

Original Article

Correlates of body dissatisfaction among Taiwanese adolescents

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Purpose: This study was designed to explore factors associated with body dissatisfaction among Taiwanese adolescents. **Methods:** Participants were randomly selected from five high schools in Taipei County, Taiwan. A total sample of 883 adolescents aged 12-16 was included. Body mass index (BMI) was calculated using self-reported weight and height. The Contour Drawing Rating Scale was used to assess body dissatisfaction. Other measurements included the Multidimensional Body-Self Relations Questionnaire-Appearance Evaluation (MBSRQ-AE), the Rosenberg Self-esteem Scale, the Eating Disorder Inventory-Perfectionism, the Socio-cultural Attitudes Towards Appearance Questionnaire (SATAQ-Internalization and SATAQ-Awareness), and physical activity. Multiple linear regression analyses were performed separately by gender to examine predictors of body dissatisfaction. **Results:** girls reported significantly higher body dissatisfaction, awareness of the socio-cultural ideals (SATAQ-Awareness), as well as the internalization of those ideals (SATAQ-Internalization) and lower satisfaction with their physical appearance (MBSRQ-AE). This indicated that girls felt less positive with their overall appearance and had a higher level of recognition and endorsement of the social standards of appearance than boys. Satisfaction with physical appearance (MBSRQ-AE), BMI and internalization of socio-cultural ideals (SATAQ-Internalization) were unique predictors of body dissatisfaction for both genders. **Conclusions:** this study enhanced the understanding about body dissatisfaction in Eastern populations. Perceived physical appearance, BMI and internalization of the socio-cultural ideals predicted body dissatisfaction, which are evident in Taiwan, as well as in Western based research. However, these factors only explained a small variance in body dissatisfaction for boys, suggesting a need in identifying more factors related to body dissatisfaction among boys.

Key Words: body dissatisfaction, body image, obesity, adolescent, Taiwan

INTRODUCTION

There is an increasing prevalence of obesity in young people worldwide.¹⁻³ This trend toward overfatness is paralleled by a cultural increase in body focus.⁴ In general, being thin is highly valued and being fat is associated with negative characteristics.^{5,6} Previous research has revealed that more than half of adolescents reported body dissatisfaction and desired to lose weight.^{7,8}

Adolescence marks the stage of rapid physical development when notions of an ideal body image become especially salient as adolescents develop self-conceptions of their own body image.⁹ Body image problems have been found to be associated with several mental health problems such as low self-esteem, depression and the development of eating disorders.¹⁰⁻¹² In light of these results, how the issues of obesity and the thin ideal are perceived and processed psychologically by adolescents need to be better understood. This study might provide some foundation to help prevent or attenuate body dissatisfaction.

Research has indicated that body dissatisfaction is derived from a wide range of factors.¹³⁻¹⁸ Gender and body

mass index (BMI) interact in their relationship with body dissatisfaction among adolescents. In general, girls are more dissatisfied with their bodies than boys and they tend to report body dissatisfaction regardless of actual body weight, whereas boys become concerned when they are actually overweight.^{19,20} Body dissatisfaction also becomes more pronounced with age during adolescence.^{21,22}

However, body image perceptions also depend on the psychological characteristics of individuals.^{5,23} Self-esteem has been shown to be negatively associated and perfectionism to be positively associated with body dissatisfaction among adolescents.^{24,25} Awareness and internalization of socio-cultural ideals might also foster body dissatisfaction, as these ideals are difficult to achieve for most boys and

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girls.^{15,26} Moreover, body image is likely to be enhanced by physical activity that might influence weight control attitudes and behaviors.¹⁸

Whereas studies have provided support for the relationship between these factors and body dissatisfaction among adolescents, particularly for girls, most of the research was conducted with samples from white Caucasian populations. Levels of body dissatisfaction are likely to vary by ethnicity since socio-cultural factors play an important role in the development and prevalence of body dissatisfaction.²⁷ Taiwanese studies have illustrated that 65.5% of girls aged 11-14 wanted to be thinner and only a small proportion of high school girls (13.2%) and boys (22.0%) reported being satisfied with their weight.^{28,29} Despite the evidence that the prevalence of overweight and obesity is increasing and body dissatisfaction is prevalent among Taiwanese adolescents,^{19,30} little is known about the relevant factors associated with body dissatisfaction for Taiwanese adolescents. It is not clear whether factors found in the literature, derived largely from European and North American samples, are also salient with Taiwanese adolescents. This study, therefore, was designed to examine the degree to which selected factors are associated with body dissatisfaction in Taiwanese adolescents.

MATERIALS AND METHODS

Participants

Students were recruited as participants for this study from junior high schools in Taipei County, Taiwan. In order to recruit a representative sample from Taipei County, participants were selected by multiple-stage sampling in the order of urbanization, school, and class. Four urban schools and one rural school were randomly selected to reflect the population distribution in Taipei County. Two classes in each grade (grade 7 to 9) in each school were then randomly selected.

All students in the selected classes were invited to take part in this study. Prior to data collection, letters outlining the purpose of the study and consent forms were sent to the students and their parents/guardians of the selected classes at five schools in Taipei County. In total, 1208 questionnaires were sent to the schools. Those who did not return the consent forms (304 students) and did not complete the questionnaire (21 students) were excluded from the study, resulting in a 73.1% participation rate. The total sample consisted of 883 students (452 boys and 431 girls) aged 12-16 years and enrolled in grade 7-9. They completed the questionnaire during one class period.

The ethics application for this study was approved by the Department of Exercise, Nutrition and Health Sciences Research Ethics Committee, University of Bristol, UK.

Measures

Measures included demographic variables, self-reported height and weight, a range of self-referent variables, and self-reported physical activity.

Body dissatisfaction

The Contour Drawing Rating Scale was used to assess body dissatisfaction. It features nine male and female figures (1=thinnest; 9=largest) with precisely graduated

increments between adjacent sizes.^{31,32} It requires participants to locate their current body figure as well as their ideal body figure from the contour drawings of incremental sizes. The difference between the ratings is the 'Self-Ideal Discrepancy' and is considered to be an indication of body dissatisfaction. Higher Self-Ideal Discrepancy scores illustrate a greater degree of dissatisfaction. Thompson and Gray have reported that the one-week test-retest reliability with undergraduates was $r=.78$ and a correlation of $r=.71$ was found between self-rating and reported weight, as well as $r=.59$ between self-rating and BMI.³¹ The Chinese version was modified slightly with the figures being given black hair. The results showed a strong association between the current figure and BMI (Pearson correlation: 0.79 in boys and 0.76 in girls, respectively) and revealed good test-retest reliability (two-week intra-class correlation: 0.75 in boys and 0.91 in girls, respectively) with Taiwanese adolescents.¹⁹

Body image

The Multidimensional Body-Self Relations Questionnaire - Appearance Evaluation (MBSRQ-AE) is one of the most widely used measures of body image, consisting of subscales which assess different components of body image.^{32,33} Items are rated on a five-point Likert scale that assess level of agreement from (1) definitely disagree, to (5) definitely agree. One subscale only was used in this study. The Appearance Evaluation subscale has seven items reflecting attitudes towards and satisfaction with overall physical appearance. In contrast, the Self-Ideal Discrepancy is a specific measure of body size/weight dissatisfaction.³⁴ The Appearance Evaluation subscale provides a global measure of liking and satisfaction with one's looks and attractiveness related to general physical appearance. High scorers feel mostly positive and satisfied with their appearance. The Chinese version has shown good factorial validity and reliability in Taiwanese adolescents. The Cronbach's alpha for the appearance evaluation subscale ranged from 0.71 to 0.77, two-week test-retest was 0.78.^{35,36}

Self-esteem

The Rosenberg Self-Esteem Scale was originally developed for measuring global self-esteem with adolescents, consisting of 10 items.³⁷ The respondent is required to rate on a four-point Likert scale ranging from (1) strongly disagree to (4) strongly agree. A higher score indicates a higher level of self-esteem. It has been shown to be reliable and valid with adolescent samples across countries in recent studies.^{12,38} The Chinese version with a Taiwanese sample has shown high reliability with Cronbach's alpha of 0.90.³⁹

Perfectionism

The Perfectionism subscale of the Eating Disorder Inventory was used to assess trait perfectionism.⁴⁰ It measures the extent to which one believes that only the highest standards of personal performance are acceptable and the belief that outstanding achievement is expected by others. All statements were rated on a 6-point Likert scale, with higher scores indicating perfectionism. Good reliability for this subscale has been reported in previous studies

with samples of adolescents, with Cronbach's alphas ranging from 0.78 to 0.88.^{38,41} The Chinese version of perfectionism subscale with Taiwanese adolescents has shown that the Cronbach's alpha was around 0.70 in adolescents.⁴²

Socio-cultural ideals

The Socio-cultural Attitudes Towards Appearance Questionnaire (SATAQ) was used to measure 'level of agreement with dominant, culturally sanctioned societal standards of female appearance mainly related to idealized thinness' (p 445).⁴³ It consists of two subscales: (1) a six-item Awareness subscale: assessing recognition/awareness of social attitudes about thinness/attractiveness (e.g. most people believe that the thinner you are, the better you look); (2) an eight-item Internalization subscale: examining the degree of acceptance/internalization of these beliefs (e.g. I would like to look like the models in the magazines). Responses were scored on a 5-point Likert-type scale ranging from (1) strongly disagree, to (5) strongly agree. High scores on the Awareness subscale indicate familiarity with the socio-cultural ideal, whereas the Internalization subscale taps adoption of that ideal.⁴⁴ The SATAQ has adequate internal consistency, replicable factor structure, and good convergent validity with college women.⁴⁵ The adolescent version has been recently developed with thin-ideal for girls and muscular-ideal for boys, showing acceptable validity.^{13,44} This study adopted the adolescent version but replaced the magazine titles with popular magazines among Taiwanese adolescents.

Leisure time physical activity

Three items were taken from the Taiwan National Physical Activity Survey.⁴⁶ Participants were asked to indicate the number of days in a usual week that they participated in physical activity. The average duration of activity on each day and the intensity of breathing required for the activity were assessed. These simple questions had the advantage of having been used extensively with a nationally representative Taiwanese sample and the validity and reproducibility for these physical activity questions have been reported in previous research.⁴⁷ For the correlation or regression analyses, a leisure time physical activity index was calculated in METs/week based on the formula below.^{36,48}

$$\begin{aligned} &8 \text{ (vigorous intensity)} \times \text{duration} \times \text{frequency} + \\ &4 \text{ (moderate intensity)} \times \text{duration} \times \text{frequency} + \\ &1.5 \text{ (light intensity)} \times \text{duration} \times \text{frequency} \end{aligned}$$

Demographic variables

A brief demographics questionnaire was developed and administered to each participant for descriptive and categorisation purposes. Variables included age, gender, residential location (urban and rural), self-reported weight and height, and parents' occupation and education. BMI was calculated as weight in kilograms divided by the square of height in meters (kg/m^2). BMI-groups were classified using the age- and gender-specific cut-off points of the IOTF.⁴⁹ As only a small proportion of girls were obese, participants were divided into two BMI-groups (normal/underweight and overweight/obesity) for analyses. Socio-economic status (SES) was examined by

parents' occupation and education based on Hollingshead's 'Two Factor Index of Social Position', modified to fit Taiwanese society by Lin.⁵⁰ Parents' occupation and education were both divided into 5 levels and scored from 5 to 1. The SES score was obtained with occupational score $\times 7$ + educational score $\times 4$.

Development of the Chinese-version instruments

Translation and pilot study

With the exception of the Social Attitudes Towards Appearance Questionnaire, all the selected instruments had already been developed and validated as Chinese versions for Taiwanese adolescents. Therefore, the first stage of the questionnaire development was forward and backward translation for the Social Attitudes Towards Appearance Questionnaire.

The second stage was to compile the Chinese questionnaire booklet with all the Chinese instruments along with the items assessing demographic variables. Then, a pilot study was conducted to evaluate the clarity and construction of the questionnaire again with thirty-three adolescents. Overall, students indicated that the language was suitable and the questions were quite easy to answer.

Test-retest

Forty-three students aged 12-13 in one class (grade 7) were recruited to take part in the test-retest survey over a two-week period, of which 33 participants completed the questionnaire booklet at both time points.

Psychometric properties of the instruments in this study

The internal consistency of each scale and subscale for each measure was tested using Cronbach's alpha. The test-retest reliability was assessed with Intraclass correlation (ICC) providing the absolute agreement for measurements over a two-week period. The results are presented in Table 1. Overall, the results showed that the structure of the Chinese version for each instrument seems to be adequate for Taiwanese adolescents. The Cronbach's alpha coefficients of five instruments all exceeded or were close to the recommended level of 0.70.^{51, 52} These revealed that the internal consistency of each instrument was satisfactory. With regard to the stability reliability, ICC above 0.75 is thought to be excellent and within the range of 0.40 to 0.75 is classified as fair to good.⁵³ Therefore, the ICCs of all instruments ranging from .64 to 0.95 indicated good test-retest reliability.

Table 1. Reliability of each instrument

Instruments	Boys		Girls	
	Cronbach's alpha	ICC	Cronbach's alpha	ICC
Contour Drawing Rating Scale		0.75		0.91
MBSRQ-Appearance evaluation	0.71	0.89	0.77	0.68
Self-esteem	0.73	0.84	0.78	0.73
EDI-Perfectionism	0.63	0.72	0.68	0.76
SATAQ-Awareness	0.73	0.64	0.76	0.82
SATAQ-Internalization	0.82	0.85	0.84	0.72
Leisure physical activity		0.92		0.95

Data analyses

The first stage of analysis was to examine the descriptive statistics of the variables, showing the numbers of participants, overweight/obesity prevalence, and means of other variables. Gender differences were assessed with chi-square tests for percentages and t tests for means. Then, bivariate associations were assessed for each gender between body dissatisfaction and other measures using Pearson correlations. Then, multiple regression analyses were performed to identify predictors of body dissatisfaction separately by gender. In each regression analysis, the dependent variable was body dissatisfaction. The independent variables were those that showed significant associations with body dissatisfaction from Pearson correlation analyses ($p < 0.05$).

RESULTS

Descriptive statistics

Table 2 shows the number of participants, the prevalence of overweight/obesity, body satisfaction, and means of the variables by gender. Gender differences were found in BMI, and overweight/obesity prevalence, with boys having the greater value or percentage (all $p < 0.001$). The

Table 2. Descriptive statistics for variables by gender

Variables	Boys	Girls	<i>p</i>
Sample size (n)	452	431	
SES (mean)	27.7	27.7	0.979
BMI (kg/m ²)	21.0	19.9	<0.001
Weight status (%)			<0.001
Overweight/obese	34.7	16.0	
Normal/underweight	65.3	84.0	
Self-Ideal discrepancy			<0.001
Want to be thinner †	49.7	73.7	
Satisfied ‡	17.7	16.3	
Want to be bigger §	32.6	10.1	
Body dissatisfaction index ¶	1.4	1.6	<0.001
MBSRQ-AE	2.9	2.7	0.001
Self-esteem	24.0	23.9	0.475
Perfectionism	6.8	6.5	0.179
SATAQ-Internalization	21.6	24.4	<0.001
SATAQ-Awareness	17.5	19.0	<0.001
Leisure PA	1286	611	<0.001

†: Self rating > Ideal rating; ‡: Self rating = Ideal rating; §: Self rating < Ideal rating;

¶ Absolute value of self and ideal ratings. The greater values mean greater body dissatisfaction

results illustrated that 34.7% of Taiwanese boys and 16% of girls were either overweight or obese, according to the classification of overweight and obesity by the IOTF.⁴⁹ Additionally, less than 20% of boys or girls reported body satisfaction with more girls wanting to be thinner. Girls scored significantly higher on body dissatisfaction (in the Contour Drawing Rating Scale), on awareness of the socio-cultural ideals (SATAQ-Awareness) as well as the internalization of those ideals (SATAQ-Internalization), and lower on satisfaction with their physical appearance (as measured by the MBSRQ-AE). These suggested that girls felt less positive with their overall appearance and had a higher level of recognition and endorsement of the social standards of appearance than boys. There was no significant difference in self-esteem or perfectionism between genders.

Associations with body dissatisfaction

The correlation matrixes of the variables are presented in Table 3. Four variables were found to be associated with body dissatisfaction in boys, including BMI, self-esteem, satisfaction with physical appearance (MBSRQ-AE) and internalization of the socio-cultural ideals (SATAQ-Internalization). Among girls, all variables, except perfectionism, were associated with body dissatisfaction. Therefore, the bivariate correlation analyses revealed that higher body dissatisfaction was associated with higher BMI, lower self-esteem, lower satisfaction with physical appearance (MBSRQ-AE) and higher internalization of the socio-cultural ideals (SATAQ-Internalization) in both genders.

Predictors of body dissatisfaction

Simultaneous multiple regression analyses were performed separately for each gender to explore predictors of body dissatisfaction and determine the proportion of variance explained by the variables. Variables were entered into the regression models simultaneously if significant associations were found with body dissatisfaction in Pearson correlation analyses ($p < .05$) (see Table 3). Four variables were entered into the regression model for boys (BMI, MBSRQ-AE, self-esteem, and SATAQ-Internalization) and eight variables (BMI, MBSRQ-AE, self-esteem, SATAQ-Internalization, SATAQ-Awareness, age, SES, leisure PA) were entered into the regression model for girls. Results of the regressions for independent variables that

Table 3. Correlations between measures for each gender (boys below diagonal and girls above diagonal)

Demographic variables/ Measure	1	2	3	4	5	6	7	8	9	10
1. Age	1	-0.09	0.14**	0.18**	-0.11*	-0.03	-0.04	0.15**	0.13**	-0.07
2. SES	0.03	1	-0.15**	-0.16**	0.16**	0.18**	0.08	-0.12*	-0.09	0.03
3. BMI	0.14**	0.09	1	0.60**	-0.32**	-0.14**	-0.03	0.17**	0.14**	0.20**
4. Body dissatisfaction	0.01	-0.09	0.31**	1	-0.45**	-0.31**	0.02	0.32**	0.28**	0.19**
5. MBSRQ_AE	-0.02	0.02	-0.27**	-0.25**	1	0.56**	0.08	-0.11*	-0.12*	-0.12
6. Self-esteem	-0.10*	-0.01	-0.15**	-0.15**	0.52**	1	0.01	-0.16**	-0.15**	-0.05
7. Perfectionism	0.03	-0.02	0.09	0.03	0.07	0.04	1	0.21**	0.25**	0.08
8. SATAQ_ Internalization	0.04	-0.01	0.06	0.15**	0.07	-0.12*	0.12*	1	0.58**	0.09
9. SATAQ_ Awareness	0.07	-0.07	0.03	0.06	0.03	-0.24**	0.14**	0.57**	1	0.02
10. Leisure PA	0.18**	-0.02	0.16**	-0.02	0.02	-0.08	0.06	0.10	0.03	1

**Correlation is significant at the 0.01 level (2-tailed). *Correlation is significant at the 0.05 level (2-tailed).

Table 4. Multiple regression analyses for predicting body dissatisfaction

Gender	Adjusted R Square	Unique predictors	β	t (Sig.)
Boys	0.14	BMI	0.25	5.34 (***)
		MBSRQ_AE	-0.20	-3.73 (***)
		SATAQ_Internalization	0.15	3.24 (**)
Girls	0.47	BMI	0.46	8.48 (***)
		MBSRQ_AE	-0.21	-3.41 (**)
		SATAQ_Internalization	0.14	2.18 (*)

were statistically significant are summarised in Table 4.

The findings revealed that BMI, satisfaction with physical appearance (MBSRQ-AE) and internalization of the socio-cultural ideals (SATAQ-Internalization) were unique predictors of body dissatisfaction for both genders. A substantial amount of total variance was explained in body dissatisfaction for girls (47%). In contrast, only a modest total amount of variance was explained for boys (14%).

DISCUSSION

The present study showed that BMI was the strongest predictor of body dissatisfaction in both genders. Perceived overall appearance (MBSRQ-AE) and internalization of the socio-cultural ideals (SATAQ-Internalization) also explained variance in body dissatisfaction beyond the contribution of BMI. However, awareness of the socio-cultural ideals (SATAQ-Awareness) was not a significant predictor for body dissatisfaction among either boys or girls. It might be that being aware of the cultural ideal may not have an impact on body dissatisfaction until internalization occurs.^{26,27}

Self-esteem and perfectionism did not contribute to body dissatisfaction in either boys or girls. Findings of Keery et al. similarly showed no significant association between perfectionism (assessed by EDI) and body dissatisfaction among Australian adolescent girls.³⁸ However, body dissatisfaction has been found to be associated with perfectionism (assessed by Multidimensional Perfectionism Scale) among Italian high school girls by Ruggiero et al.²⁵ Therefore, different measures of perfectionism might contribute to this inconsistency in research. Self-esteem emerged as a significant correlate with body dissatisfaction in the bivariate analyses, which was in accordance with preceding studies.^{24,38} Nevertheless, the finding became non-significant when entered into the multivariate model, illustrating that it did not account for a significant amount of unique variance in the presence of the other predictors. On the other hand, self-esteem was highly associated with overall physical appearance (MBSRQ-AE). It is likely that the appearance measure already includes the critical component of self-esteem.

Research about the relationship between body image and physical activity is somewhat inconsistent. Duncan and Ai-Nakeeb have found no significant relationships

between body image and physical activity among secondary school children.⁵⁴ However, some studies have suggested that body image and physical activity might be related. Mikkilä et al. have found that inactive boys were more dissatisfied with their weight than active boys.⁵⁵ Tiggeman and Williamson have illustrated a negative relationship between the amount of exercise and body dissatisfaction in young women aged 16-21.⁵⁶ The current study revealed that the amounts of leisure time physical activity were positively related with body dissatisfaction for girls, but not for boys. These discordances might be due to the difference of sample, on the measures of body image and physical activity. For example, participants in these studies were in different age ranges, from early adolescents through late adolescents to young adults.^{54,55,56} Body dissatisfaction was assessed with various measures, such as figure ratings (this study) or the Body Esteem Scale.⁵⁴ The measures of physical activity might also provide different results. Duncan and Ai-Nakeeb have considered overall physical activity undertaken across intensities,⁵⁴ Tiggeman and Williamson have assessed amounts of exercise with several physical activities (e.g., walking, running, aerobics),⁵⁶ and this study examined leisure time physical activity. These differences in measurement approaches might explain the disparity among results. On the other hand, the inconsistency might be due to the weak relationships between body dissatisfaction and physical activity.

The current study provided several strong points. First, the measurements used have been chosen carefully and demonstrated high validity and reliability for the Taiwanese sample. Next, it comprised a broad range of variables for examining associations with body dissatisfaction in Taiwanese adolescents, filling the gap in the existing literature focusing on Western populations. In addition, this study expanded the understanding of body dissatisfaction, in showing how gender differences related to body dissatisfaction in Taiwanese adolescents. However, although we attempted to provide a representative sample, this is limited to one district region and generalization to young people from the remainder of Taiwan or beyond should be undertaken with caution.

CONCLUSION

This study enhanced the understanding about the factors involved in body dissatisfaction in Eastern populations. Overall, BMI, perceived physical appearance and internalization of the socio-cultural ideals predicted body dissatisfaction. These factors are in evidence in Taiwan as well as in Western based research. Other variables (e.g., perfectionism, physical activity) provided slightly different results compared with preceding studies and the possible rationales were discussed, such as sample age or measures used. However, these factors only explained a small variance in body dissatisfaction for boys, suggesting a need in identifying more factors (e.g. weight-related teasing, relationships with parents, pubertal development) to better understand body dissatisfaction among boys.

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AUTHOR DISCLOSURES

The authors declare that they have no competing interests.

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Original Article

Correlates of body dissatisfaction among Taiwanese adolescents

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臺灣青少年體型不滿意之相關因素

目的：本研究目的為探討臺灣青少年體型不滿意之相關因子。方法：研究參與者係來自臺灣臺北縣五所國民中學，共計 883 位學生，年齡介於 12-16 歲之間。透過自填體重與身高計算身體質量指數(BMI)，並使用外型描繪評分尺度(The Contour Drawing Rating Scale)以評估體型不滿意程度。其它測量工具尚包含多向度身體意象評價量表-外表評價分量表(The Multidimensional Body-Self Relations Questionnaire-Appearance Evaluation)，Rosenberg 自尊量表(The Rosenberg Self-esteem Scale)，社會文化外表評價量表-內化及知覺分量表(Socio-cultural Attitudes Towards Appearance Questionnaire, [SATAQ]-Internalization and SATAQ-Awareness) 以及身體活動測量。以性別分層方式，運用多元線性迴歸分析體型不滿意之相關因子。結果：女生在體型不滿意、社會文化理想外表之知覺及內化程度顯著高於男生，在多向度身體意象之外表評價得分顯著低於男生。該結果表示，相較於男生，女生對於自己的外表持較負面的態度，對於社會理想外表的認同度較高。男女生預測體型不滿意的顯著因子均為外表評價的滿意度、身體質量指數以及社會理想外表的內化程度。結論：本研究增加有關東方人體型不滿意程度的了解。在台灣及西方國家，外表評價的認知，身體質量指數以及社會理想外表的內化程度為預測體型不滿意的相關因子。然而，這些因子所能解釋男生體型不滿意的變異量並不高，有必要再深入探究男生體型不滿意的其他因子。

關鍵字：體型不滿意、身體意象、肥胖、青少年、臺灣