0.46	[-0.72, -0.19]	**0.001**
		Too fat				-0.64	[-0.85, -0.43]	< **0.001**
Greece	1265	Intercept	7.57	[7.31, 7.83]		7.76	[7.49, 8.03]	
		Thinness	-0.48	[-0.88, -0.08]	**0.019**	-0.44	[-0.86, -0.02]	**0.040**
		Overweight	0.07	[-0.22, 0.35]	0.640	0.46	[0.15, 0.77]	**0.004**
		Obesity	-0.93	[-1.45, -0.41]	< **0.001**	-0.33	[-0.88, 0.21]	0.236
		Girls	-0.76	[-0.96, -0.55]	< **0.001**	-0.66	[-0.87, -0.45]	< **0.001**
		SES interm. 60%	-0.04	[-0.3, 0.22]	0.766	-0.01	[-0.27, 0.25]	0.956
		SES lower 20%	-0.33	[-0.69, 0.03]	0.072	-0.29	[-0.65, 0.06]	0.105
		Too thin				-0.42	[-0.69, -0.15]	**0.002**
		Too fat				-0.90	[-1.16, -0.64]	< **0.001**
Greenland	155	Intercept	8.53	[7.58, 9.48]		8.82	[7.89, 9.75]	
		Thinness	-1.79	[-3.67, 0.09]	0.069	-2.02	[-3.81, -0.22]	**0.033**
		Overweight	0.54	[-0.25, 1.33]	0.191	0.96	[0.18, 1.74]	**0.020**
		Obesity	0.32	[-1.31, 1.96]	0.703	0.86	[-0.68, 2.41]	0.288
		Girls	-0.63	[-1.29, 0.03]	0.069	-0.30	[-0.95, 0.35]	0.376
		SES interm. 60%	-0.48	[-1.29, 0.33]	0.253	-0.34	[-1.11, 0.42]	0.392
		SES lower 20%	-2.12	[-3.27, -0.97]	**0.001**	-1.88	[-2.96, -0.79]	**0.001**
		Too thin				-0.85	[-1.83, 0.13]	0.099
		Too fat				-1.68	[-2.4, -0.95]	< **0.001**
Hungary	1065	Intercept	7.94	[7.6, 8.29]		8.08	[7.74, 8.43]	
		Thinness	0.08	[-0.3, 0.46]	0.669	0.22	[-0.18, 0.63]	0.280
		Overweight	-0.16	[-0.48, 0.16]	0.325	0.11	[-0.25, 0.47]	0.540
		Obesity	-0.09	[-0.62, 0.45]	0.752	0.24	[-0.32, 0.8]	0.403
		Girls	-0.46	[-0.69, -0.23]	< **0.001**	-0.40	[-0.64, -0.17]	**0.001**
		SES interm. 60%	-0.70	[-0.99, -0.4]	< **0.001**	-0.67	[-0.96, -0.37]	< **0.001**
		SES lower 20%	-0.82	[-1.21, -0.43]	< **0.001**	-0.76	[-1.15, -0.37]	< **0.001**
		Too thin				-0.55	[-0.9, -0.21]	**0.002**
		Too fat				-0.62	[-0.91, -0.33]	< **0.001**
Iceland	1852	Intercept	8.12	[7.92, 8.33]		8.32	[8.11, 8.52]	
		Thinness	0.14	[-0.17, 0.45]	0.386	0.18	[-0.13, 0.49]	0.250
		Overweight	-0.40	[-0.64, -0.16]	**0.001**	-0.01	[-0.26, 0.23]	0.911

Country	N	Independent fixed Variables	Model 1			Model 2		
			Coef. (β)	95% CI	p-value	Coef. (β)	95%CI	p-value
					a) Life satisfaction			
		Obesity	-0.95	[-1.36, -0.53]	< **0.001**	-0.16	[-0.59, 0.26]	0.451
		Girls	-0.60	[-0.76, -0.44]	< **0.001**	-0.46	[-0.62, -0.3]	< **0.001**
		SES interm. 60%	-0.46	[-0.65, -0.26]	< **0.001**	-0.42	[-0.61, -0.24]	< **0.001**
		SES lower 20%	-0.67	[-0.95, -0.4]	< **0.001**	-0.63	[-0.89, -0.37]	< **0.001**
		Too thin				-0.63	[-0.88, -0.38]	< **0.001**
		Too fat				-1.24	[-1.45, -1.03]	< **0.001**
Ireland	401	Intercept	7.40	[6.89, 7.9]		7.78	[7.25, 8.3]	
		Thinness	0.06	[-0.43, 0.55]	0.815	0.15	[-0.35, 0.65]	0.551
		Overweight	-0.25	[-0.92, 0.41]	0.456	-0.06	[-0.73, 0.61]	0.869
		Obesity	-0.62	[-1.66, 0.41]	0.244	-0.32	[-1.37, 0.72]	0.549
		Girls	-0.38	[-0.76, 0.01]	0.057	-0.35	[-0.75, 0.05]	0.090
		SES interm. 60%	-0.10	[-0.6, 0.39]	0.686	-0.13	[-0.62, 0.35]	0.594
		SES lower 20%	-0.92	[-1.55, -0.29]	**0.005**	-0.92	[-1.53, -0.3]	**0.004**
		Too thin				-0.80	[-1.27, -0.33]	**0.001**
		Too fat				-0.81	[-1.25, -0.37]	< **0.001**
Israel	2442	Intercept	8.05	[7.8, 8.29]		8.24	[7.99, 8.49]	
		Thinness	-0.01	[-0.3, 0.28]	0.942	0.08	[-0.22, 0.38]	0.607
		Overweight	-0.25	[-0.51, 0.02]	0.069	0.04	[-0.25, 0.33]	0.798
		Obesity	-0.43	[-0.93, 0.07]	0.089	0.02	[-0.5, 0.54]	0.939
		Girls	-0.12	[-0.31, 0.07]	0.206	-0.09	[-0.28, 0.1]	0.345
		SES interm. 60%	-0.44	[-0.66, -0.22]	< **0.001**	-0.43	[-0.65, -0.21]	< **0.001**
		SES lower 20%	-1.08	[-1.38, -0.77]	< **0.001**	-1.07	[-1.37, -0.76]	< **0.001**
		Too thin				-0.45	[-0.7, -0.2]	< **0.001**
		Too fat				-0.71	[-0.95, -0.47]	< **0.001**
Italy	1201	Intercept	7.51	[7.26, 7.77]		7.62	[7.36, 7.88]	
		Thinness	-0.56	[-0.89, -0.23]	**0.001**	-0.47	[-0.82, -0.12]	**0.009**
		Overweight	-0.33	[-0.62, -0.04]	**0.025**	-0.04	[-0.34, 0.27]	0.821
		Obesity	-1.10	[-1.75, -0.45]	**0.001**	-0.67	[-1.32, -0.01]	**0.048**
		Girls	-0.33	[-0.53, -0.12]	**0.002**	-0.23	[-0.45, -0.02]	**0.032**
		SES interm. 60%	-0.01	[-0.25, 0.24]	0.951	0.00	[-0.24, 0.25]	0.992
		SES lower 20%	-0.50	[-0.83, -0.17]	**0.003**	-0.44	[-0.77, -0.12]	**0.007**
		Too thin				-0.36	[-0.7, -0.02]	**0.039**
		Too fat				-0.67	[-0.91, -0.44]	< **0.001**
Kazakhstan	1464	Intercept	8.41	[8.12, 8.71]		8.44	[8.14, 8.73]	
		Thinness	0.16	[-0.09, 0.41]	0.209	0.13	[-0.14, 0.4]	0.341
		Overweight	-0.30	[-0.77, 0.18]	0.222	-0.09	[-0.57, 0.4]	0.725
		Obesity	-0.95	[-2.12, 0.23]	0.115	-0.73	[-1.97, 0.52]	0.255
		Girls	-0.10	[-0.3, 0.1]	0.337	-0.01	[-0.21, 0.19]	0.922
		SES interm. 60%	-0.15	[-0.43, 0.13]	0.290	-0.14	[-0.43, 0.14]	0.318
		SES lower 20%	-0.29	[-0.62, 0.05]	0.098	-0.26	[-0.59, 0.08]	0.137
		Too thin				-0.10	[-0.38, 0.19]	0.495

Country	N	Independent fixed Variables	Coef. (β)	95% CI	p-value	Coef. (β)	95%CI	p-value
				a) Life satisfaction				
				Model 1			**Model 2**	
		Too fat				-0.53	[-0.83, -0.23]	**0.001**
Latvia	1319	Intercept	8.04	[7.77, 8.31]		8.24	[7.96, 8.51]	
		Thinness	0.04	[-0.3, 0.37]	0.830	0.03	[-0.31, 0.38]	0.858
		Overweight	0.00	[-0.32, 0.32]	1.000	0.28	[-0.06, 0.62]	0.103
		Obesity	-0.83	[-1.42, -0.25]	**0.005**	-0.45	[-1.05, 0.15]	0.142
		Girls	-0.63	[-0.82, -0.43]	< **0.001**	-0.55	[-0.76, -0.35]	< **0.001**
		SES interm. 60%	-0.72	[-0.99, -0.46]	< **0.001**	-0.70	[-0.96, -0.44]	< **0.001**
		SES lower 20%	-1.31	[-1.65, -0.96]	< **0.001**	-1.26	[-1.6, -0.92]	< **0.001**
		Too thin				-0.41	[-0.69, -0.12]	**0.006**
		Too fat				-0.68	[-0.92, -0.44]	< **0.001**
Lithuania	1095	Intercept	7.95	[7.61, 8.28]		8.13	[7.79, 8.47]	
		Thinness	0.27	[-0.15, 0.69]	0.204	0.29	[-0.14, 0.73]	0.186
		Overweight	-0.13	[-0.51, 0.24]	0.486	0.05	[-0.35, 0.44]	0.815
		Obesity	-0.44	[-1.17, 0.29]	0.235	-0.29	[-1.03, 0.46]	0.452
		Girls	-0.40	[-0.64, -0.16]	**0.001**	-0.32	[-0.57, -0.08]	**0.011**
		SES interm. 60%	-0.22	[-0.52, 0.07]	0.136	-0.18	[-0.47, 0.11]	0.224
		SES lower 20%	-0.42	[-0.8, -0.04]	**0.032**	-0.39	[-0.77, -0.02]	**0.041**
		Too thin				-0.49	[-0.82, -0.16]	**0.004**
		Too fat				-0.64	[-0.93, -0.36]	< **0.001**
Luxembourg	1183	Intercept	7.95	[7.72, 8.17]		8.13	[7.89, 8.37]	
		Thinness	-0.20	[-0.52, 0.12]	0.212	-0.12	[-0.46, 0.22]	0.125
		Overweight	-0.13	[-0.41, 0.15]	0.359	0.06	[-0.25, 0.37]	0.206
		Obesity	-0.36	[-0.81, 0.1]	0.127	-0.07	[-0.55, 0.42]	0.202
		Girls	-0.20	[-0.4, 0]	0.052	-0.19	[-0.39, 0.02]	< **0.001**
		SES interm. 60%	-0.41	[-0.66, -0.15]	**0.002**	-0.39	[-0.64, -0.13]	< **0.001**
		SES lower 20%	-0.86	[-1.16, -0.56]	< **0.001**	-0.82	[-1.12, -0.52]	< **0.001**
		Too thin				-0.48	[-0.78, -0.19]	< **0.001**
		Too fat				-0.52	[-0.77, -0.27]	< **0.001**
Macedonia	1370	Intercept	8.60	[8.31, 8.9]				
		Thinness	-0.04	[-0.43, 0.36]	0.848			
		Overweight	-0.17	[-0.47, 0.13]	0.276			
		Obesity	-0.25	[-0.79, 0.3]	0.375			
		Girls	-0.34	[-0.58, -0.1]	**0.005**			
		SES interm. 60%	-0.63	[-0.91, -0.36]	< **0.001**			
		SES lower 20%	-1.20	[-1.56, -0.84]	< **0.001**			
Malta	500	Intercept	6.80	[6.26, 7.34]		6.88	[6.33, 7.44]	
		Thinness	-0.03	[-0.66, 0.59]	0.917	-0.06	[-0.71, 0.59]	0.858
		Overweight	0.01	[-0.45, 0.47]	0.960	0.11	[-0.37, 0.58]	0.669
		Obesity	-0.03	[-0.66, 0.59]	0.917	0.35	[-0.41, 1.11]	0.375
		Girls	-0.40	[-0.82, 0.02]	0.063	-0.37	[-0.79, 0.04]	0.080
		SES interm. 60%	0.17	[-0.32, 0.67]	0.490	0.13	[-0.36, 0.62]	0.608

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Country	N	Independent fixed Variables	Model 1			Model 2		
			Coef. (β)	95% CI	p-value	Coef. (β)	95%CI	p-value
		SES lower 20%	-0.08	[-0.77, 0.6]	0.815	-0.13	[-0.82, 0.55]	0.703
		Too thin				-0.01	[-0.6, 0.57]	0.965
		Too fat				-0.47	[-0.99, 0.06]	0.082
Netherlands	1175	Intercept	7.92	[7.7, 8.14]		8.11	[7.89, 8.33]	
		Thinness	-0.02	[-0.26, 0.22]	0.861	-0.10	[-0.36, 0.15]	0.421
		Overweight	-0.04	[-0.37, 0.28]	0.790	0.30	[-0.02, 0.63]	0.069
		Obesity	-1.62	[-2.38, -0.87]	< **0.001**	-1.12	[-1.86, -0.37]	**0.003**
		Girls	-0.69	[-0.87, -0.51]	< **0.001**	-0.51	[-0.69, -0.33]	< **0.001**
		SES interm. 60%	-0.24	[-0.45, -0.02]	**0.032**	-0.21	[-0.42, 0]	0.050
		SES lower 20%	-0.54	[-0.82, -0.26]	< **0.001**	-0.52	[-0.79, -0.25]	< **0.001**
		Too thin				-0.34	[-0.62, -0.07]	**0.015**
		Too fat				-0.83	[-1.03, -0.63]	< **0.001**
Norway	585	Intercept	8.26	[7.84, 8.68]				
		Thinness	-0.65	[-1.14, -0.16]	**0.009**			
		Overweight	-0.48	[-0.95, -0.02]	**0.044**			
		Obesity	-0.76	[-1.65, 0.14]	0.099			
		Girls	-0.44	[-0.74, -0.13]	**0.006**			
		SES interm. 60%	-0.36	[-0.77, 0.06]	0.092			
		SES lower 20%	-0.80	[-1.33, -0.27]	**0.004**			
Poland	1675	Intercept	7.73	[7.46, 8]		7.99	[7.71, 8.27]	
		Thinness	0.06	[-0.22, 0.35]	0.667	-0.14	[-0.44, 0.15]	0.334
		Overweight	-0.26	[-0.55, 0.03]	0.085	0.12	[-0.18, 0.42]	0.446
		Obesity	-0.02	[-0.71, 0.67]	0.951	0.43	[-0.25, 1.11]	0.220
		Girls	-0.57	[-0.76, -0.39]	< **0.001**	-0.35	[-0.55, -0.16]	< **0.001**
		SES interm. 60%	-0.32	[-0.59, -0.06]	**0.016**	-0.35	[-0.6, -0.09]	**0.009**
		SES lower 20%	-0.93	[-1.27, -0.58]	< **0.001**	-0.90	[-1.24, -0.56]	< **0.001**
		Too thin				-0.12	[-0.38, 0.14]	0.370
		Too fat				-0.90	[-1.11, -0.7]	< **0.001**
Portugal	1342	Intercept	7.91	[7.63, 8.19]		8.11	[7.82, 8.39]	
		Thinness	0.04	[-0.27, 0.34]	0.819	0.21	[-0.12, 0.54]	0.217
		Overweight	-0.37	[-0.62, -0.11]	**0.005**	-0.12	[-0.4, 0.16]	0.398
		Obesity	-0.37	[-0.89, 0.15]	0.161	-0.05	[-0.58, 0.49]	0.867
		Girls	-0.38	[-0.56, -0.19]	< **0.001**	-0.34	[-0.53, -0.15]	< **0.001**
		SES interm. 60%	-0.31	[-0.55, -0.07]	**0.011**	-0.31	[-0.54, -0.08]	**0.010**
		SES lower 20%	-0.70	[-1.01, -0.38]	< **0.001**	-0.68	[-0.99, -0.36]	< **0.001**
		Too thin				-0.58	[-0.86, -0.3]	< **0.001**
		Too fat				-0.61	[-0.84, -0.37]	< **0.001**
Republic of Moldova	1528	Intercept	8.46	[8.21, 8.71]		8.52	[8.27, 8.78]	
		Thinness	-0.12	[-0.35, 0.11]	0.314	-0.11	[-0.35, 0.14]	0.390
		Overweight	-0.45	[-0.79, -0.11]	**0.010**	-0.33	[-0.68, 0.03]	0.070

Country	N	Independent fixed Variables	Model 1			Model 2		
			Coef. (β)	95% CI	p-value	Coef. (β)	95%CI	p-value
		Obesity	0.05	[-0.65, 0.75]	0.897	0.21	[-0.5, 0.91]	0.569
		Girls	-0.20	[-0.37, -0.03]	**0.023**	-0.18	[-0.35, 0]	**0.049**
		SES interm. 60%	-0.37	[-0.6, -0.14]	**0.002**	-0.34	[-0.56, -0.11]	**0.004**
		SES lower 20%	-1.18	[-1.48, -0.88]	< **0.001**	-1.11	[-1.41, -0.81]	< **0.001**
		Too thin				-0.29	[-0.52, -0.07]	**0.012**
		Too fat				-0.38	[-0.62, -0.13]	**0.003**
Romania	1265	Intercept	8.54	[8.31, 8.77]		8.75	[8.52, 8.98]	
		Thinness	-0.19	[-0.47, 0.1]	0.203	0.01	[-0.29, 0.31]	0.939
		Overweight	-0.01	[-0.26, 0.24]	0.962	0.16	[-0.11, 0.43]	0.238
		Obesity	-0.09	[-0.63, 0.45]	0.750	0.24	[-0.31, 0.8]	0.398
		Girls	-0.24	[-0.42, -0.05]	**0.013**	-0.20	[-0.39, -0.01]	**0.040**
		SES interm. 60%	-0.46	[-0.68, -0.23]	< **0.001**	-0.44	[-0.67, -0.22]	**<0.001**
		SES lower 20%	-0.58	[-0.87, -0.29]	< **0.001**	-0.61	[-0.89, -0.33]	< **0.001**
		Too thin				-0.76	[-1.01, -0.52]	< **0.001**
		Too fat				-0.60	[-0.83, -0.36]	< **0.001**
Russia	1740	Intercept	7.59	[7.33, 7.85]		7.80	[7.53, 8.08]	
		Thinness	0.23	[-0.05, 0.51]	0.104	0.29	[-0.01, 0.58]	0.055
		Overweight	-0.02	[-0.32, 0.28]	0.893	0.18	[-0.14, 0.49]	0.269
		Obesity	-0.13	[-0.8, 0.53]	0.696	0.14	[-0.53, 0.82]	0.680
		Girls	-0.22	[-0.41, -0.03]	**0.023**	-0.21	[-0.4, -0.01]	**0.040**
		SES interm. 60%	-0.57	[-0.82, -0.32]	< **0.001**	-0.56	[-0.81, -0.31]	< **0.001**
		SES lower 20%	-1.02	[-1.32, -0.72]	< **0.001**	-0.99	[-1.29, -0.7]	< **0.001**
		Too thin				-0.49	[-0.74, -0.23]	< **0.001**
		Too fat				-0.61	[-0.84, -0.38]	< **0.001**
Scotland	542	Intercept	7.78	[7.37, 8.18]		7.91	[7.5, 8.32]	
		Thinness	0.14	[-0.28, 0.56]	0.527	0.16	[-0.27, 0.6]	0.467
		Overweight	-0.41	[-0.84, 0.01]	0.056	-0.09	[-0.53, 0.35]	0.694
		Obesity	-0.85	[-1.73, 0.03]	0.060	-0.49	[-1.4, 0.42]	0.292
		Girls	-0.51	[-0.82, -0.2]	**0.001**	-0.37	[-0.68, -0.06]	**0.022**
		SES interm. 60%	-0.23	[-0.63, 0.17]	0.255	-0.15	[-0.54, 0.25]	0.463
		SES lower 20%	-0.74	[-1.23, -0.26]	**0.003**	-0.71	[-1.19, -0.22]	**0.005**
		Too thin				-0.43	[-0.86, 0]	0.053
		Too fat				-0.81	[-1.17, -0.46]	< **0.001**
Serbia	1522	Intercept	8.50	[8.24, 8.77]		8.09	[7.8, 8.39]	
		Thinness	-0.32	[-0.64, 0]	**0.048**	-0.30	[-0.61, 0.01]	0.062
		Overweight	-0.10	[-0.36, 0.16]	0.458	0.14	[-0.12, 0.39]	0.291
		Obesity	-0.29	[-0.8, 0.23]	0.277	0.02	[-0.49, 0.52]	0.944
		Girls	-0.47	[-0.67, -0.27]	< **0.001**	-0.38	[-0.58, -0.19]	< **0.001**
		SES interm. 60%	-0.34	[-0.57, -0.1]	**0.005**	-0.26	[-0.48, -0.03]	**0.030**
		SES lower 20%	-0.86	[-1.15, -0.57]	< **0.001**	-0.70	[-0.98, -0.42]	< **0.001**
		Too thin				0.57	[0.37, 0.76]	< **0.001**

			Model 1			Model 2		
			Coef. (β)	**95% CI**	**p-value**	**Coef. (β)**	**95%CI**	**p-value**
Country	**N**	**Independent fixed Variables**						

Country	**N**	**Independent fixed Variables**	**Coef. (β)**	**95% CI**	**p-value**	**Coef. (β)**	**95%CI**	**p-value**
		Too fat				-1.30	[-1.67, -0.92]	< **0.001**
Slovakia	1092	Intercept	7.95	[7.68, 8.22]		8.12	[7.84, 8.41]	
		Thinness	-0.11	[-0.48, 0.25]	0.546	-0.03	[-0.42, 0.37]	0.892
		Overweight	-0.38	[-0.72, -0.04]	**0.030**	-0.11	[-0.48, 0.26]	0.557
		Obesity	-0.38	[-1.23, 0.48]	0.391	-0.03	[-0.93, 0.87]	0.945
		Girls	-0.50	[-0.73, -0.27]	< **0.001**	-0.42	[-0.66, -0.19]	< **0.001**
		SES interm. 60%	-0.41	[-0.69, -0.13]	**0.004**	-0.42	[-0.69, -0.14]	**0.003**
		SES lower 20%	-0.53	[-0.87, -0.2]	**0.002**	-0.50	[-0.83, -0.16]	**0.004**
		Too thin				-0.40	[-0.71, -0.09]	**0.011**
		Too fat				-0.74	[-1.05, -0.44]	< **0.001**
Slovenia	1656	Intercept	8.28	[8.04, 8.52]		8.45	[8.2, 8.69]	
		Thinness	-0.09	[-0.44, 0.25]	0.603	-0.02	[-0.39, 0.34]	0.911
		Overweight	-0.10	[-0.35, 0.14]	0.398	0.12	[-0.14, 0.38]	0.379
		Obesity	-0.54	[-1.02, -0.07]	**0.025**	-0.16	[-0.65, 0.34]	0.531
		Girls	-0.76	[-0.94, -0.58]	**<0.001**	-0.68	[-0.87, -0.49]	**<0.001**
		SES interm. 60%	-0.42	[-0.66, -0.19]	**<0.001**	-0.41	[-0.64, -0.17]	**0.001**
		SES lower 20%	-0.74	[-1.03, -0.45]	**<0.001**	-0.76	[-1.05, -0.47]	**<0.001**
		Too thin				-0.43	[-0.68, -0.18]	**0.001**
		Too fat				-0.61	[-0.83, -0.4]	**<0.001**
Spain	1441	Intercept	8.18	[7.96, 8.4]		8.42	[8.18, 8.65]	
		Thinness	0.09	[-0.21, 0.39]	0.550	0.13	[-0.18, 0.44]	0.405
		Overweight	-0.11	[-0.37, 0.15]	0.409	0.20	[-0.08, 0.47]	0.160
		Obesity	-0.63	[-1.18, -0.08]	**0.025**	-0.20	[-0.75, 0.35]	0.481
		Girls	-0.52	[-0.7, -0.35]	< **0.001**	-0.44	[-0.62, -0.26]	< **0.001**
		SES interm. 60%	-0.19	[-0.41, 0.04]	0.103	-0.17	[-0.39, 0.05]	0.131
		SES lower 20%	-0.76	[-1.05, -0.47]	< **0.001**	-0.77	[-1.06, -0.49]	< **0.001**
		Too thin				-0.48	[-0.73, -0.23]	< **0.001**
		Too fat				-0.84	[-1.05, -0.63]	< **0.001**
Sweden	1405	Intercept	7.79	[7.5, 8.08]		7.96	[7.66, 8.25]	
		Thinness	-0.34	[-0.7, 0.01]	0.055	-0.38	[-0.73, -0.03]	**0.034**
		Overweight	0.10	[-0.21, 0.41]	0.541	0.37	[0.06, 0.69]	**0.021**
		Obesity	-1.05	[-1.76, -0.34]	**0.004**	-0.46	[-1.17, 0.25]	0.202
		Girls	-0.62	[-0.81, -0.42]	< **0.001**	-0.41	[-0.61, -0.21]	< **0.001**
		SES interm. 60%	-0.31	[-0.59, -0.04]	**0.027**	-0.28	[-0.55, -0.01]	**0.045**
		SES lower 20%	-0.84	[-1.22, -0.47]	< **0.001**	-0.83	[-1.2, -0.46]	< **0.001**
		Too thin				-0.28	[-0.54, -0.01]	**0.040**
		Too fat				-1.01	[-1.25, -0.78]	< **0.001**
Switzerland	2251	Intercept	7.91	[7.72, 8.1]		8.11	[7.91, 8.31]	
		Thinness	0.04	[-0.22, 0.29]	0.780	-0.01	[-0.27, 0.25]	0.920
		Overweight	-0.41	[-0.65, -0.18]	**0.001**	-0.17	[-0.41, 0.08]	0.185
		Obesity	-0.75	[-1.25, -0.25]	**0.003**	-0.37	[-0.88, 0.14]	0.152

				a) Life satisfaction				
				Model 1			**Model 2**	
Country	**N**	**Independent fixed Variables**	**Coef. (β)**	**95% CI**	**p-value**	**Coef. (β)**	**95%CI**	**p-value**
		Girls	-0.75	[-0.9, -0.6]	< **0.001**	-0.65	[-0.81, -0.49]	< **0.001**
		SES interm. 60%	-0.06	[-0.26, 0.13]	0.531	-0.05	[-0.24, 0.15]	0.638
		SES lower 20%	-0.34	[-0.57, -0.11]	**0.004**	-0.28	[-0.51, -0.05]	**0.016**
		Too thin				-0.37	[-0.58, -0.15]	**0.001**
		Too fat				-0.69	[-0.87, -0.51]	< **0.001**
Turkey	1483	Intercept	6.89	[6.64, 7.15]		6.96	[6.71, 7.22]	
		Thinness	0.09	[-0.21, 0.38]	0.569	0.19	[-0.14, 0.52]	0.253
		Overweight	0.04	[-0.25, 0.32]	0.793	0.19	[-0.14, 0.51]	0.268
		Obesity	0.08	[-0.52, 0.67]	0.796	0.31	[-0.32, 0.94]	0.339
		Girls	-0.44	[-0.64, -0.24]	< **0.001**	-0.43	[-0.64, -0.23]	< **0.001**
		SES interm. 60%	-0.54	[-0.8, -0.29]	< **0.001**	-0.54	[-0.79, -0.29]	< **0.001**
		SES lower 20%	-1.25	[-1.55, -0.94]	< **0.001**	-1.25	[-1.55, -0.94]	< **0.001**
		Too thin				-0.22	[-0.51, 0.07]	0.133
		Too fat				-0.38	[-0.69, -0.08]	**0.015**
Ukraine	1912	Intercept	7.93	[7.72, 8.15]		8.08	[7.86, 8.3]	
		Thinness	-0.22	[-0.45, 0]	0.055	-0.21	[-0.45, 0.03]	0.085
		Overweight	-0.20	[-0.5, 0.11]	0.203	0.03	[-0.28, 0.34]	0.842
		Obesity	0.04	[-0.52, 0.61]	0.879	0.40	[-0.17, 0.97]	0.173
		Girls	-0.18	[-0.35, -0.01]	**0.037**	-0.10	[-0.27, 0.08]	0.285
		SES interm. 60%	-0.45	[-0.67, -0.23]	< **0.001**	-0.44	[-0.65, -0.22]	< **0.001**
		SES lower 20%	-0.94	[-1.22, -0.67]	< **0.001**	-0.93	[-1.21, -0.66]	< **0.001**
		Too thin				-0.50	[-0.75, -0.25]	< **0.001**
		Too fat				-0.63	[-0.84, -0.42]	< **0.001**
Wales	1671	Intercept	8.12	[7.89, 8.34]		8.41	[8.18, 8.63]	
		Thinness	-0.23	[-0.51, 0.04]	0.094	-0.22	[-0.5, 0.06]	0.125
		Overweight	-0.19	[-0.43, 0.06]	0.135	0.16	[-0.09, 0.42]	0.205
		Obesity	-0.84	[-1.29, -0.39]	< **0.001**	-0.29	[-0.75, 0.16]	0.203
		Girls	-0.62	[-0.79, -0.44]	< **0.001**	-0.45	[-0.62, -0.27]	< **0.001**
		SES interm. 60%	-0.51	[-0.73, -0.29]	< **0.001**	-0.51	[-0.73, -0.3]	< **0.001**
		SES lower 20%	-0.99	[-1.26, -0.72]	< **0.001**	-0.91	[-1.18, -0.65]	< **0.001**
		Too thin				-0.62	[-0.87, -0.37]	< **0.001**
		Too fat				-1.05	[-1.26, -0.85]	< **0.001**

				b) Subjective health complaints				
				Model 1			**Model 2**	
Country	**N**	**Independent fixed Variables**	**Coef. (β)**	**95% CI**	**p-value**	**Coef. (β)**	**95%CI**	**p-value**
Albania	710	Intercept	4.29	[4.1, 4.48]		4.38	[4.19, 4.56]	
		Thinness	-0.20	[-0.43, 0.03]	0.083	-0.05	[-0.28, 0.19]	0.706
		Overweight	-0.12	[-0.31, 0.06]	0.195	-0.10	[-0.31, 0.12]	0.374
		Obesity	-0.05	[-0.47, 0.37]	0.815	0.01	[-0.43, 0.45]	0.950

			Model 1			**Model 2**		
				b) Subjective health complaints				
Country	N	Independent fixed Variables	Coef. (β)	95% CI	p-value	Coef. (β)	95%CI	p-value
		Girls	-0.47	[-0.6, -0.35]	**<0.001**	-0.49	[-0.62, -0.36]	**<0.001**
		SES interm. 60%	0.00	[-0.17, 0.17]	0.985	0.00	[-0.17, 0.17]	0.971
		SES lower 20%	-0.07	[-0.29, 0.15]	0.539	-0.01	[-0.23, 0.2]	0.895
		Too thin				-0.44	[-0.62, -0.26]	**<0.001**
		Too fat				-0.17	[-0.35, 0.01]	0.058
Armenia	1180	Intercept	4.24	[4.11, 4.37]		4.28	[4.15, 4.41]	
		Thinness	0.02	[-0.11, 0.14]	0.778	0.03	[-0.1, 0.17]	0.658
		Overweight	0.01	[-0.14, 0.16]	0.895	0.10	[-0.06, 0.26]	0.231
		Obesity	-0.02	[-0.33, 0.29]	0.896	0.16	[-0.17, 0.48]	0.347
		Girls	-0.27	[-0.37, -0.18]	**<0.001**	-0.27	[-0.37, -0.17]	**<0.001**
		SES interm. 60%	-0.07	[-0.2, 0.06]	0.295	-0.06	[-0.19, 0.07]	0.354
		SES lower 20%	-0.03	[-0.19, 0.12]	0.682	-0.03	[-0.18, 0.13]	0.735
		Too thin				-0.09	[-0.22, 0.03]	0.149
		Too fat				-0.28	[-0.42, -0.14]	**<0.001**
Austria	1303	Intercept	4.16	[4.03, 4.29]		4.26	[4.12, 4.39]	
		Thinness	0.00	[-0.15, 0.15]	0.993	-0.02	[-0.18, 0.13]	0.766
		Overweight	-0.12	[-0.25, 0.01]	0.077	0.02	[-0.12, 0.16]	0.777
		Obesity	-0.17	[-0.44, 0.09]	0.196	0.04	[-0.23, 0.31]	0.773
		Girls	-0.48	[-0.57, -0.38]	**<0.001**	-0.43	[-0.53, -0.33]	**<0.001**
		SES interm. 60%	-0.01	[-0.12, 0.11]	0.910	0.00	[-0.11, 0.12]	0.963
		SES lower 20%	-0.08	[-0.23, 0.07]	0.308	-0.08	[-0.23, 0.08]	0.328
		Too thin				-0.15	[-0.28, -0.02]	**0.022**
		Too fat				-0.34	[-0.44, -0.23]	**<0.001**
Azerbaijan	1324	Intercept	4.18	[4.06, 4.3]		4.27	[4.15, 4.39]	
		Thinness	-0.12	[-0.22, -0.01]	**0.026**	-0.08	[-0.18, 0.02]	0.126
		Overweight	-0.04	[-0.2, 0.13]	0.665	-0.02	[-0.18, 0.15]	0.838
		Obesity	0.39	[0.06, 0.72]	**0.020**	0.40	[0.08, 0.72]	**0.015**
		Girls	-0.13	[-0.21, -0.05]	**0.002**	-0.14	[-0.22, -0.05]	**0.001**
		SES interm. 60%	0.27	[0.16, 0.38]	**<0.001**	0.26	[0.15, 0.37]	**<0.001**
		SES lower 20%	0.30	[0.16, 0.43]	**<0.001**	0.29	[0.16, 0.42]	**<0.001**
		Too thin				-0.30	[-0.41, -0.19]	**<0.001**
		Too fat				-0.25	[-0.4, -0.11]	**0.001**
Belgium (Flemish region)	1263	Intercept	4.09	[3.97, 4.2]		4.17	[4.06, 4.28]	
		Thinness	0.07	[-0.04, 0.18]	0.245	0.06	[-0.06, 0.18]	0.315
		Overweight	-0.05	[-0.18, 0.08]	0.446	0.04	[-0.09, 0.18]	0.527
		Obesity	-0.27	[-0.54, -0.01]	**0.042**	-0.15	[-0.41, 0.12]	0.280
		Girls	-0.40	[-0.48, -0.32]	**<0.001**	-0.36	[-0.44, -0.27]	**<0.001**
		SES interm. 60%	0.03	[-0.07, 0.13]	0.613	0.04	[-0.06, 0.14]	0.447
		SES lower 20%	0.01	[-0.12, 0.14]	0.866	0.03	[-0.1, 0.16]	0.659
		Too thin				-0.21	[-0.34, -0.09]	**0.001**

			Model 1			Model 2		
			b) Subjective health complaints					
Country	N	Independent fixed Variables	Coef. (β)	95% CI	p-value	Coef. (β)	95%CI	p-value
		Too fat				-0.27	[-0.36, -0.18]	**<0.001**
Belgium (Walloon region)	828	Intercept	3.99	[3.85, 4.12]		4.14	[3.99, 4.29]	
		Thinness	-0.01	[-0.19, 0.18]	0.939	0.03	[-0.17, 0.23]	0.767
		Overweight	0.02	[-0.14, 0.19]	0.786	0.13	[-0.04, 0.3]	0.139
		Obesity	-0.01	[-0.36, 0.33]	0.940	0.14	[-0.21, 0.49]	0.426
		Girls	-0.47	[-0.58, -0.36]	**<0.001**	-0.47	[-0.58, -0.35]	**<0.001**
		SES interm. 60%	-0.11	[-0.24, 0.03]	0.120	-0.15	[-0.28, -0.02]	**0.027**
		SES lower 20%	-0.13	[-0.3, 0.04]	0.147	-0.18	[-0.35, -0.01]	**0.041**
		Too thin				-0.23	[-0.4, -0.06]	**0.009**
		Too fat				-0.30	[-0.43, -0.16]	**<0.001**
Bulgaria	1409	Intercept	3.88	[3.76, 4.01]		3.96	[3.83, 4.09]	
		Thinness	-0.02	[-0.15, 0.1]	0.737	-0.01	[-0.13, 0.12]	0.935
		Overweight	-0.08	[-0.22, 0.05]	0.214	-0.07	[-0.2, 0.06]	0.304
		Obesity	-0.12	[-0.41, 0.18]	0.441	-0.06	[-0.35, 0.23]	0.684
		Girls	-0.29	[-0.38, -0.19]	**<0.001**	-0.29	[-0.38, -0.19]	**<0.001**
		SES interm. 60%	0.00	[-0.12, 0.12]	0.981	0.00	[-0.12, 0.12]	0.991
		SES lower 20%	0.01	[-0.12, 0.15]	0.866	0.01	[-0.12, 0.15]	0.854
		Too thin				-0.28	[-0.41, -0.16]	**<0.001**
		Too fat				-0.16	[-0.27, -0.06]	**0.002**
Canada	3092	Intercept	4.15	[4.05, 4.26]		4.27	[4.17, 4.37]	
		Thinness	0.04	[-0.08, 0.16]	0.503	0.12	[0, 0.24]	0.055
		Overweight	-0.18	[-0.27, -0.09]	**<0.001**	-0.07	[-0.16, 0.02]	0.154
		Obesity	-0.26	[-0.39, -0.13]	**<0.001**	-0.07	[-0.2, 0.07]	0.344
		Girls	-0.63	[-0.69, -0.56]	**<0.001**	-0.61	[-0.68, -0.55]	**<0.001**
		SES interm. 60%	-0.02	[-0.11, 0.08]	0.697	0.00	[-0.09, 0.09]	0.959
		SES lower 20%	-0.18	[-0.29, -0.08]	**0.001**	-0.15	[-0.25, -0.04]	**0.006**
		Too thin				-0.40	[-0.49, -0.3]	**<0.001**
		Too fat				-0.41	[-0.48, -0.33]	**<0.001**
Croatia	2068	Intercept	4.22	[4.12, 4.32]		4.31	[4.21, 4.41]	
		Thinness	0.02	[-0.11, 0.16]	0.766	0.04	[-0.1, 0.18]	0.567
		Overweight	-0.01	[-0.11, 0.1]	0.891	0.10	[-0.01, 0.22]	0.083
		Obesity	0.00	[-0.31, 0.31]	0.996	0.18	[-0.13, 0.49]	0.265
		Girls	-0.52	[-0.6, -0.44]	**<0.001**	-0.50	[-0.58, -0.42]	**<0.001**
		SES interm. 60%	0.00	[-0.1, 0.09]	0.963	-0.01	[-0.11, 0.08]	0.795
		SES lower 20%	-0.02	[-0.14, 0.1]	0.764	-0.02	[-0.13, 0.1]	0.774
		Too thin				-0.17	[-0.28, -0.07]	**0.001**
		Too fat				-0.32	[-0.41, -0.22]	**<0.001**
Czech Republic	3559	Intercept	4.16	[4.09, 4.23]		4.19	[4.12, 4.27]	
		Thinness	-0.10	[-0.18, -0.01]	**0.025**	-0.12	[-0.2, -0.03]	**0.008**
		Overweight	-0.04	[-0.11, 0.03]	0.219	0.09	[0.02, 0.17]	**0.015**

b) Subjective health complaints

			Model 1			Model 2		
Country	**N**	**Independent fixed Variables**	**Coef. (β)**	**95% CI**	**p-value**	**Coef. (β)**	**95%CI**	**p-value**
		Obesity	-0.10	[-0.23, 0.03]	0.147	0.12	[-0.02, 0.25]	0.099
		Girls	-0.45	[-0.5, -0.4]	**<0.001**	-0.40	[-0.45, -0.36]	**<0.001**
		SES interm. 60%	-0.04	[-0.11, 0.02]	0.202	-0.03	[-0.1, 0.04]	0.385
		SES lower 20%	-0.13	[-0.21, -0.05]	**0.002**	-0.11	[-0.19, -0.03]	**0.010**
		Too thin				-0.05	[-0.12, 0.01]	0.087
		Too fat				-0.32	[-0.38, -0.26]	**<0.001**
Denmark	711	Intercept	4.08	[3.94, 4.22]		4.21	[4.07, 4.34]	
		Thinness	0.07	[-0.11, 0.25]	0.454	0.10	[-0.08, 0.28]	0.278
		Overweight	-0.05	[-0.22, 0.12]	0.548	0.14	[-0.04, 0.31]	0.128
		Obesity	-0.17	[-0.56, 0.22]	0.386	0.08	[-0.3, 0.46]	0.683
		Girls	-0.36	[-0.47, -0.25]	**<0.001**	-0.29	[-0.4, -0.18]	**<0.001**
		SES interm. 60%	0.11	[-0.03, 0.26]	0.133	0.12	[-0.02, 0.25]	0.106
		SES lower 20%	0.00	[-0.18, 0.17]	0.960	0.05	[-0.12, 0.21]	0.591
		Too thin				-0.38	[-0.54, -0.21]	**<0.001**
		Too fat				-0.47	[-0.6, -0.35]	**<0.001**
England	320	Intercept	4.05	[3.79, 4.32]		4.19	[3.94, 4.45]	
		Thinness	-0.03	[-0.3, 0.25]	0.855	-0.03	[-0.3, 0.25]	0.854
		Overweight	-0.30	[-0.59, -0.01]	**0.043**	-0.11	[-0.41, 0.19]	0.488
		Obesity	-0.40	[-1.15, 0.35]	0.300	-0.20	[-0.94, 0.54]	0.597
		Girls	-0.43	[-0.63, -0.23]	**<0.001**	-0.37	[-0.57, -0.17]	**<0.001**
		SES interm. 60%	-0.22	[-0.47, 0.03]	0.086	-0.23	[-0.48, 0.01]	0.061
		SES lower 20%	-0.38	[-0.7, -0.06]	**0.021**	-0.36	[-0.67, -0.05]	**0.027**
		Too thin				-0.20	[-0.48, 0.07]	0.157
		Too fat				-0.49	[-0.71, -0.26]	**<0.001**
Estonia	1437	Intercept	4.05	[3.93, 4.17]		4.14	[4.01, 4.27]	
		Thinness	-0.02	[-0.18, 0.13]	0.757	0.00	[-0.16, 0.16]	0.975
		Overweight	-0.30	[-0.43, -0.16]	**<0.001**	-0.17	[-0.32, -0.03]	**0.019**
		Obesity	-0.14	[-0.38, 0.1]	0.245	0.04	[-0.21, 0.29]	0.742
		Girls	-0.55	[-0.64, -0.46]	**<0.001**	-0.52	[-0.61, -0.42]	**<0.001**
		SES interm. 60%	-0.05	[-0.17, 0.07]	0.395	-0.05	[-0.16, 0.07]	0.413
		SES lower 20%	-0.13	[-0.27, 0.02]	0.090	-0.11	[-0.26, 0.04]	0.143
		Too thin				-0.19	[-0.32, -0.06]	**0.004**
		Too fat				-0.30	[-0.42, -0.19]	**<0.001**
Finland	1016	Intercept	3.95	[3.82, 4.08]		4.05	[3.92, 4.18]	
		Thinness	-0.11	[-0.31, 0.1]	0.305	-0.13	[-0.33, 0.07]	0.219
		Overweight	-0.07	[-0.22, 0.09]	0.382	0.07	[-0.09, 0.23]	0.383
		Obesity	-0.13	[-0.46, 0.2]	0.457	0.16	[-0.17, 0.48]	0.357
		Girls	-0.53	[-0.63, -0.42]	**<0.001**	-0.46	[-0.56, -0.35]	**<0.001**
		SES interm. 60%	0.03	[-0.11, 0.17]	0.667	0.05	[-0.09, 0.18]	0.488
		SES lower 20%	-0.04	[-0.21, 0.12]	0.604	-0.01	[-0.16, 0.15]	0.936
		Too thin				-0.25	[-0.41, -0.09]	**0.003**

			Model 1			**Model 2**		
				b) Subjective health complaints				
Country	**N**	**Independent fixed Variables**	**Coef. (β)**	**95% CI**	**p-value**	**Coef. (β)**	**95%CI**	**p-value**
		Too fat				-0.47	[-0.59, -0.35]	**<0.001**
France	1954	Intercept	3.92	[3.83, 4.02]		4.01	[3.91, 4.1]	
		Thinness	-0.03	[-0.13, 0.07]	0.559	0.01	[-0.09, 0.12]	0.823
		Overweight	-0.04	[-0.15, 0.08]	0.558	0.08	[-0.05, 0.2]	0.233
		Obesity	-0.20	[-0.43, 0.04]	0.106	0.01	[-0.23, 0.25]	0.942
		Girls	-0.47	[-0.54, -0.4]	**<0.001**	-0.44	[-0.51, -0.37]	**<0.001**
		SES interm. 60%	0.02	[-0.07, 0.11]	0.663	0.02	[-0.07, 0.11]	0.644
		SES lower 20%	-0.06	[-0.18, 0.06]	0.342	-0.05	[-0.17, 0.07]	0.448
		Too thin				-0.28	[-0.39, -0.17]	**<0.001**
		Too fat				-0.31	[-0.4, -0.22]	**<0.001**
Georgia	1069	Intercept	4.18	[4.02, 4.34]		4.26	[4.1, 4.43]	
		Thinness	-0.09	[-0.25, 0.07]	0.256	-0.05	[-0.22, 0.11]	0.516
		Overweight	0.13	[-0.05, 0.32]	0.153	0.19	[0, 0.38]	0.050
		Obesity	0.15	[-0.19, 0.49]	0.380	0.27	[-0.07, 0.62]	0.120
		Girls	-0.37	[-0.49, -0.26]	**<0.001**	-0.34	[-0.46, -0.23]	**<0.001**
		SES interm. 60%	-0.01	[-0.16, 0.14]	0.891	0.00	[-0.15, 0.14]	0.973
		SES lower 20%	0.02	[-0.17, 0.2]	0.872	0.05	[-0.13, 0.23]	0.594
		Too thin				-0.27	[-0.42, -0.13]	**<0.001**
		Too fat				-0.26	[-0.4, -0.11]	**<0.001**
Germany	1389	Intercept	4.15	[4.04, 4.25]		4.21	[4.1, 4.32]	
		Thinness	-0.11	[-0.24, 0.01]	0.082	-0.12	[-0.26, 0.01]	0.082
		Overweight	-0.03	[-0.14, 0.07]	0.557	0.07	[-0.05, 0.18]	0.244
		Obesity	-0.03	[-0.25, 0.18]	0.763	0.12	[-0.11, 0.34]	0.313
		Girls	-0.40	[-0.47, -0.32]	**<0.001**	-0.36	[-0.44, -0.28]	**<0.001**
		SES interm. 60%	-0.10	[-0.2, 0.01]	0.072	-0.09	[-0.19, 0.01]	0.093
		SES lower 20%	-0.07	[-0.21, 0.06]	0.284	-0.05	[-0.18, 0.09]	0.496
		Too thin				-0.10	[-0.22, 0.01]	0.074
		Too fat				-0.24	[-0.33, -0.15]	**<0.001**
Greece	1265	Intercept	3.99	[3.88, 4.11]		4.07	[3.95, 4.19]	
		Thinness	-0.08	[-0.26, 0.1]	0.379	-0.03	[-0.22, 0.16]	0.763
		Overweight	-0.07	[-0.19, 0.06]	0.304	0.02	[-0.12, 0.16]	0.756
		Obesity	-0.22	[-0.45, 0.01]	0.064	-0.08	[-0.33, 0.16]	0.510
		Girls	-0.52	[-0.61, -0.42]	**<0.001**	-0.51	[-0.6, -0.41]	**<0.001**
		SES interm. 60%	-0.03	[-0.15, 0.09]	0.646	-0.02	[-0.14, 0.1]	0.753
		SES lower 20%	0.03	[-0.13, 0.2]	0.677	0.06	[-0.1, 0.22]	0.495
		Too thin				-0.19	[-0.31, -0.07]	**0.002**
		Too fat				-0.24	[-0.36, -0.12]	**<0.001**
Greenland	155	Intercept	3.92	[3.57, 4.27]		4.06	[3.7, 4.41]	
		Thinness	0.05	[-0.83, 0.93]	0.918	0.11	[-0.77, 0.99]	0.805
		Overweight	-0.16	[-0.52, 0.2]	0.389	-0.11	[-0.47, 0.26]	0.578
		Obesity	0.25	[-0.48, 0.98]	0.509	0.38	[-0.35, 1.1]	0.321

			Model 1			**Model 2**		
					b) Subjective health complaints			
Country	**N**	**Independent fixed Variables**	**Coef. (β)**	**95% CI**	**p-value**	**Coef. (β)**	**95%CI**	**p-value**
		Girls	-0.57	[-0.86, -0.27]	**<0.001**	-0.51	[-0.81, -0.2]	**0.002**
		SES interm. 60%	0.33	[-0.03, 0.68]	0.076	0.35	[0, 0.7]	0.055
		SES lower 20%	0.01	[-0.47, 0.49]	0.971	0.07	[-0.4, 0.55]	0.764
		Too thin				-0.50	[-0.98, -0.03]	**0.043**
		Too fat				-0.43	[-0.76, -0.09]	**0.016**
Hungary	1065	Intercept	4.00	[3.84, 4.16]		4.08	[3.92, 4.23]	
		Thinness	0.02	[-0.15, 0.2]	0.809	0.00	[-0.18, 0.19]	0.974
		Overweight	-0.09	[-0.24, 0.06]	0.242	0.18	[0.01, 0.34]	**0.037**
		Obesity	-0.08	[-0.32, 0.17]	0.540	0.25	[-0.01, 0.5]	0.058
		Girls	-0.54	[-0.65, -0.44]	**<0.001**	-0.47	[-0.58, -0.36]	**<0.001**
		SES interm. 60%	-0.15	[-0.28, -0.01]	**0.036**	-0.14	[-0.27, -0.01]	**0.041**
		SES lower 20%	-0.21	[-0.39, -0.03]	**0.021**	-0.19	[-0.36, -0.01]	**0.038**
		Too thin				-0.14	[-0.29, 0.02]	0.083
		Too fat				-0.52	[-0.65, -0.39]	**<0.001**
Iceland	1852	Intercept	4.15	[4.05, 4.24]		4.25	[4.16, 4.34]	
		Thinness	0.09	[-0.07, 0.25]	0.264	0.14	[-0.02, 0.30]	0.078
		Overweight	-0.21	[-0.33, -0.09]	**0.001**	-0.05	[-0.17, 0.07]	0.423
		Obesity	-0.28	[-0.48, -0.07]	**0.009**	0.05	[-0.16, 0.26]	0.640
		Girls	-0.56	[-0.64, -0.48]	**<0.001**	-0.51	[-0.59, -0.43]	**<0.001**
		SES interm. 60%	-0.16	[-0.25, -0.06]	**0.002**	-0.14	[-0.24, 0.05]	**0.003**
		SES lower 20%	-0.27	[-0.41, -0.14]	**<0.001**	-0.25	[-0.38, 0.12]	**<0.001**
		Too thin				-0.38	[-0.51, -0.26]	**<0.001**
		Too fat				-0.54	[-0.65, -0.44]	**<0.001**
Ireland	401	Intercept	4.07	[3.84, 4.31]		4.28	[4.05, 4.52]	
		Thinness	-0.21	[-0.44, 0.02]	0.077	-0.21	[-0.43, 0.02]	0.080
		Overweight	-0.23	[-0.54, 0.08]	0.155	-0.04	[-0.35, 0.27]	0.808
		Obesity	-0.32	[-0.79, 0.14]	0.179	-0.04	[-0.5, 0.42]	0.856
		Girls	-0.46	[-0.64, -0.28]	**<0.001**	-0.40	[-0.58, -0.22]	**<0.001**
		SES interm. 60%	-0.06	[-0.29, 0.17]	0.608	-0.08	[-0.3, 0.14]	0.491
		SES lower 20%	-0.16	[-0.46, 0.13]	0.276	-0.17	[-0.45, 0.12]	0.255
		Too thin				-0.37	[-0.58, -0.16]	**0.001**
		Too fat				-0.58	[-0.78, -0.38]	**<0.001**
Israel	2442	Intercept	3.74	[3.63, 3.85]		3.80	[3.69, 3.91]	
		Thinness	0.05	[-0.08, 0.17]	0.443	0.05	[-0.08, 0.18]	0.450
		Overweight	-0.03	[-0.15, 0.08]	0.579	0.10	[-0.02, 0.23]	0.101
		Obesity	-0.37	[-0.58, -0.15]	**0.001**	-0.15	[-0.38, 0.07]	0.186
		Girls	-0.38	[-0.46, -0.3]	**<0.001**	-0.35	[-0.44, -0.27]	**<0.001**
		SES interm. 60%	-0.06	[-0.16, 0.03]	0.200	-0.06	[-0.16, 0.03]	0.215
		SES lower 20%	-0.19	[-0.32, -0.05]	**0.006**	-0.18	[-0.32, -0.05]	**0.006**
		Too thin				-0.10	[-0.21, 0]	0.058
		Too fat				-0.31	[-0.41, -0.2]	**<0.001**

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Country	N	Independent fixed Variables	Model 1			Model 2		
			Coef. (β)	95% CI	p-value	Coef. (β)	95%CI	p-value

b) Subjective health complaints

Country	N	Independent fixed Variables	Coef. (β)	95% CI	p-value	Coef. (β)	95%CI	p-value
Italy	1201	Intercept	3.86	[3.74, 3.97]		3.93	[3.81, 4.05]	
		Thinness	-0.12	[-0.28, 0.03]	0.115	-0.10	[-0.26, 0.06]	0.245
		Overweight	-0.09	[-0.22, 0.05]	0.198	0.06	[-0.08, 0.2]	0.377
		Obesity	-0.39	[-0.69, -0.09]	**0.011**	-0.16	[-0.46, 0.15]	0.310
		Girls	-0.63	[-0.72, -0.54]	**<0.001**	-0.59	[-0.69, -0.5]	**<0.001**
		SES interm. 60%	-0.08	[-0.2, 0.03]	0.153	-0.07	[-0.19, 0.04]	0.196
		SES lower 20%	-0.13	[-0.28, 0.02]	0.081	-0.11	[-0.25, 0.04]	0.160
		Too thin				-0.21	[-0.37, -0.06]	**0.007**
		Too fat				-0.37	[-0.48, -0.27]	**<0.001**
Kazakhstan	1464	Intercept	4.26	[4.14, 4.39]		4.33	[4.2, 4.45]	
		Thinness	0.02	[-0.09, 0.13]	0.779	0.01	[-0.11, 0.12]	0.927
		Overweight	-0.08	[-0.29, 0.12]	0.424	0.03	[-0.17, 0.24]	0.766
		Obesity	-0.27	[-0.77, 0.24]	0.306	0.06	[-0.47, 0.59]	0.831
		Girls	-0.30	[-0.39, -0.21]	**<0.001**	-0.26	[-0.35, -0.17]	**<0.001**
		SES interm. 60%	0.18	[0.06, 0.31]	**0.003**	0.17	[0.05, 0.29]	**0.005**
		SES lower 20%	0.09	[-0.05, 0.24]	0.214	0.11	[-0.04, 0.25]	0.142
		Too thin				-0.17	[-0.29, -0.05]	**0.007**
		Too fat				-0.39	[-0.52, -0.26]	**<0.001**
Latvia	1319	Intercept	4.08	[3.94, 4.22]		4.18	[4.04, 4.32]	
		Thinness	0.08	[-0.09, 0.24]	0.361	0.11	[-0.06, 0.28]	0.201
		Overweight	-0.07	[-0.22, 0.09]	0.394	0.03	[-0.13, 0.2]	0.690
		Obesity	-0.21	[-0.49, 0.07]	0.136	-0.08	[-0.37, 0.21]	0.589
		Girls	-0.69	[-0.78, -0.59]	**<0.001**	-0.68	[-0.78, -0.58]	**<0.001**
		SES interm. 60%	-0.01	[-0.14, 0.12]	0.831	0.00	[-0.13, 0.13]	0.993
		SES lower 20%	-0.01	[-0.18, 0.16]	0.869	0.02	[-0.15, 0.19]	0.840
		Too thin				-0.26	[-0.4, -0.12]	**<0.001**
		Too fat				-0.27	[-0.38, -0.15]	**<0.001**
Lithuania	1095	Intercept	4.07	[3.93, 4.21]		4.18	[4.04, 4.32]	
		Thinness	0.15	[-0.03, 0.34]	0.107	0.21	[0.02, 0.4]	**0.030**
		Overweight	-0.19	[-0.36, -0.02]	**0.028**	-0.13	[-0.31, 0.04]	0.134
		Obesity	-0.06	[-0.38, 0.26]	0.704	-0.04	[-0.37, 0.29]	0.828
		Girls	-0.60	[-0.7, -0.49]	**<0.001**	-0.60	[-0.71, -0.49]	**<0.001**
		SES interm. 60%	0.01	[-0.12, 0.13]	0.938	0.04	[-0.09, 0.17]	0.557
		SES lower 20%	0.21	[0.04, 0.38]	**0.015**	0.24	[0.08, 0.4]	**0.004**
		Too thin				-0.35	[-0.5, -0.2]	**<0.001**
		Too fat				-0.27	[-0.39, -0.14]	**<0.001**
Luxembourg	1183	Intercept	3.90	[3.8, 4]		3.98	[3.88, 4.09]	
		Thinness	-0.02	[-0.16, 0.12]	0.781	0.03	[-0.12, 0.18]	0.653
		Overweight	0.00	[-0.12, 0.12]	0.997	0.12	[-0.01, 0.26]	0.074
		Obesity	-0.12	[-0.32, 0.08]	0.257	0.06	[-0.15, 0.27]	0.592
		Girls	-0.45	[-0.53, -0.36]	**<0.001**	-0.43	[-0.52, -0.34]	**<0.001**

			Model 1			**Model 2**		
Country	N	Independent fixed Variables	Coef. (β)	95% CI	p-value	Coef. (β)	95%CI	p-value
					b) Subjective health complaints			
		SES interm. 60%	0.06	[-0.06, 0.17]	0.333	0.06	[-0.05, 0.18]	0.265
		SES lower 20%	-0.01	[-0.15, 0.12]	0.828	0.00	[-0.14, 0.13]	0.956
		Too thin				-0.22	[-0.35, -0.09]	**0.001**
		Too fat				-0.29	[-0.40, -0.18]	**<0.001**
Malta	500	Intercept	3.80	[3.55, 4.04]		3.85	[3.6, 4.1]	
		Thinness	0.01	[-0.27, 0.29]	0.955	0.02	[-0.27, 0.31]	0.903
		Overweight	-0.06	[-0.26, 0.14]	0.582	0.00	[-0.21, 0.21]	0.993
		Obesity	-0.32	[-0.59, -0.05]	**0.023**	-0.12	[-0.46, 0.21]	0.464
		Girls	-0.48	[-0.68, -0.28]	**<0.001**	-0.47	[-0.66, -0.28]	**<0.001**
		SES interm. 60%	-0.12	[-0.34, 0.09]	0.268	-0.14	[-0.35, 0.08]	0.216
		SES lower 20%	-0.30	[-0.6, 0]	0.051	-0.32	[-0.62, -0.02]	**0.037**
		Too thin				-0.08	[-0.34, 0.17]	0.522
		Too fat				-0.25	[-0.48, -0.03]	**0.031**
Netherlands	1175	Intercept	4.21	[4.09, 4.32]		4.32	[4.21, 4.43]	
		Thinness	0.00	[-0.12, 0.13]	0.960	-0.02	[-0.15, 0.11]	0.786
		Overweight	-0.11	[-0.27, 0.06]	0.224	0.07	[-0.1, 0.24]	0.426
		Obesity	-0.51	[-0.9, -0.11]	**0.012**	-0.24	[-0.63, 0.15]	0.225
		Girls	-0.48	[-0.57, -0.39]	**<0.001**	-0.39	[-0.48, -0.29]	**<0.001**
		SES interm. 60%	0.03	[-0.08, 0.14]	0.625	0.04	[-0.07, 0.15]	0.484
		SES lower 20%	-0.17	[-0.31, -0.02]	**0.024**	-0.16	[-0.3, -0.02]	**0.026**
		Too thin				-0.24	[-0.39, -0.1]	**0.001**
		Too fat				-0.44	[-0.54, -0.33]	**<0.001**
Norway	585	Intercept	4.09	[3.92, 4.26]				
		Thinness	-0.19	[-0.4, 0.01]	0.068			
		Overweight	-0.23	[-0.42, -0.03]	**0.024**			
		Obesity	-0.26	[-0.66, 0.15]	0.214			
		Girls	-0.45	[-0.58, -0.32]	**<0.001**			
		SES interm. 60%	0.08	[-0.1, 0.25]	0.385			
		SES lower 20%	0.11	[-0.12, 0.33]	0.359			
Poland	1675	Intercept	3.80	[3.68, 3.92]		3.92	[3.8, 4.05]	
		Thinness	0.01	[-0.11, 0.13]	0.896	-0.04	[-0.17, 0.08]	0.515
		Overweight	-0.10	[-0.22, 0.03]	0.132	0.03	[-0.1, 0.16]	0.639
		Obesity	0.13	[-0.16, 0.43]	0.383	0.29	[0, 0.58]	0.054
		Girls	-0.50	[-0.58, -0.42]	**<0.001**	-0.43	[-0.52, -0.35]	**<0.001**
		SES interm. 60%	0.19	[0.08, 0.3]	**0.001**	0.19	[0.08, 0.3]	**0.001**
		SES lower 20%	0.07	[-0.08, 0.22]	0.332	0.09	[-0.06, 0.24]	0.228
		Too thin				-0.13	[-0.24, -0.02]	**0.024**
		Too fat				-0.35	[-0.44, -0.26]	**<0.001**
Portugal	1342	Intercept	4.29	[4.17, 4.42]		4.38	[4.26, 4.51]	
		Thinness	0.00	[-0.15, 0.14]	0.950	0.04	[-0.11, 0.2]	0.593
		Overweight	-0.23	[-0.35, -0.11]	**<0.001**	-0.09	[-0.22, 0.04]	0.176

			Model 1			Model 2		
Country	**N**	**Independent fixed Variables**	**Coef. (β)**	**95% CI**	**p-value**	**Coef. (β)**	**95%CI**	**p-value**

Country	N	Independent fixed Variables	Coef. (β)	95% CI	p-value	Coef. (β)	95%CI	p-value
		Obesity	-0.21	[-0.46, 0.03]	0.087	-0.03	[-0.28, 0.22]	0.811
		Girls	-0.63	[-0.71, -0.54]	**<0.001**	-0.60	[-0.69, -0.51]	**<0.001**
		SES interm. 60%	-0.01	[-0.12, 0.1]	0.862	-0.01	[-0.12, 0.1]	0.825
		SES lower 20%	-0.09	[-0.24, 0.06]	0.224	-0.09	[-0.23, 0.06]	0.248
		Too thin				-0.22	[-0.35, -0.09]	**0.001**
		Too fat				-0.32	[-0.43, -0.21]	**<0.001**
Republic of Moldova	1528	Intercept	4.00	[3.88, 4.11]		4.04	[3.92, 4.16]	
		Thinness	0.03	[-0.08, 0.14]	0.595	0.05	[-0.07, 0.17]	0.414
		Overweight	0.05	[-0.11, 0.21]	0.553	0.10	[-0.07, 0.27]	0.259
		Obesity	-0.16	[-0.5, 0.17]	0.344	-0.13	[-0.47, 0.21]	0.445
		Girls	-0.44	[-0.52, -0.35]	**<0.001**	-0.43	[-0.52, -0.35]	**<0.001**
		SES interm. 60%	0.10	[-0.01, 0.21]	0.063	0.10	[-0.01, 0.21]	0.072
		SES lower 20%	-0.03	[-0.17, 0.11]	0.718	-0.02	[-0.16, 0.13]	0.824
		Too thin				-0.15	[-0.26, -0.04]	**0.007**
		Too fat				-0.10	[-0.22, 0.02]	0.094
Romania	1265	Intercept	4.00	[3.89, 4.12]		4.08	[3.96, 4.2]	
		Thinness	0.02	[-0.12, 0.17]	0.745	0.05	[-0.11, 0.2]	0.542
		Overweight	-0.05	[-0.18, 0.08]	0.457	0.10	[-0.04, 0.25]	0.151
		Obesity	-0.39	[-0.67, -0.1]	**0.008**	-0.12	[-0.42, 0.17]	0.405
		Girls	-0.58	[-0.68, -0.48]	**<0.001**	-0.53	[-0.63, -0.44]	**<0.001**
		SES interm. 60%	0.01	[-0.1, 0.13]	0.815	0.03	[-0.09, 0.14]	0.628
		SES lower 20%	0.05	[-0.1, 0.2]	0.515	0.04	[-0.1, 0.19]	0.568
		Too thin				-0.23	[-0.36, -0.1]	**<0.001**
		Too fat				-0.40	[-0.52, -0.27]	**<0.001**
Russia	1740	Intercept	4.15	[4.04, 4.26]		4.25	[4.14, 4.36]	
		Thinness	0.10	[-0.02, 0.21]	0.115	0.09	[-0.03, 0.21]	0.155
		Overweight	-0.14	[-0.26, -0.01]	**0.035**	-0.02	[-0.15, 0.11]	0.743
		Obesity	-0.16	[-0.45, 0.12]	0.257	0.02	[-0.27, 0.3]	0.905
		Girls	-0.39	[-0.47, -0.31]	**<0.001**	-0.37	[-0.45, -0.29]	**<0.001**
		SES interm. 60%	-0.04	[-0.14, 0.07]	0.503	-0.03	[-0.14, 0.07]	0.548
		SES lower 20%	-0.14	[-0.27, -0.02]	**0.027**	-0.13	[-0.26, -0.01]	**0.039**
		Too thin				-0.18	[-0.29, -0.07]	**0.002**
		Too fat				-0.35	[-0.45, -0.26]	**<0.001**
Scotland	542	Intercept	4.10	[3.91, 4.3]		4.20	[4.01, 4.39]	
		Thinness	-0.01	[-0.21, 0.19]	0.919	0.02	[-0.19, 0.23]	0.862
		Overweight	-0.16	[-0.37, 0.04]	0.124	0.02	[-0.19, 0.23]	0.859
		Obesity	-0.42	[-0.85, 0.00]	0.053	-0.25	[-0.68, 0.18]	0.258
		Girls	-0.63	[-0.78, -0.48]	**<0.001**	-0.55	[-0.7, -0.4]	**<0.001**
		SES interm. 60%	-0.16	[-0.36, 0.03]	0.094	-0.12	[-0.31, 0.07]	0.219
		SES lower 20%	-0.09	[-0.33, 0.15]	0.463	-0.06	[-0.29, 0.17]	0.593

			Model 1			Model 2		
			b) Subjective health complaints					
Country	**N**	**Independent fixed Variables**	**Coef. (β)**	**95% CI**	**p-value**	**Coef. (β)**	**95%CI**	**p-value**
		Too thin				-0.31	[-0.52, -0.1]	**0.005**
		Too fat				-0.48	[-0.65, -0.31]	**<0.001**
Serbia	1522	Intercept	4.15	[4.04, 4.25]		4.08	[3.96, 4.2]	
		Thinness	-0.10	[-0.24, 0.04]	0.146	-0.09	[-0.23, 0.04]	0.177
		Overweight	-0.08	[-0.19, 0.03]	0.151	-0.02	[-0.13, 0.09]	0.746
		Obesity	-0.22	[-0.44, 0]	0.050	-0.14	[-0.36, 0.09]	0.231
		Girls	-0.50	[-0.59, -0.42]	**<0.001**	-0.48	[-0.56, -0.4]	**<0.001**
		SES interm. 60%	0.12	[0.02, 0.22]	**0.019**	0.14	[0.04, 0.24]	**0.007**
		SES lower 20%	0.11	[-0.01, 0.24]	0.080	0.15	[0.02, 0.27]	**0.021**
		Too thin				0.10	[0.01, 0.18]	**0.022**
		Too fat				-0.47	[-0.64, -0.31]	**<0.001**
Slovakia	1092	Intercept	4.05	[3.92, 4.17]		4.09	[3.96, 4.22]	
		Thinness	0.01	[-0.15, 0.17]	0.899	0.00	[-0.17, 0.17]	0.992
		Overweight	-0.19	[-0.34, -0.04]	**0.013**	-0.07	[-0.22, 0.09]	0.422
		Obesity	-0.10	[-0.49, 0.29]	0.617	0.07	[-0.34, 0.48]	0.743
		Girls	-0.41	[-0.51, -0.31]	**<0.001**	-0.37	[-0.47, -0.27]	**<0.001**
		SES interm. 60%	-0.01	[-0.14, 0.11]	0.815	-0.01	[-0.13, 0.11]	0.899
		SES lower 20%	-0.07	[-0.22, 0.07]	0.326	-0.05	[-0.2, 0.09]	0.471
		Too thin				-0.07	[-0.2, 0.06]	0.301
		Too fat				-0.31	[-0.44, -0.18]	**<0.001**
Slovenia	1656	Intercept	4.16	[4.05, 4.27]		4.24	[4.12, 4.35]	
		Thinness	-0.09	[-0.25, 0.07]	0.290	-0.09	[-0.26, 0.08]	0.282
		Overweight	0.05	[-0.06, 0.17]	0.363	0.19	[0.07, 0.31]	**0.002**
		Obesity	-0.05	[-0.27, 0.17]	0.667	0.18	[-0.05, 0.41]	0.124
		Girls	-0.65	[-0.73, -0.56]	**<0.001**	-0.59	[-0.68, -0.5]	**<0.001**
		SES interm. 60%	-0.02	[-0.13, 0.09]	0.775	-0.01	[-0.12, 0.1]	0.872
		SES lower 20%	-0.04	[-0.18, 0.09]	0.532	-0.05	[-0.18, 0.09]	0.500
		Too thin				-0.15	[-0.27, -0.03]	**0.011**
		Too fat				-0.34	[-0.44, -0.24]	**<0.001**
Spain	1441	Intercept	4.32	[4.22, 4.42]		4.42	[4.31, 4.52]	
		Thinness	-0.01	[-0.15, 0.12]	0.861	-0.01	[-0.15, 0.13]	0.878
		Overweight	-0.11	[-0.23, 0.01]	0.071	0.04	[-0.09, 0.16]	0.569
		Obesity	-0.14	[-0.39, 0.1]	0.257	0.06	[-0.19, 0.3]	0.651
		Girls	-0.50	[-0.58, -0.42]	**<0.001**	-0.46	[-0.54, -0.38]	**<0.001**
		SES interm. 60%	0.04	[-0.06, 0.14]	0.425	0.06	[-0.04, 0.16]	0.262
		SES lower 20%	-0.03	[-0.16, 0.1]	0.629	-0.03	[-0.16, 0.09]	0.593
		Too thin				-0.19	[-0.3, -0.07]	**0.001**
		Too fat				-0.39	[-0.48, -0.29]	**<0.001**
Sweden	1405	Intercept	3.83	[3.71, 3.95]		3.92	[3.8, 4.05]	
		Thinness	-0.05	[-0.2, 0.1]	0.509	-0.04	[-0.2, 0.11]	0.562
		Overweight	0.00	[-0.13, 0.13]	0.986	0.09	[-0.05, 0.22]	0.215

Country	N	Independent fixed Variables	Model 1			Model 2		
			Coef. (β)	95% CI	p-value	Coef. (β)	95%CI	p-value
		Obesity	-0.27	[-0.58, 0.03]	0.079	-0.07	[-0.38, 0.23]	0.647
		Girls	-0.55	[-0.64, -0.47]	**<0.001**	-0.50	[-0.58, -0.41]	**<0.001**
		SES interm. 60%	-0.03	[-0.15, 0.09]	0.611	-0.01	[-0.13, 0.11]	0.860
		SES lower 20%	-0.04	[-0.2, 0.12]	0.640	-0.03	[-0.19, 0.12]	0.680
		Too thin				-0.21	[-0.33, -0.1]	**<0.001**
		Too fat				-0.39	[-0.49, -0.28]	**<0.001**
Switzerland	2251	Intercept	4.04	[3.96, 4.12]		4.12	[4.04, 4.2]	
		Thinness	0.00	[-0.1, 0.1]	0.985	-0.01	[-0.12, 0.09]	0.798
		Overweight	-0.14	[-0.24, -0.05]	**0.003**	-0.06	[-0.16, 0.04]	0.249
		Obesity	-0.11	[-0.32, 0.09]	0.268	0.01	[-0.19, 0.22]	0.895
		Girls	-0.51	[-0.57, -0.45]	**<0.001**	-0.48	[-0.54, -0.41]	**<0.001**
		SES interm. 60%	0.10	[0.02, 0.18]	**0.012**	0.11	[0.03, 0.19]	**0.007**
		SES lower 20%	0.06	[-0.04, 0.15]	0.234	0.08	[-0.01, 0.18]	0.086
		Too thin				-0.16	[-0.24, -0.07]	**<0.001**
		Too fat				-0.25	[-0.33, -0.18]	**<0.001**
Turkey	1483	Intercept	3.45	[3.33, 3.56]		3.49	[3.38, 3.61]	
		Thinness	0.08	[-0.05, 0.2]	0.235	0.18	[0.04, 0.32]	**0.013**
		Overweight	-0.01	[-0.13, 0.12]	0.929	0.05	[-0.09, 0.2]	0.467
		Obesity	0.26	[0, 0.52]	0.052	0.35	[0.08, 0.62]	**0.013**
		Girls	-0.44	[-0.53, -0.35]	**<0.001**	-0.44	[-0.52, -0.35]	**<0.001**
		SES interm. 60%	0.13	[0.02, 0.24]	**0.025**	0.13	[0.02, 0.24]	**0.024**
		SES lower 20%	0.02	[-0.11, 0.15]	0.793	0.02	[-0.11, 0.15]	0.791
		Too thin				-0.25	[-0.37, -0.12]	**<0.001**
		Too fat				-0.17	[-0.3, -0.04]	**0.012**
Ukraine	1912	Intercept	4.02	[3.92, 4.11]		4.09	[3.99, 4.18]	
		Thinness	-0.12	[-0.22, -0.02]	**0.017**	-0.13	[-0.24, -0.02]	**0.016**
		Overweight	-0.03	[-0.17, 0.1]	0.636	0.10	[-0.04, 0.24]	0.168
		Obesity	0.13	[-0.12, 0.37]	0.320	0.33	[0.08, 0.58]	**0.009**
		Girls	-0.50	[-0.57, -0.42]	**<0.001**	-0.44	[-0.52, -0.37]	**<0.001**
		SES interm. 60%	0.00	[-0.1, 0.1]	0.979	0.01	[-0.08, 0.11]	0.760
		SES lower 20%	-0.03	[-0.15, 0.09]	0.632	-0.02	[-0.15, 0.1]	0.689
		Too thin				-0.24	[-0.35, -0.13]	**<0.001**
		Too fat				-0.37	[-0.46, -0.28]	**<0.001**
Wales	1671	Intercept	4.12	[4.02, 4.22]		4.25	[4.15, 4.35]	
		Thinness	-0.15	[-0.27, -0.02]	**0.027**	-0.12	[-0.25, 0.01]	0.076
		Overweight	-0.14	[-0.26, -0.03]	**0.017**	0.00	[-0.12, 0.12]	0.960
		Obesity	-0.24	[-0.45, -0.02]	**0.029**	-0.01	[-0.23, 0.2]	0.896
		Girls	-0.68	[-0.77, -0.6]	**<0.001**	-0.61	[-0.7, -0.53]	**<0.001**
		SES interm. 60%	-0.07	[-0.18, 0.03]	0.167	-0.07	[-0.17, 0.03]	0.177
		SES lower 20%	-0.22	[-0.34, -0.09]	**0.001**	-0.18	[-0.3, -0.05]	**0.006**
		Too thin				-0.31	[-0.43, -0.19]	**<0.001**

b) Subjective health complaints

			Model 1			Model 2		
Country	**N**	**Independent fixed Variables**	**Coef. (β)**	**95% CI**	**p-value**	**Coef. (β)**	**95%CI**	**p-value**
		Too fat				-0.45	[-0.54, -0.35]	**<0.001**