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Weight-Influenced Self-Esteem, Body Comparisons and Body Satisfaction: Findings among Women from The Netherlands and Curacao

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Abstract The present study examined young women's weight-influenced self-esteem (WISE) in response to imagined weight gain and weight loss, and its relations to body satisfaction, body comparisons and global self-esteem. Young women from two different regions, that is, from the north of The Netherlands ($n=157$) and from the Willemstad area (the capital of Curacao; $n=162$), completed a questionnaire. It was expected that Dutch women would show lower self-esteem in response to imagined weight gain than women from Curacao, and that self-esteem in response to imagined weight gain would be negatively related to general self-esteem and body satisfaction, and more so among Dutch women than among Curacaoan women. Finally, it was expected that body comparisons would be predictive of lower self-esteem in response to imagined weight gain. As expected Dutch women showed lower self-esteem in response to imagined weight gain than Curacaoan women. Moreover, findings showed that among Curacaoan women self-esteem in response to imagined weight gain was not related to general self-esteem or body satisfaction and that body comparisons were less predictive of lowered self-esteem in response to imagined weight gain than among Dutch women. Findings are discussed in light of cultural differences in ideal body shape and the supportiveness of women's social networks.

Keywords Weight-influenced self-esteem · Body satisfaction · Social comparison · The Netherlands · Curacao · Body image

Introduction

Physical attractiveness is generally regarded as a more important characteristic for women than for men (cf., Feingold 1990), a gender difference that is usually attributed to the relation between physical attractiveness and female fertility (e.g., Lippa 2007). The higher importance of physical attractiveness for women makes particularly women vulnerable to developing low body satisfaction and the eating disorders that may result from it (e.g., Striegel-Moore and Bulik 2007). Nonetheless, substantial differences have been found between cultures in the prevalence of low body satisfaction and eating disorders. Kessler et al. (2013), for example, reported that the lifetime prevalence of bulimia nervosa was 13 times higher in New Zealand than in Italy (1.3 vs. 0.1 %). To date relatively little is still known about the processes by which culture contributes to low body satisfaction and eating disorders among women (Markey 2004). Insights from cognitive-behavioral therapy point to the relevance of beliefs and values in the development of low body satisfaction and eating disorders (e.g., Wonderlich et al. 2014). These beliefs and values are shaped, at least partially, by cultural factors, such as media content and family socialization (Markey 2004).

In order to develop effective interventions for low body satisfaction and eating disorders, we think it is of crucial importance to better understand women's beliefs about weight and cultural differences in these beliefs. The aim of the present study is therefore to examine weight-influenced self-esteem (WISE; also referred to as weight-based self-esteem) among women from two different cultures: The Netherlands and

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Curacao. The Netherlands is a Western high-income country, whereas Curacao is a Caribbean island with a predominantly Afro-Caribbean culture. Previous studies have shown clear cross-cultural differences with regard to body-size ideals, with a preference for relatively thin figures in Westernized settings and a preference for relatively plump figures in non-Westernized, more traditional settings (Swami 2007). As will be argued later, we expect to find differences in weight-influenced self-esteem between these two cultures. In this introduction, we will begin by introducing the concept of WISE, building on recent work on WISE by Trottier et al. (2013a, b). We will then proceed by discussing cultural differences in WISE and the potential role of social comparisons, an important determinant of body-image related concerns (e.g., Dijkstra et al. 2010; Franzoi et al. 2012), in WISE. Subsequently, we will formulate our hypotheses and present a study on WISE among young women from The Netherlands and Curacao, in which women were asked to imagine gaining respectively losing weight.

Weight-Influenced Self-Esteem

Self-schemata are cognitive generalizations about the self that organize and guide the processing of self-related information (Markus 1977) and that may lead individuals to behave in a certain way (e.g., Allom and Mullan 2012). An important self-schema that is related to appearance is weight-influenced self-esteem (WISE), a self-schema that connects weight to self-esteem (McFarlane et al. 2001; Trottier et al. 2013b). The relevance of WISE has been emphasized in studies showing that this schema is one of the core cognitive features of disordered eating (e.g., Trottier et al. 2013a). The relevance is also apparent from the fact that in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5; APA 2013), WISE is listed as a key criterion for diagnosis of both anorexia nervosa and bulimia nervosa. As women have stronger WISE they evaluate their self-worth more on the basis of their weight. As a result, even small fluctuations in weight may cause fluctuations in self-esteem. More specifically, in response to weight gain, women who have adopted this self-schema not only evaluate themselves negatively in the domain of physical attractiveness, but also in other domains, such as in their relationships with other people, and their work (e.g., Trottier et al. 2013b). WISE may therefore, when internalized strongly, have a generalized negative impact on women's well-being.

Culture and WISE

In most Western societies, such as the U.S. (e.g., Owen and Laurel-Seller 2000), and The Netherlands (e.g., Martijn et al. 2013), the beauty ideal for women is defined, in large part, by thinness (e.g., Swami 2015). This is, however, not necessarily

the case in other cultures. For instance, among adolescent females in Ecuador, De Casanova (2004) found young women to describe their ideal body shape as somewhat heavier than is commonly preferred in Western countries (cf., Swami 2015). According to Anderson-Fye (2011), as non-Western cultures become more industrialized and modern, the beauty ideal for women shifts more towards the Western beauty ideal of 'thinness' (also see Swami 2015). Recent studies however indicate that cultural differences in beauty ideals still exist (e.g., Forbes et al. 2012).

Partly as a result of cultural differences in standards of beauty, women from different cultures have also been found to differ in the degree of body satisfaction (e.g., Wildes and Emery 2001). That is, by comparing themselves to the cultural beauty ideal women may feel more or less satisfied about their body. Recurrently, in different samples, especially Black women have been found to report relatively high levels of body satisfaction. For instance, in a study among more than 4000 female U.S. residents, ranging in age from 25–45 years, African-American women reported lower body dissatisfaction than European-American women (Kronenfeld et al. 2010). Likewise, in a sample of undergraduates, Jefferson and Stake (2009) found, after controlling for BMI, African-American women to show lower discrepancies between their ideal and actual body than European-American women. Findings like these are usually explained by the fact that in Black communities it is more socially acceptable for women to have a larger body size, and less likely that women are stigmatized for having a larger body size (e.g., Hicken et al. 2013).

Because of the cultural differences in body satisfaction and standards of beauty, it seems very likely that women from different cultures will also differ in WISE. Despite its relevance, studies that have investigated cultural differences in WISE are very scarce. We know of only one study among U.S. undergraduates (Clabaugh et al. 2008) that found African-American women to be less inclined than White and Asian women to base their self-esteem on body weight. The present study examines WISE and its relation to body satisfaction among female undergraduates from two different cultures: The Netherlands and Curacao. In addition to body satisfaction, we also examined the relationship between WISE and global self-esteem, that is the way individuals, in general, value themselves. Global self-esteem is an important correlate of body satisfaction: in general, high self-esteem individuals are more satisfied with their appearance and less likely to contrast themselves with beauty ideals (e.g., Dijkstra et al. 2010). More in general, high self-esteem is considered to be indicative of flourishing, that is the experience that life is going well (Huppert and So 2013). A relatively strong relationship exists between global self-esteem and WISE as well. Among Canadian female undergraduates Trottier et al. (2013a), for instance, found that as imagined weight gain

affected participants' esteem more negatively (and thus WISE was higher), they showed lower general self-esteem ($r = -.46$).

The Netherlands is a small and densely populated high-income country in Western Europe. Its 17 million inhabitants predominantly have a Western-European cultural background: only 10 % of the population has a non-Western cultural background (CBS 2013). As in most other Western-European countries, thinness is an important standard for female beauty in The Netherlands, more important than it is for male beauty (e.g., Martijn et al. 2013). A large scale study, among 36,874 Dutch men and women, for instance, has shown that about 70 % of adult Dutch women want to be thinner than they actually are. This study also found that 76 % of Dutch women find their appearance to be important. These percentages are substantially higher than those found for Dutch men (54 and 49 %; Woertman and Van den Brink 2008). To date, no studies have investigated how weight gain or loss affects the self-esteem of Dutch women, although several indications have been found for a relation between self-esteem and perceptions of weight among Dutch women. A study by De Bruin et al. (2009), for instance, showed that among 140 girls from secondary education, those who participated in sports for weight-related reasons, had lower self-esteem than those who participated in sports for other reasons and those who did not participate in sports. Likewise, a study among 1287 adult Dutch women showed a negative relation between BMI and self-esteem (Dijkstra and Barelds 2011a). As a consequence of the importance Dutch women may attach to an attractive appearance and the importance of the thinness ideal for female beauty, we expected WISE to be a relatively important self-schema for young Dutch women.

Curacao is a small Caribbean island, with about 140,000 inhabitants. It is a former Dutch colony and still a constituent part of The Netherlands. Although its inhabitants come from diverse ethnical backgrounds, the cultural background of Curacao's inhabitants is overwhelmingly Afro-Caribbean. Studies on body satisfaction and beauty ideals among inhabitants of Curacao are scarce. The studies that have been conducted have noticed that in the communities of Black women on Curacao being overweight is much more socially acceptable than in Western European countries such as The Netherlands, and that, probably as a consequence, anorexia nervosa is very rare among women from Curacao (e.g., Hoek et al. 2005). Likewise, a study among 39 inhabitants of St. Kitts (this is also a Caribbean island with an Afro-Caribbean culture), showed that inhabitants of Kitts—both men and women—valued heavier women somewhat more than men and women from the U.S. (Gray and Frederick 2012). Because of an anticipated higher acceptance of heavier body sizes in the communities of women from African heritage in this region (also see Swami 2015), we expected that, for

Curacaoan women, WISE will be a relatively unimportant self-schema, less important than for women from The Netherlands. In sum, with regard to WISE, we expected women from The Netherlands to show lower self-esteem in response to imagined weight gain than women from Curacao (Hypothesis 1). In addition, we expected self-esteem in response to imagined weight gain to be related negatively to general self-esteem and body satisfaction, and more so among Dutch women than among Curacaoan women (Hypothesis 2).

Social Comparison and WISE

In general, social comparison is an important variable linking standards of beauty—as portrayed in, for instance, media messages of beauty—and body image, especially for women (cf., Jones 2001). Numerous studies have, for instance, found that as women compare their appearance more often to that of other women, they become less satisfied with their bodies: in others, women often see what they wish for themselves (e.g., Dijkstra et al. 2010; Martijn et al. 2013). One reason is that women, more than men, tend to compare their appearance to that of other women who are more attractive (e.g., Franzoi et al. 2012). As a result, they feel more negatively about their own appearance and become less satisfied with their body. Social comparisons regarding thinness may also strengthen WISE: the more women compare their body to that of others, the more they may believe that weight is important, and, as a result, the stronger weight may become connected to their self-esteem. This may make women who compare themselves often relatively vulnerable to weight related fluctuations in self-esteem, regardless of their specific cultural background. We therefore expected that, as women made more frequent body comparisons, they would show lower self-esteem in response to imagined weight gain (Hypothesis 3). It must be noted, however, that research on the role of social comparison in body satisfaction has predominantly used European and U.S. samples. Research shows that individuals from different cultures may differ in the extent to which they use social comparisons for different purposes. Recently, for instance, Church et al. (2014) found that college students from the U.S. relatively often used social comparisons to self-enhance, whereas college students from China relatively often used social comparisons to self-efface. Studies in which two or more different cultural groups are compared with regard to the role of social comparisons in body satisfaction are, to our knowledge, absent, and the present study is the first to explicitly examine this issue.

The Present Study

In sum, the present study set out to examine the following hypotheses:

- Hypothesis 1. Women from The Netherlands show lower self-esteem in response to imagined weight gain than women from Curacao.
- Hypothesis 2. Self-esteem in response to imagined weight gain is negatively related to general self-esteem and body satisfaction and more so among Dutch women than among Curacaoan women.
- Hypothesis 3. As women make more frequent body comparisons, they show lower self-esteem in response to imagined weight gain.

To date, studies on WISE have only examined self-esteem in response to imagined weight *gain*, and its relation to body satisfaction (see Trottier et al. 2013a, b). The present study, however, also examined self-esteem in response to imagined weight *loss* and its relation to body satisfaction and general self-esteem. Studying WISE with regard to imagined weight loss is important since weight loss may form an important reinforcer of dieting behavior and, as such, may increase the chances of developing a pattern of disordered eating. Since the literature on weight loss does not provide us with clear expectations regarding the consequences of weight loss in different cultures, we did not formulate specific hypotheses with regard to WISE in the case of imagined weight loss.

In addition, the present study will examine (exploratory) two different aspects of self-esteem in response to both weight gain and weight loss (i.e., generalized and expected; see Method section). Finally, the present study will examine to extent to which self-esteem in response to weight gain or weight loss can be predicted by body satisfaction, general self-esteem, and body comparisons (regression analyses).

Method

Participants and Procedure

Participants were undergraduates recruited at the University of Groningen in the north of The Netherlands, and at the University of Curacao in Willemstad, the capital of the island of Curacao, and surrounding area. Participants were asked to participate in a study on physical appearance. We aimed at two samples of young women, because physical appearance plays an especially important role for young women. The Dutch sample completed an online questionnaire, whereas the participants from Curacao were handed the questionnaires on paper by researchers from the University of Curacao. These paper and pencil questionnaires were offered in both Dutch

and Papiamentu, since both of these languages are spoken on Curacao (with Papiamentu being the more dominant language; in the present study 72.2 % of the Curacaoan participants indicated that Papiamentu was their primary language). After completing the questionnaire the Curacaoan participants received a granola bar as a sign of gratitude for their cooperation. Data were collected for a sample of 171 Curacaoan women. Because the focus of the present study is on young women, we decided to remove the data of any participants over the age of 30. This meant removing the data from nine participants from the Curacaoan sample, leaving a final sample of 162 Curacaoan women (see Table 1 for details).

The Dutch participants were recruited at the University of Groningen, and received some research credits for their participation in an online study. A total of 157 female participants completed the Dutch online questionnaire (see Table 1). There were some significant differences between the two samples. The mean age between the two samples was significantly different, $F(1, 318)=81.26, p<.001, \eta^2=.20$, but did not affect the results: when age was added as a covariate in the subsequent analyses, no significant direct or interaction effects were found for age. The two samples also differed in BMI, with the BMI of the Dutch sample being lower than that of the Curacaoan sample, $F(1, 304)=55.06, p<.001, \eta^2=.15$. As with age, when BMI was used as a covariate in the subsequent analyses, no significant direct or interaction effects were found. We therefore decided not to control for age or BMI.

Measures

Weight-Influenced Self-Esteem (WISE)

The Weight-Influenced Self-Esteem Questionnaire (the WISE-Q; Trottier et al. 2013b) was used to assess self-esteem subsequent to imagined weight gain. The WISE-Q is a 22-item self-report questionnaire that measures the negative consequences of an imagined gain in body weight on multiple dimensions of self-esteem. In the WISE-Q, respondents are

Table 1 Characteristics of the two samples in the present study

	Curacaoan sample	Dutch sample
<i>N</i>	162	157
Age		
– <i>M</i>	21.4	19.1
– <i>SD</i>	1.8	1.7
– range	16–28	17–30
BMI		
– <i>M</i>	25.9	21.6
– <i>SD</i>	6.6	2.8
– range	16.5–54.9	16.9–40.0

instructed to imagine that they stepped on a scale and saw that they had gained 5 lbs. They are then asked to indicate how this 5 lbs weight gain would negatively influence how they feel about themselves in various domains of self-esteem, such as their physical attractiveness, popularity, assertiveness, sense of self-control, personality, and quality of their work (for example “How you feel about your appearance”; “Hoe je je voelt over je uiterlijk.”). The following instruction was presented to the participants directly preceding the items (see Trottier et al. 2013b, p. 115): “Imagine that you stepped on the scale this morning and saw that you *gained* 2.5 kg. To what extent would this 2.5 kg weight GAIN *negatively* affect. . .”.

Responses were assessed on 5-point scales (1 = not at all, 5 = strongly). In the present study, we replaced the 5 lbs in the original introduction of the WISE-Q (Trottier et al. 2013b, p. 115) to its approximate metric equivalent of 2.5 kg, because the metric system is the common system in The Netherlands and Curacao (and everywhere else in the world, with the exception of the U.S., Burma and Liberia).

In addition, to assess self-esteem in response to imagined weight *loss*, we presented participants with an adapted version of WISE-Q. The items and response scale of this adapted version were identical to those of the original WISE-Q, only the instruction to the participants was adapted. In the adapted version of the WISE-Q, respondents were instructed to imagine that they stepped on a scale and saw that they had *lost* 2.5 kg. They were then asked to indicate how this 2.5 kg weight loss would positively influence how they feel about themselves in various domains of self-esteem. The following instruction was presented to the participants directly preceding the items: “Imagine that you stepped on the scale this morning and saw that you *lost* 2.5 kg. To what extent would this 2.5 kg weight LOSS *positively* affect. . .”.

Responses to the 22 items were again assessed on 5-point scales (1 = not at all, 5 = strongly). In the present study, Cronbach’s alpha for the WISE-Q (imagined gain; 22 items) was .97, and for the adapted version of the WISE-Q (imagined loss; 22 items) Cronbach’s alpha was .96 (data of the two samples combined). The total WISE-Q scores (one for gain and one for loss) were computed by summing all 22 item-responses per scenario.

In addition to the total score, two subscale scores can be computed for the WISE-Q: Generalized (16 items dealing with seemingly unrelated domains of self-esteem, such as personality and performance, for example “Your performance at work or school”; “Je prestaties op het werk of school”), and Expected (six items dealing with aspects of self-esteem that can be expected to be related to weight gain, for example “How physically attractive you feel”; “Hoe fysiek aantrekkelijk je je voelt”;

see Trottier et al. 2013b). The Generalized and Expected subscale scores were computed in addition to the total scores (separately for imagined weight gain and weight loss) by summing the respective items. Cronbach’s alphas for the two subscales were: Generalized gain .97, Generalized loss .96, Expected gain .91, and Expected loss .88 (samples combined). Correlations between the two subscales were .62 for the gain scenario and .67 for the loss scenario ($ps < .001$; samples combined). All WISE-Q items (and all other items used in the present study) are listed in the Appendix Table 7.

Self-Esteem

The Rosenberg Self-Esteem Scale (RSES; Rosenberg 1965) is the most commonly used instrument for the assessment of global self-esteem. The RSES is a self-report measure consisting of 10 statements related to overall feelings of self-worth or self-acceptance (for example “I take a positive attitude toward myself”; “Ik sta positief tegenover mezelf.”). The items were answered on five-point scales ranging from strongly disagree (1) to strongly agree (5), and were summed in order to compute the total RSES score. Previous studies have found extensive support for the reliability and validity of the RSES in different cultures (e.g., Schmitt and Allik 2005). Cronbach’s alpha for this scale in the present study was .84 (data of the two samples combined).

Body Satisfaction

The present study used three variables as an indication of body satisfaction (see also Dijkstra and Barelds 2011a). First, participants completed the Body Areas Satisfaction Scale (BASS; Cash 2000). This scale consists of nine items (that were answered on 5-point scales; 1 = very dissatisfied; 5 = very satisfied) that refer to eight distinct physical areas or attributes (for example “face”, “weight”; “gezicht”, “gewicht”), and overall appearance. Cronbach’s alpha for this scale was .86 (data of the two samples combined). The nine item scores were summed in order to compute the total BASS score. Second, participants were asked the question “How attractive do you feel your body is?” (“Hoe aantrekkelijk vind je je lichaam?”) on a 10-point rating scale ranging from 1 = very unattractive to 10 = very attractive. For the third measure of body satisfaction, we asked participants to report both their actual and their ideal weight in kilograms. The discrepancy between the actual and ideal weight has been used in previous studies as an indicator of body satisfaction, with a higher level of satisfaction being reflected by a smaller discrepancy between the two (see also Dijkstra and Barelds 2011a; Swami et al. 2010). A potential problem with

this discrepancy variable, however, is that both actual and ideal weight are dependent on body height, whereas the ideal weight, that is used to compute this discrepancy score, in its turn is dependent on the actual weight of the participants. In other words, taller participants are, on average, heavier than smaller participants, whereas the reported ideal weight is, on average, higher for heavier individuals. In the present samples, for example, the correlations between body weight and body height are $r=.37$ for the Curacaoan sample and $r=.40$ for the Dutch sample. The ideal weight correlates $r=.81$ and $r=.83$ respectively with the actual weight in these two samples (all p 's<.001). In order to obtain a more accurate indication of body satisfaction that is still based on actual and ideal body weight, but that is controlled for body height, we calculated both the BMI (weight divided by height squared) and the ideal BMI (ideal weight divided by height squared) of the participants. We then regressed the ideal BMI on the actual BMI and used the residual scores (unstandardized) as an indication of body satisfaction. The interpretation of these residual scores is such that higher scores indicate higher body satisfaction.

Body Comparisons

The frequency with which women compare their appearance to that of others was assessed by means of four items that are based on the Body Comparison Scale (BCS; see Thompson et al. 2002). Women were asked how often they compared (a) their figure, (b) their weight, (c) the attractiveness of their face, and (d) their general appearance with that of other women. A sample item is “I compare my weight to that of other women” (“Ik vergelijk mijn gewicht met dat van andere vrouwen”). Items were assessed on 5-point scales (1 = never, 5 = all the time). Dijkstra and Barelds (2011b) describe how this scale was developed and showed that these four items can be summed to obtain a short and reliable scale for body comparisons. Cronbach's alpha for this scale in the present study was .85 (samples combined).

Results

The present study uses two versions of the WISE-Q: one referring to the negative effect of imagined weight gain, and one referring to the positive effect of weight loss. The implicit assumption in using these two versions of the WISE-Q is that there is a general consensus among women that weight gain is undesirable, and weight loss is desirable. There might however also be women in the two samples for whom weight gain is desirable, and weight loss undesirable. To examine this,

we first calculated the absolute difference scores between the reported actual and ideal weight. In the Dutch sample, five women (3.2 %) reported a higher ideal than actual weight. In the Curacaoan sample, 27 women (16.7 %) reported a higher ideal than actual weight. It was decided to remove these participants from the subsequent analyses. The results found when including these women are highly comparable to the results reported here. Mainly as a result of the higher number of participants, more significant differences between the correlations in the two samples are found if these women are included (15 instead of 11). Similar significant main and interaction effects are found when including these women.

To examine whether Dutch women report lower self-esteem in response to imagined weight gain (Hypothesis 1) and imagined weight loss than women from Curacao, the mean WISE-Q scores (total scores and subscale scores, for both gain and loss) were computed (see Table 2). Analyses of variance revealed that the difference between the two samples with regard to the reported negative effect of imagined weight gain on self-esteem was significant for the WISE-Q total score: in the Dutch sample, the overall negative effect of imagined weight gain on self-esteem (WISE-Q total score) was rated higher than in the Curacaoan sample, $F(1, 272)=6.86$, $p<.01$. Moreover, the ratings for the WISE-Q Expected subscale, $F(1, 272)=31.43$, $p<.01$, but not the Generalized subscale, $F(1, 272)=1.52$, $p=n.s.$, were significantly higher in the Dutch sample than in the Curacaoan sample, thus partly supporting Hypothesis 1. The ratings of the positive effect of imagined weight loss on self-esteem, on the other hand, were not significantly different between the two samples, neither for the total WISE-Q score, nor its two subscales, $F_s(1, 272)\leq 1.61$, $p=n.s.$, see Table 2.

A repeated measures MANOVA using imagined weight gain or loss as the repeated measures variable and sample (Curacaoan vs. Dutch) as the between participants factor, and the WISE-Q total and subscale scores as the dependent variables showed that the multivariate imagined weight gain or loss $\times$ sample interaction effect was significant, $F(3, 268)=8.13$, $p<.01$. Significant univariate weight gain or loss $\times$ sample interaction effects were found for both the total WISE-Q score, $F(1, 270)=7.39$, $p<.01$, and the WISE-Q Expected subscale, $F(1, 270)=20.23$, $p<.01$. The significant interaction effects between imagined weight gain or loss and sample are graphically displayed in Figs. 1 and 2.

Closer examination of these effects (repeated measures MANOVA for each sample separately) revealed that for Dutch women, the negative effect of imagined weight gain was as strong as the positive effect of

Table 2 Mean WISE-Q, general self-esteem, body satisfaction, and body comparison scores for Curacaoan and Dutch women

	Curacaoan Women		Dutch Women				
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	Theoretical scale range	<i>F</i> (1, 272)	η^2
Self-esteem in response to imagined weight gain							
WISE-Q total gain	58.51	21.66	65.15	20.03	22–110	6.86*	0.03
- Generalized gain	39.76	17.77	42.26	15.67	16–80	1.52	0.01
- Expected gain	18.74	6.26	22.88	5.88	6–30	31.43*	0.10
Self-esteem in response to imagined weight loss							
WISE-Q total loss	65.05	22.92	65.74	21.14	22–110	0.07	0.00
- Generalized loss	43.55	18.57	43.33	16.57	16–80	0.01	0.00
- Expected loss	21.49	5.96	22.41	5.98	6–30	1.61	0.01
General Self-esteem	41.79	6.10	36.72	5.45	10–50	52.43*	0.16
Body satisfaction							
BASS	34.81	5.97	31.55	4.99	9–45	24.15*	0.08
Self-rated attractiveness	7.71	1.43	6.63	1.40	1–10	40.06*	0.13
Corrected ideal BMI	0.05	1.85	−0.46	0.88		8.83*	0.03
Body comparisons	9.51	3.85	12.88	3.22	4–20	61.68*	0.19

WISE-Q gain refers to the negative effect of imagined weight gain on self-esteem, WISE-Q loss to the positive effect of imagined weight loss on self-esteem, BASS to the Body Areas Satisfaction Scale, Self-rated attractiveness to the grade participants assigned to their own appearance, and Corrected ideal BMI to the ideal BMI corrected for the actual BMI

* $p < .01$

imagined weight loss: WISE-Q total $F(1, 151)=0.21$, $p=n.s.$; WISE-Q Generalized $F(1, 156)=1.24$, $p=n.s.$; WISE-Q Expected $F(1, 156)=1.18$, $p=n.s.$. For Curacaoan women on the other hand, the reported positive effect of imagined weight loss was comparable to that of Dutch women, but the negative effect of imagined weight gain was significantly lower than the same effect for Dutch women (see Table 2). The difference between the total WISE-Q gain scores and the total WISE-Q loss scores *within* the Curacaoan sample (repeated measures MANOVA) was also significant, $F(1, 121)=13.80$, $p < .01$, as was the difference between the WISE-Q Expected subscale scores, $F(1, 121)=21.69$,

$p < .01$, and the WISE-Q Generalized scores, $F(1, 121)=8.13$, $p < .01$, for the gain and loss scenarios.

In addition, differences between the two samples with regard to general self-esteem, body satisfaction, and body comparisons were examined (see also Table 2). Curacaoan women reported significantly higher scores than Dutch women regarding general self-esteem and body satisfaction, whereas Dutch women reported significantly more body comparisons (see Table 2). The effect sizes for general self-esteem and body comparisons were high (e.g., Cohen 1992).

Fig. 1 Differences between Curacaoan and Dutch women in the effects of imagined weight gain or weight loss on self-esteem (WISE-Q total score)

Fig. 2 Differences between Curacaoan and Dutch women in the effects of imagined weight gain or weight loss on self-esteem (WISE-Q Expected subscale)

Next, to examine the relations between WISE and general self-esteem, body satisfaction, and body comparisons, we computed the correlations between these variables for the Curacaoan and the Dutch sample separately (see Table 3). It was expected that self-esteem in response to imagined weight gain would be negatively related to general self-esteem and body satisfaction, and more so among Dutch women than among Curacaoan women (Hypothesis 2). In addition, it was expected that as women make more frequent body comparisons, they show lower self-esteem in response to imagined weight gain (Hypothesis 3). Differences between the correlations found in the two samples were tests using tests for independent correlations.

In the Dutch sample, significant negative relations were found between all six WISE-Q scores (total scores and subscales for both the gain and the loss scenario) and general self-esteem, body satisfaction, and body comparisons, with the exception of the correlations between the corrected ideal BMI score and the two WISE-Q Expected subscale scores (gain and loss). These results support Hypotheses 2 and 3. In the Curacaoan sample, on the other hand, none of the six WISE-Q scores was significantly related to general self-esteem, body satisfaction, or body comparisons, which is inconsistent with our expectations. Moreover, 11 out of a total of 30 correlations (i.e., the correlations between the six WISE-Q scores on the one hand and the RSES, BASS, Body comparisons, Self-rated attractiveness, and Corrected ideal BMI on the other hand) were significantly different between the two

samples, indicating that the relations between these variables are quite different in these two samples, thus supporting Hypothesis 2. In addition, it was found that whereas the corrected ideal BMI scores had substantial correlations with the other body satisfaction measures in the Dutch sample (r s are .50 and .47; see Table 3), this was not the case in the Curacaoan sample (r s are .12 and .14). Again, these correlations were significantly different (p 's < .01).

Finally, we conducted regression analyses in order to examine which variables are the best predictors of self-esteem in response to imagined weight gain or weight loss. These regression analyses were conducted separately for the two samples and separately for the WISE-Q total and subscale scores (see Tables 4, 5, and 6). Multi-collinearity was examined by examining the VIF values. These ranged from 1.18 (Body comparisons) to 2.93 (BASS) for the Dutch sample, and from 1.02 (Corrected ideal BMI) to 2.05 (BASS) for the Curacaoan sample. The predictors explained a significant amount of variance in the Dutch sample only (range 18 % for expected weight gain to 30 % for weight loss, p s < .01; range in the Curacaoan sample from 4 % for generalized weight loss to 9 % for expected weight gain, p =n.s.). The results were quite consistent across the WISE-Q scales and across scenarios (gain or loss). For Curacaoan women, only one significant effect was found: body comparisons significantly predicted the scores on the Expected subscale for the

Table 3 Correlations between weight-influenced self-esteem, general self-esteem, body satisfaction, and body comparisons

	1	2	3	4	5	6	7	8	9	10	11
Self-esteem in response to imagined weight gain											
1. WISE-Q total gain	1.00	.97*	.71*	.65*	.64*	.50*	-.16	.03	.09	.01	.14
2. <i>Generalized gain</i>	.98*	1.00	.51*	.69*	.71*	.46*	-.16	.04	.10	-.01	.10
3. <i>Expected gain</i>	.81*	.66*	1.00	.27*	.20	.44*	-.09	-.00	.02	.06	.21
Self-esteem in response to imagined weight loss											
4. WISE-Q total loss	.70*	.71*	.47*	1.00	.98*	.80*	.01	.04	.15	-.01	.04
5. <i>Generalized loss</i>	.69*	.74*	.39*	.98*	1.00	.66*	-.08	.06	.15	-.02	-.00
6. <i>Expected loss</i>	.55*	.48*	.60*	.82*	.69*	1.00	.08	-.03	.12	.01	.14
7. General Self-esteem	-.35*	-.36*	-.23*	-.37*	-.38*	-.26*	1.00	.42*	.38*	.26	-.39*
Body satisfaction											
8. BASS	-.45*	-.43*	-.37*	-.44*	-.41*	-.42*	.62*	1.00	.76*	.12	-.40*
9. Self-rated attractiveness	-.31*	-.31*	-.22*	-.28*	-.28*	-.23*	.54*	.77*	1.00	.14	-.33*
10. Corrected ideal BMI	-.21*	-.23*	-.10	-.23*	-.24*	-.16	.43*	.50*	.47*	1.00	-.10
11. Body comparisons	.38*	.38*	.29*	.43*	.42*	.34*	-.37*	-.34*	-.27*	-.21	1.00

Below the diagonal the correlations for the Dutch sample, above the diagonal the correlations for the Curacaoan sample. WISE-Q gain refers to the negative effect of imagined weight gain on self-esteem, WISE-Q loss to the positive effect of imagined weight loss on self-esteem, BASS to the Body Areas Satisfaction Scale, Self-rated attractiveness to the grade participants assigned to their own appearance, and Corrected ideal BMI to the ideal BMI corrected for the actual BMI. Correlations printed in italic are significantly different between the two samples (p < .01)

* p < .01

Table 4 Regression analyses results for the WISE-Q total score for Curacaoan and Dutch women

	Weight gain				Weight loss			
	Curacaoan Women		Dutch Women		Curacaoan Women		Dutch Women	
	β	<i>t</i>	β	<i>t</i>	β	<i>t</i>	β	<i>t</i>
Body satisfaction								
BASS	0.01	0.09	−0.41	−3.31*	−0.18	−1.22	−0.41	−3.40*
Self-rated attractiveness	0.21	1.46	0.10	0.84	0.32	2.20	0.17	1.53
Corrected ideal BMI	0.07	0.71	0.03	0.33	−0.05	−0.49	−0.01	−.08
General Self-esteem	−0.21	−1.95	−0.08	−0.79	0.02	−0.18	−0.10	−1.08
Body comparisons	0.15	1.48	0.25	3.18*	0.05	0.47	0.30	3.92*
<i>R</i> ²	.08		.27*		.05		.30*	

BASS refers to the Body Areas Satisfaction Scale, Self-rated attractiveness to the grade participants assigned to their own appearance, and Corrected ideal BMI to the ideal BMI corrected for the actual BMI

* $p < .01$

gain scenario (see Table 6). More specifically, the more Curacaoan women compared their appearance to that of others, the more imagined weight gain affected their appearance related self-esteem. In the Dutch sample a consistent pattern was found: self-esteem as a result of either imagined weight gain or imagined weight loss was significantly predicted by the BASS and Body comparisons (see Tables 4, 5, and 6; for Body comparisons a p value of .018 was found for expected weight gain). The more Dutch women compare their body to that of other women, and the less satisfied they are with their body, the larger the effect of imagined weight gain or loss on their self-esteem (both appearance related and generalized).

Discussion

The general picture that emerges from the present study is that young women from Curacao show higher appearance related wellbeing (weight-influenced self-esteem and body satisfaction) than young women from The Netherlands. First, supporting Hypothesis 1, Curacaoan women reported smaller negative effects on self-esteem of imagined weight gain than Dutch women. It must be noted, however, that this difference was primarily driven by differences in scores on the Expected subscale of the WISE-Q. That is, whereas imagined weight gain similarly affected Dutch and Curacaoan women's self-esteem with regard to

Table 5 Regression analyses results for the WISE-Q generalized subscale (gain and loss) for Curacaoan and Dutch women

	Weight gain				Weight loss			
	Curacaoan Women		Dutch Women		Curacaoan Women		Dutch Women	
	β	<i>t</i>	β	<i>t</i>	β	<i>t</i>	β	<i>t</i>
Body satisfaction								
BASS	−0.00	−0.01	−0.35	−2.82*	−0.14	−0.91	−0.32	−2.60*
Self-rated attractiveness	0.22	1.50	0.07	0.64	0.28	1.94	0.13	1.18
Corrected ideal BMI	0.04	0.43	−0.00	−0.03	−0.05	−0.48	−0.03	−0.34
General Self-esteem	−0.22	−2.06	−0.10	−1.04	−0.07	−0.61	−0.14	−1.44
Body comparisons	0.09	0.88	0.24	3.09*	−0.00	−0.01	0.29	3.81*
<i>R</i> ²	.07		.25*		.04		.27*	

BASS refers to the Body Areas Satisfaction Scale, Self-rated attractiveness to the grade participants assigned to their own appearance, and Corrected ideal BMI to the ideal BMI corrected for the actual BMI

* $p < .01$

Table 6 Regression analyses results for the WISE-Q expected subscale (gain and loss) for Curacaoan and Dutch women

	Weight gain				Weight loss			
	Curacaoan Women		Dutch Women		Curacaoan Women		Dutch Women	
	β	<i>t</i>	β	<i>t</i>	β	<i>t</i>	β	<i>t</i>
Body satisfaction								
BASS	0.05	0.33	−0.46	−3.53*	−0.27	−1.83	−0.57	−4.58*
Self-rated attractiveness	0.11	0.74	0.13	1.10	0.34	2.39	0.23	2.04
Corrected ideal BMI	0.11	1.19	0.10	1.13	−0.04	−0.42	0.07	0.64
General Self-esteem	−0.09	−0.89	0.01	0.07	0.13	1.19	0.02	0.23
Body comparisons	0.27	2.61*	0.20	2.39†	0.19	1.83	0.24	3.03*
R^2	.09		.18*		.08		.25*	

BASS refers to the Body Areas Satisfaction Scale, Self-rated attractiveness to the grade participants assigned to their own appearance, and Corrected ideal BMI to the ideal BMI corrected for the actual BMI

* $p < .01$

† $p = .018$

relatively unrelated issues, such as one's role at work, imagined weight gain affected Dutch women's self-esteem with regard to appearance more than Curacaoan women's self-esteem with regard to appearance. In line with this finding, Curacaoan women also reported higher body satisfaction (even though they had a higher mean BMI) and higher general self-esteem than Dutch women.

With regard to body satisfaction and the smaller negative impact of imaged weight gain, women from Curacao resemble women from African-American background who, in several studies, have been found to report relatively positive self-evaluations, particularly about their body, and relatively high body satisfaction (Chandler-Laney et al. 2009). Some have suggested that cultural or ethnic differences in body dissatisfaction are diminishing as the Western thin ideal of beauty becomes more widely spread, and also reaches women from other cultures and ethnic backgrounds. A meta-analysis by Roberts et al. (2006), however, found this to be true only for weight-focused measures of body satisfaction. In contrast, on more global body satisfaction measures, cultural and ethnic differences actually increased. A possible explanation is proposed by Evans and McConnell (2003), according to whom many African-American women do not consider the Western mainstream beauty standards as relevant to themselves as Asian and Caucasian women do. This assumption was confirmed in a study by Jefferson and Stake (2009) who, in a sample of U.S. undergraduates, found that African-American women internalized Western beauty standards less than their Caucasian peers. This

may partially be the result of the fact that this beauty ideal is mostly represented by Caucasian models (Frisby 2004). In contrast, several studies have shown that when African-American females compare their appearance to that of other women, they usually compare themselves to African-American models (Frisby 2004), or to other Black women in their social milieu, who (on average) are heavier than White women (e.g., Allan et al. 1993; Makkar and Strube 1995). If this is also the case for Curacaoan women, it may help explain why women on Curacao may find a thin figure relatively less important and base their self-esteem to a lesser extent on their weight, especially in the case of weight gain.

In addition, other studies suggest that it is not the ideal body size that matters, but how women perceive their *actual* body size. For instance, in a sample of U.S. women who enrolled in a weight loss program, Chandler-Laney et al. (2009) found that African-American women preferred similar body sizes as European-American women of the same BMI, but reported more slender *actual* body sizes, leading to smaller discrepancies between ideal and actual body size and higher body satisfaction. The African-American women in this study also reported higher acceptable body sizes than their European-American counterparts. In sum, the factors underlying cultural differences in body satisfaction seem to encompass more than just the exposure to Western thin ideals, and are more complex than previously suggested.

A phenomenon that may, nonetheless, contribute to Curacao's women higher body satisfaction, is the fact

that on Curacao, for women, being overweight is much more socially acceptable (Hoek et al. 1998). More in general, the families and communities of Black women often support acceptance of different body shapes and sizes more than the families and communities of, for example, Caucasian women (Sabik et al. 2010). As a consequence, women from African heritage are, usually more than other women, ‘buffered’ by their communities: their social environment shields them from developing (appearance based) low self-esteem and body image problems. This may also apply to women from Curacao, who, like African-American women, are relatively strongly influenced by their African heritage in which, traditionally, weight is often valued in a positive sense (Gray and Frederick 2012). However, because the present study did not assess women’s social environment we do not know how valid this explanation is. Future studies may therefore help clarify this issue.

Our expectation that self-esteem in response to imagined weight gain would be negatively related to general self-esteem and body satisfaction and more so among Dutch women than among Curacaoan women (Hypothesis 2), was, for the most part, supported. That is, only among Dutch women imagined weight gain was negatively related to general self-esteem and body satisfaction. Moreover, whereas in the Dutch sample the corrected ideal BMI scores had substantial relations with the other body satisfaction measures, this was not the case in the Curacaoan sample. In other words, among women from Curacao, the discrepancy between actual and ideal weight (expressed in BMI) seems unrelated to how satisfied they feel about their body. This does not mean, however, that Curacaoan women are not vulnerable to body image problems at all. Although thinness and weight may play a smaller role in Curacaoan women’s evaluations of their body than in Dutch women’s evaluations, women from the Caribbean do seem to value an attractive body, such as a shapely and curvaceous body (Anderson-Fye 2004). Although their beauty ideal of, for instance, a shapely and curvaceous body may make them less vulnerable to weight issues, it may still contribute to other problems that are related to not living up to this particular beauty ideal (for instance, feeling insecure about having small breasts or a relatively boyish figure). The fact that, among women from Curacao, we did not find discrepancies between actual and ideal weight (expressed in BMI) to be related to body satisfaction is important for methodological reasons as well. Previous studies (e.g., Dijkstra and Barelds 2011a) have used the discrepancy between actual and ideal weight as a measure of body satisfaction. The present

study suggests that this may not be a valid operationalization in Afro-Caribbean cultures.

In this context it must be noted, however, that weight did not appear to be unimportant at all to women from Curacao. Curacaoan women reported about equal increases in self-esteem following imagined weight *loss* as Dutch women did. When it comes to weight, for women from Curacao the positive consequences of imagined weight loss weighed more heavily than the negative consequences of imagined weight gain. Again, a possible explanation is that for women from Curacao weight may not be as central an indicator of physical attractiveness and self-esteem as it is for women from The Netherlands. This probably makes it easier for Curacaoan women to rationalize weight gain as, for instance, not being all too important, while feeling good about weight loss when it occurs. In other words, Curacaoan women may successfully use one or more defense mechanisms, such as denial, devaluation, rationalization or suppression (for an overview see, for example, Ehlers et al. 1995), to cope with the potentially undesirable reality of weight gain, making weight gain having a less negative effect on (appearance-related) self-esteem than for Dutch women.

Our expectation that women show lower self-esteem in response to imagined weight gain as they make more frequent body comparisons (Hypothesis 3) was, for the most part, supported. Among both Dutch and Curacaoan women, the frequency with which women compared their body was related to lowered self-esteem in response to imagined weight gain, but only with regard to the Expected subscale, that is, with regard to appearance related self-esteem. In response to imagined weight gain, among Dutch women (but not Curacaoan women) body comparisons also predicted lower scores on the Generalized subscale, that reflects appearance unrelated self-esteem. In addition, in response to imagined weight *loss*, among Dutch women (but not Curacaoan women) body comparisons predicted scores on both subscales of the WISE-Q. These findings suggest that, in response to weight fluctuations, body comparisons much more broadly impact Dutch women’s self-esteem than Curacaoan women’s self-esteem, that is, in response to both imagined weight gain and loss, and with regard to both appearance-related and appearance unrelated self-esteem. Although these findings underline the importance of social comparisons in the evocation and maintenance of body dissatisfaction (e.g., Dijkstra and Barelds 2011b), this seems to apply particularly to Dutch women’s experiences, and far less to those of women from Curacao. A possible explanation for the striking difference between these two samples in this regard is that social comparisons

are the result, rather than the cause, of body dissatisfaction. As women feel more dissatisfied with their body they may feel more of a need to compare themselves with others in order to, for instance, generate ideas for improving their appearance. Since women from Curacao feel relatively satisfied with their body, they may also feel less of a need to compare themselves and, consequently, report less frequent body comparisons.

Limitations

The present study has several limitations. First, the present study examined WISE following *imagined* weight gain and loss rather than *actual* weight gain and loss. Responses to imagined weight gain and loss may not accurately reflect how individuals would feel if they really gained or lost 2.5 kg. The present study therefore primarily assessed *expectations* of self-esteem in response to weight fluctuations and its findings need to be cross-validated by future studies that investigate WISE in response to actual weight gain and loss. Another limitation is the WISE-Q's implicit assumption that weight gain is always undesirable, and weight loss is desirable. It could, however, well be that there are women who are simply happy with their current weight as well as women for whom weight *gain* is desirable and weight loss is undesirable. Future studies using the WISE-Q should therefore explicitly assess whether participants indeed agree with the assumption that weight loss is desirable or assess both positive and negative consequences of both imagined weight gain and weight loss.

In addition, the present study did not assess women's socio-economic status (SES). Research has shown that individuals with a lower socio-economic status are more likely to view heavier women as attractive than individuals with a higher socio-economic status. In a recent review of cultural studies on body size ideals, Swami (2015) concluded that the largest differences in body size ideals are now found between sites differing in SES, with heavier figures being preferred in environments of low SES and thinness being valued in contexts of high SES. Although both The Netherlands and Curacao are considered to be high-income countries by the World Bank (2014), The Netherlands is economically more prosperous than Curacao. As a result, not only cultural differences, but also differences in SES may be responsible for the present study's results and pose an explanation for why women in Curacao report higher self-esteem in response to imagined weight gain than Dutch women.

Furthermore, it must be noted that the present study examined relatively small fluctuations in body weight

(2.5 kg gain and loss). It is possible that women may respond differently in response to larger imagined weight gains, for instance in response to a weight gain of 10 kg. In that case, women from Curacao may experience comparable levels of self-esteem as Dutch women, because a higher imagined weight gain may make women lose their desired body shape. Findings from the present study should therefore not be generalized to larger weight gains. Relatedly, because women from Curacao reported a higher mean BMI than Dutch women, a gain or loss of 2.5 kg may mean something different for Dutch women than for Curacaoan women. A solution to this problem in future studies would be to adapt the amount of weight loss or gain that is presented to the participants based on the actual BMI of these participants (for example based on a percentage of the actual BMI; this could be easily implemented in digital questionnaires). Finally, the measures used in the present study have been developed and validated in Western culture and, as a consequence, it is possible that they are less valid for use in Curacaoan culture.

Conclusions

Bearing these limitations in mind, our study does show that women from different cultures differ in self-esteem in response to imagined weight gain and loss. Whereas women from The Netherlands seem vulnerable to the negative effects of imagined weight gain, women from Curacao show more resistance to these effects, making them less vulnerable to, for instance, body dissatisfaction and the development of eating disorders. Our study's findings help pinpoint those cultural beliefs that may facilitate the development of low body satisfaction and, eventually, eating disorders and may make it easier to develop culturally sensitive interventions that help prevent low body satisfaction and eating disorders among young women. Our study, for instance, suggests that, for interventions aimed at young women in The Netherlands, WISE is a much more important belief to tackle than for interventions aimed at young women in Curacao. Future studies may further investigate WISE and the factors that, in Curacaoan culture, help women preserve body satisfaction and self-esteem despite fluctuations in weight. Knowledge on these factors may help psychologist develop effective interventions for women from other cultures who are more vulnerable to developing body dissatisfaction in order to preserve a sense of well-being, despite fluctuations in weight.

Appendix

Table 7 Scale items

Dutch	English
BASS	
uiterlijk als geheel	overall appearance
gezicht	face
haar	hair
gewicht	weight
lengte	height
bovenlichaam	upper torso
middenstuk van je lichaam	mid-torso
onderlichaam	lower torso
spieren	muscle tone
BCS	
Ik vergelijk mijn figuur met dat van andere vrouwen	I compare my figure to that of other women
Ik vergelijk mijn gewicht met dat van andere vrouwen	I compare my weight to that of other women
Ik vergelijk de aantrekkelijkheid van mijn gezicht met die van andere vrouwen	I compare my facial attractiveness to that of other women
Ik vergelijk mijn algemene uiterlijk met dat van andere vrouwen	I compare my general appearance to that of other women
RSES	
Over het geheel genomen ben ik tevreden met mezelf.	On the whole, I am satisfied with myself.
Soms heb ik het gevoel dat ik nergens voor deug.	At times I think I am no good at all.
Ik vind dat ik goede eigenschappen bezit.	I feel that I have a number of good qualities.
Ik kan allerlei dingen evengoed als de meeste andere mensen.	I am able to do things as well as most other people.
Ik vind dat ik weinig reden heb om trots op mezelf te zijn.	I feel I do not have much to be proud of.
Ik voel me af en toe echt nutteloos.	I certainly feel useless at times.
Ik vind dat ik in vergelijking met anderen een waardevolle persoon ben.	I feel that I am a person of worth, at least on an equal plane with others.
Ik zou willen dat ik wat meer respect voor mezelf op kon brengen.	I wish I could have more respect for myself.
Al met al kan ik mezelf niet anders zien dan een mislukkeling.	All in all, I am inclined to feel that I am a failure.
Ik sta positief tegenover mezelf.	I take a positive attitude toward myself.
WISE-Q	
Hoe je je voelt over je uiterlijk.	How you feel about your appearance.
Hoe je je voelt over je relaties met anderen.	How you feel about you relationships with other people.
De kwaliteit van je werk	The quality of your work.
Hoe geïntimideerd je je voelt door anderen	How intimidated you feel by others.
Hoeveel je, gedurende de dag, met anderen zou omgaan.	How much you would socialize during the day.
Je prestaties op het werk of school	Your performance at work or school.
Je vermogen om iets nieuws te leren	Your ability to learn new things.
Hoe fysiek aantrekkelijk je je voelt	How physically attractive you feel.
Het gevoel dat je een goede persoon bent	Your feelings of being a good or moral person.
Je persoonlijkheid	Your personality.
Hoe je vindt dat je gezicht er uit ziet	The way your face looks.
Hoe populair je jezelf voelt	How popular you feel.
Hoeveel controle je denkt te hebben over je eetgedrag.	How out of control you feel about your eating.
Hoe leuk anderen het vinden om bij jou te zijn	How much others enjoy spending time with you.
Hoe aardig anderen jou vinden	How much others will like you.
Hoe assertief je deze dag bent	How assertive you will be that day.
Hoe seksueel aantrekkelijk je je voelt	How sexually attractive you feel.
Hoe fit en lichamelijk gezond je je voelt	How physically fit and healthy you feel.
Het gevoel dat je in staat bent goed met stress om te gaan	Your feelings of being able to cope under pressure.
De mate waarin je je kunt concentreren op dagelijkse activiteiten	Your level of concentration on your daily activities.
Je gevoel van zelfbeheersing	Your sense of self-control.
Het vertrouwen in je vermogen om de dingen die je doet goed te doen	Your confidence in your ability to do well at things you try.

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