

# Body Image, Self-Esteem, Media, Disordered Eating and Actual Ideal Weight Discrepancy: Findings in Cyprus

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## Abstract

The current study aimed to evaluate the relationship between the actual ideal weight discrepancy and the following variables in adolescents from Cyprus: self-esteem, appearance satisfaction, investment in appearance, weight-related anxiety, internalization of the thin and athletic ideals, the perception of the media as a good source of information in regards to appearance, the perception of the media as a source of pressure, and disordered eating symptomatology. The sample consisted of 2220 high school students (881 boys, 1339 girls) who answered the measures of interest. Results indicated significant relationships between the actual ideal weight discrepancy and all the variables of interest. In addition, results indicated weight-related anxiety and appearance satisfaction to be significant predictors of the actual ideal discrepancy in both boys and girls. Significant gender differences concerning the actual ideal weight discrepancy were also found where girls reported higher levels of discrepancy. No differences were found concerning age, socioeconomic status and place of upbringing and residence. The results of this study offer important additional information to the body image and disordered eating literature regarding a construct (actual ideal weight discrepancy) never examined before in Cyprus. This information could be used by Cypriot and European mental health professionals when working with children and teenagers who are at risk for or exhibit symptoms related to eating disorders and in developing prevention interventions.

*Keywords:* body image, self-esteem, media, disordered eating, actual ideal weight discrepancy, Cyprus

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The actual ideal weight discrepancy refers to the difference between the weight that is perceived by the individual as acquired (actual weight) and the weight that the individual wishes to acquire (ideal weight; Vartanian, 2012). Even though a large discrepancy between actual and ideal body weight could imply body dissatisfaction, the constructs are not the same, as the actual ideal weight discrepancy is a way to quantitatively measure the extent of body dissatisfaction. Several studies reported large numbers of individuals who are dissatisfied with their actual body weight. Sarwer, Thompson, and Cash (2005) reported that two thirds of women and more than half of men were not satisfied with their body weight and Furnham, Badmin, and Sneade (2002) supported that body satisfaction is related to the discrepancy between actual and ideal body weight. Furthermore, when participants were shown body size figures, most male participants (79.9%) and most female participants (81.7%) chose a different body figure that represented their ideal weight as compared to the one they chose to represent their actual weight. Additionally, results revealed a statistically significant negative correlation between the actual ideal weight discrepancy and levels of self-esteem for women, whereas the same correlation was not found to be significant for men.

Moreover, Valutis, Goreczny, Abdullah, Magee, and Wister (2009) supported further that the actual ideal weight discrepancy influences body satisfaction. Specifically, their results revealed that the actual ideal weight discrep-

ancy was a significant predictor of body weight-related anxiety. In addition, [Furnham, Badmin, and Sneade \(2002\)](#), who assessed the reasons why one chooses to exercise, found that the actual ideal weight discrepancy statistically explained over 40% of the variance of body satisfaction, along with weight control, body toning, attractiveness and actual body mass.

Furthermore, [Tang et al. \(2010\)](#) suggested that girls are more likely to misperceive their body as being overweight which probably leads them to experience depressive and anxious symptomatology. Additionally, [Posavac and Posavac \(2002\)](#) showed that stress levels were positively correlated with actual ideal weight discrepancy and that the variance explained by the discrepancy is different than the one explained by levels of self-esteem. Moreover, [Marsh and Roche \(1996\)](#) found that levels of self-esteem were predicted by the size of the discrepancy between actual and ideal body weight.

Concerning the relationship between the media and the ideal weight, in a meta-analysis of 25 empirical studies, [Groesz, Levine, and Murnen \(2002\)](#) found that the ideal weight projected by the media is correlated with decreased body satisfaction in girls and women. The effect of this correlation was stronger in young girls. In regards to the male population, [Agliata and Tantleff-Dunn \(2004\)](#) supported a significant relationship between exposure to the thin ideal by the media and depressive symptoms, as well as a dissatisfaction regarding their muscle mass. [Ahern, Bennett, Kelly, and Hetherington \(2011\)](#) further confirm the above relationship claiming that people who have the thin ideal internalized, have more disordered eating symptomatology than the ones who score low on the internalization of the thin ideal. The researchers incurred that this could be due to the fact that the people who internalize the thin or athletic ideal ([Homan, 2010](#)) hold the ideal body weight that is projected by the media as their own personal ideal ([Dittmar & Howard, 2004](#)).

In further support of the above relationship, [Vartanian \(2012\)](#) found that, when exposed to a thin ideal projected by the media, the participants who scored high on the actual ideal weight discrepancy experienced feelings of dejection, whereas the participants who scored high on actual-ought weight discrepancy (actual weight vs. an obligation or duty to possess a certain weight) experienced agitation. In contrast, the participants with low levels of actual ideal weight discrepancy were not influenced by the projections of the thin ideal. [Shaw and Waller \(1995\)](#) offer an explanation on this, suggesting that people with high levels of actual ideal weight discrepancy perceive the specific discrepancy as their failure to achieve their ideal weight.

Cyprus is of great interest in the literature concerning body image and sociocultural issues due to four main reasons ([Argyrides, Kkeli, & Koutsantoni, 2015](#)). Firstly, there was a great boost in economy after the 1974 war resulting in an emphasis placed by the inhabitants on their social image as well as their body image ([Katsounari, 2009](#)). Secondly, the warm weather in Cyprus results in lighter, more revealing clothing to be worn. As previous research pointed out, this may lead to an emphasis being placed on body image ([Sloan, 2002](#)). Thirdly, there has been a significant increase in body image and self-esteem concerns as compared to other countries and ethnicities ([Argyrides, 2013](#); [Katsounari, 2009](#)). Lastly, there is minimal emphasis placed by the school curriculum on issues of body image and disordered eating, as the classes that address these issues have been reduced significantly ([Ministry of Education of Cyprus, 2015](#)).

The literature in Cyprus reports high levels of body dissatisfaction ([Hadjigeorgiou, Tornaritis, Savva, & Kafatos, 2005](#)) with 42% of girls and 18% of boys aged 10 – 18 reporting not being satisfied with their weight and would have liked to lose some. In addition, [Hadjigeorgiou et al. \(2005\)](#) also showed a high percentage of Cypriot teenagers who are at-risk for, or are suffering from, eating disorders. Specifically, during 2003, 18.8% of boys and 34.7% of

girls surveyed had a significant high score on the Eating Attitudes Test – 26 (EAT – 26  $\geq$  20), 15.4% of the participants were at-risk for developing eating disorders and 30.6% of the participants were at-risk for developing bulimia. These statistical percentages appear to have increased in 2010 (Hadjigeorgiou, Tornaritis, Savva, Solea, & Kafatos, 2012). The same researchers who repeated their study highlight the increased number of teenagers in Cyprus exhibiting distorted eating habits (Hadjigeorgiou et al., 2012). Argyrides and Kkeli (2013) and Katsounari (2009) provide further supporting data of the high levels of body dissatisfaction and disordered eating in university-aged populations. Relationships between significant weight concerns, age and gender differences, disordered eating symptomatology, levels of Body Mass Index (BMI), location of upbringing and socioeconomic status (SES) have also been assessed in Cyprus (Argyrides, Kkeli, & Koutsantoni, 2015). Even though there have been a number of studies focusing on disordered eating and body image in Cyprus lately, there is a lack of research regarding the assessment of the construct of actual ideal weight discrepancy and its possible relation to other variables of interest. Another gap in the literature lies in possible differences between the actual ideal weight discrepancy and gender, age, BMI category, location of upbringing, SES and disordered eating symptomatology.

## Aim of the Study

The current study aimed to evaluate the relationship between the actual ideal weight discrepancy and the following variables: self-esteem, appearance satisfaction, investment in appearance, weight-related anxiety, internalization of the thin and athletic ideals, the perception of the media as a good source of information in regards to appearance, the perception of the media as a source of pressure, and disordered eating symptomatology. Since previous literature found a greater effect size in younger girls and boys rather than women and men, the study aimed to assess these variables with adolescents.

Furthermore, based on previous literature relating to weight concerns and age and gender differences, BMI category, location of upbringing, SES and disordered eating symptomatology, the study aimed to assess predictors and the extent of the actual ideal weight discrepancy in all the above stated variables.

Based on the general aims of the study, three hypotheses were developed:

*H1: There will be significant relationships between the actual ideal weight discrepancy and self-esteem, appearance satisfaction, investment in appearance, weight-related anxiety, internalization of the thin and athletic ideals, the perception of the media as a good source of information in regards to appearance, the perception of the media as a source of pressure, and disordered eating symptomatology.*

*H2: The significant predictors of the actual ideal weight discrepancy will differ in boys and girls.*

*H3: There will be significant differences in actual ideal weight discrepancy when comparing gender (male vs. female participants), age (15 vs. 18 year olds), BMI category (underweight, normal weight, overweight and obese), location of upbringing and residence (urban vs. rural), socioeconomic status (low, medium, high), as well as disordered eating (EAT – 26  $\geq$  20 vs. < 20).*

## Method

### Participants

The participants of the current study included a large representative sample of 2220 high school students (881 boys and 1339 girls) from all over Cyprus, aged 15 – 18 ( $M = 15.24$ ,  $SD = 1.24$ ), with height between 110 – 200

cm ( $M = 167\text{cm}$ ,  $SD = 8.5\text{cm}$ ), weight between 36 – 124 kg ( $M = 59\text{ kg}$ ,  $SD = 12.05\text{ kg}$ ) and Body Mass Index (BMI) 12.35 – 49.59 ( $M = 21$ ,  $SD = 3.53$ ). Participants' BMI Weight Category was also calculated using the teenage BMI scale (0 – 5th percentile = Underweight, 5th – 85th percentile = Normal Weight, 85th – 95th percentile = Overweight and Higher than 95th percentile = Obese; [Must & Anderson, 2006](#)). This frequency distribution revealed that 492 participants (22.17%) fell in the Underweight category, 1478 (66.57%) in the Normal Weight category, 195 (8.77%) in the Overweight category, and 55 (2.49%) in the Obese category. The sample was Greek-Cypriots in its majority (87.6%) with a small percentage of non-Greek-Cypriots (12.4%), which overall reflects the demographic make-up of the Republic of Cyprus. Participants' self-reported answers also revealed that they came mostly from middle to upper-middle class families: 16.2% low socioeconomic status; 64.3% middle socioeconomic status; 19.5% high socioeconomic status.

## Measures

The actual ideal weight discrepancy variable was assessed by asking participants to self-report their weight and their ideal weight. The discrepancy between these two self-reported measures (calculated by subtracting one from the other) was used as the variable of interest in the study.

In order to assess the media influences and the internalization of the thin and athletic ideals, the Sociocultural Attitudes Towards Appearance Questionnaire – 3rd version was used (SATAQ – 3; [Thompson, van den Berg, Roehrig, Guarda, & Heinberg, 2004](#); [Argyrides, Kkeli, & Kendeou, 2014](#) for the Greek version). This 30 item measure consists of four subscales: the internalization of the thin ideal (Internalization – General), the internalization of the athletic ideal (Internalization – Athlete), the perceived pressures from the media regarding appearance (Pressures), and whether the media are perceived as a good source of information regarding appearance (Information). The items are scored on a 5-point Likert-type scale ranging from Definitely Disagree (receiving a score of 1) to Definitely Agree (receiving a score of 5). The SATAQ – 3 has excellent psychometric properties across several populations and ages with internal Cronbach alpha coefficients ranging from .84 to .93. For the current sample, the Cronbach's alphas were .92 for Internalization – General, .82 for Internalization – Athlete, .94 for Pressures and .88 for Information.

The Eating Attitudes Test – 26 (EAT – 26; [Garner, Olmsted, Bohr, & Garfinkel, 1982](#); [Varsou & Trikkas, 1991](#) for the Greek version) was also used in order to evaluate distorted eating attitudes and behaviors. This is a 26-item questionnaire and has three subscales (Dieting, Bulimia and Food Preoccupation, and Oral Control) and a Composite Total Score. The 6-point Likert-type scale used for the EAT – 26 ratings, ranges from Always (receiving a score of 1) to Never (receiving a score of 6). The EAT – 26 has reported reliability coefficients ranging from .86 to .90. For the current sample the alpha coefficient for the Total Composite Score was .88.

In order to assess self-esteem, the Rosenberg Self-Esteem Scale was used ([Rosenberg, 1965](#); [Spanea, Anagnostopoulos, Kalatzi-Azizi, & Skarlos, 2005](#) for the Greek version). It consists of 10-items that assess levels of global self-worth based on the positive and negative beliefs and perceptions about one's self. The questionnaire uses a 4-point Likert-type scale ranging from Strongly Agree to Strongly Disagree. The Rosenberg Self-Esteem Scale also has excellent reported reliability coefficients ranging from .87 to .93. For the current sample the alpha coefficient was .87.

Lastly, the Multidimensional Body – Self Relations Questionnaire – Appearance Scales (MBSRQ – AS; [Cash, 2000](#); [Argyrides & Kkeli, 2013](#) for the Greek version) was used to measure participants' appearance satisfaction,

investment in appearance, as well as weight-related anxiety. For the purposes of this study, three of the five subscales of the measure were used: the 7-item Appearance Evaluation subscale measuring feelings of physical attractiveness and satisfaction with one's looks, the 12-item Appearance Orientation subscale measuring the extent of investment in one's appearance, and the 4-item Overweight Preoccupation subscale measuring weight-related anxiety. All items were rated on a 5-point Likert-type satisfaction scale ranging from Very Satisfied to Very Dissatisfied and Strongly Agree to Strongly Disagree. The subscales of the current measure have been found to have good psychometric properties among both genders and different cultural groups with alphas above .80. For the current sample, the alpha coefficient for the Appearance Orientation subscale was .81, for the Appearance Evaluation .82 and .86 for the Overweight Preoccupation subscale.

## Procedure

The current study was approved by the Ministry of Education and Culture of Cyprus. The participants and their parents were informed about the aims of the study and the necessary consent was given. The data were collected during school hours within a period of 1 month where participants answered a demographic sheet which included their self-reported actual and ideal weight, height, gender, age, location of upbringing and residence, and socio-economic status as well as all the questionnaires of interest. Based on the above, their Body Mass Index and according category (Underweight, Normal Weight, Overweight, Obese) were also calculated. All the data were entered into the Statistical Package of Social Sciences, Version 22.0 (SPSS 22) and all the necessary analyses were conducted.

## Results

To address the first hypothesis (H1) referring to the possible relationships between the actual ideal weight discrepancy and the variables of interest, a Pearson Product Moment correlation analysis was conducted. The analysis (see [Table 1](#)) revealed a statistically significant positive relationship between the actual ideal weight discrepancy construct and disordered eating symptomatology, the perception of the media as a good source of information and as a source of pressure regarding appearance, the internalization of the thin and the athletic ideal, weight-related anxiety and investment in appearance. This implies that the larger the actual ideal weight discrepancy of participants, the more anxiety they felt regarding their weight and appearance and the more pressure they felt from the media in regards to their appearance. Moreover, more symptomatology of disordered eating was present and there is a higher internalization of the thin and athletic ideals. Finally, individuals with more discrepancy invest more time and effort in their appearance and they consider the media as a good source of information for their appearance. Additionally, there is a statistically significant negative relationship between the actual ideal weight discrepancy construct and self-esteem, as well as appearance satisfaction. This implies that the larger the actual ideal weight discrepancy, the lower levels of self-esteem and appearance satisfaction were present.

To address the second hypothesis (H2) referring to the different predictors between boys and girls, two stepwise multiple regression analyses were conducted to evaluate how well the variables included in the study predicted the actual ideal weight discrepancy in boys and girls. The predictor variables were the internalization of the thin and athletic ideals, the media as a good source of information and a source of pressure, satisfaction with appearance, investment in appearance, weight and appearance-related anxiety, and levels of self-esteem, whereas the criterion variable was the actual ideal weight discrepancy.

Table 1

Correlations Between the Actual-Ideal Weight Discrepancy Construct and the EAT-26, SATAQ-3, MBSRQ and Rosenberg's Self Esteem Scale.

Variable	Scale	Actual-Ideal Weight Discrepancy
Disordered eating symptomatology	Eating Attitudes Test (EAT-26)	.177**
Media as good source of information regarding appearance	SATAQ 3 Information	.061**
Media as source of pressure	SATAQ 3 Pressures	.203**
Internalisation of the athletic ideal	SATAQ 3 Internalization – Athlete	.045*
Internalisation of the thin ideal	SATAQ 3 Internalization – General	.141**
Weight-related anxiety	MBSRQ Overweight Preoccupation	.377**
Investment in appearance	MBSRQ Appearance Orientation	.082**
Appearance satisfaction	MBSRQ Appearance Evaluation	-.292**
Self-Esteem	Rosenberg's Self-Esteem Scale	-.110**

\* $p < .05$ . \*\* $p < .01$ .

The stepwise regression equation for boys (Table 2) was significant ( $F(3, 878) = 38.72, p < .001$ ) and accounted for 11.7% of the variance of actual ideal weight discrepancy ( $R^2 = .117$ , adjusted  $R^2 = .114$ ). The actual ideal weight discrepancy was primarily predicted by weight-related anxiety ( $\beta = .302, t(872) = 8.965, p < .001$ ), to a lesser extent by body image satisfaction ( $\beta = -.115, t(872) = -3.495, p < .001$ ) which added another 1.3% to the variance, and by the media as a good source of information ( $\beta = -.097, t(872) = -2.985, p < .005$ ) which added another 0.9% to the total variance of actual ideal weight discrepancy.

Table 2

Summary of Multiple Regression of Male Participants' Actual-ideal Weight

Independent Predictor Variables	B	SE	$\beta$	$t(872)$	p
MBSRQ Overweight Preoccupation (Weight-Related Anxiety)	3.120	0.348	0.302	8.965	< .001
MBSRQ Appearance Evaluation (Feelings of Attractiveness)	-1.453	0.416	-0.115	-3.495	< .001
SATAQ-3 Information	-0.152	0.051	-0.097	-2.985	.003

Note.  $N = 881$  males.

## Discrepancy

The stepwise regression equation for girls (Table 3) was also significant ( $F(5, 1334) = 76.51, p < .001$ ) and accounted for 22% of the variance of the actual ideal weight discrepancy ( $R^2 = .223$ , adjusted  $R^2 = .220$ ). The actual ideal weight discrepancy was primarily predicted by weigh-related anxiety ( $\beta = .322, t(1330) = 10.874, p < .001$ ). To a lesser extent, it was predicted by body image satisfaction ( $\beta = -.311, t(1330) = -10.469, p < .001$ ) which added 5.6% to the variance equation. Additionally, the actual ideal weight discrepancy was also predicted, to a lesser extent, by the levels of self-esteem ( $\beta = .109, t(1330) = 3.716, p < .001$ ) which added 0.9% to the variance, and by the internalization of the thin ideal ( $\beta = -.103, t(1330) = -3.092, p < .005$ ) which added another 0.2% to the variance. Lastly, the actual ideal weight discrepancy was also predicted by pressures from the media regarding appearance ( $\beta = .079, t(1330) = 2.410, p < .05$ ) which added another 0.4% to the variance equation.

Table 3

Summary of Multiple Regression of Female Participants' Actual-ideal Weight Discrepancy

Independent Predictor Variables	B	SE	$\beta$	t(1330)	p
MBSRQ Overweight Preoccupation (Weight-Related Anxiety)	3.397	0.220	0.322	10.874	< .001
MBSRQ Appearance Evaluation (Feelings of Attractiveness)	-3.108	0.297	-0.311	-10.469	< .001
Self-esteem	0.150	0.040	0.109	3.716	< .001
SATAQ-3 Internalization	-0.090	0.029	-0.103	03.092	< .001
SATAQ-3 Pressures	0.094	0.039	0.079	2.410	.016

Note.  $N = 1339$  females.

To assess the third hypothesis (H3) which addressed possible differences between the independent variables of gender, age, location of upbringing and residence, EAT – 26 score category, socioeconomic status and Body Mass Index category, a series of  $t$ -tests and Analyses of Variances (ANOVAs) were carried out.

The independent sample  $t$ -test analysis on gender revealed that there was a statistically significant difference between the two groups  $t(2220) = -6.97, p < .001$ . Specifically, girls ( $M = 3.56, SD = 6.85$ ) scored significantly higher than boys ( $M = 1.10, SD = 8.88$ ), indicating that girls had a significantly higher discrepancy between their actual and ideal weight.

Regarding the difference between participants in the 3rd class of Gymnasium (15 year olds) and the 3rd class of Lyceum (18 year olds), the  $t$ -test analysis revealed no significant differences ( $t(2220) = -.953, p > .05$ ). Similarly, results revealed no significant differences relating to the place of upbringing and residence ( $t(2220) = 1.29, p > .05$ ).

Regarding the difference between participants indicating disordered eating behavior and attitudes (EAT – 26  $\geq 20$ ) and those who did not indicate (EAT – 26  $< 20$ ), the  $t$ -test revealed a significant difference between the two ( $t(2220) = -7.128, p < .001$ ). Specifically, the participants who scored equal to or higher than 20 on the EAT – 26 ( $M = 5.18, SD = 8.94$ ), had higher levels of actual ideal weight discrepancy than the participants who scored lower than 20 on the EAT – 26 ( $M = 2.05, SD = 7.46$ ) indicating that they want to lose more weight.

In order to identify possible differences between the four categories of Body Mass Index (Underweight, Normal Weight, Overweight and Obese), and the three categories of Socioeconomic Status (Low, Medium, High), two Analyses of Variances were conducted.

The ANOVA on the BMI revealed a significant main effect of BMI on the actual ideal weight discrepancy ( $F(3, 2218) = 363.14, p < .001, \eta^2 = .33$ ). Tukey HSD post-hoc tests revealed that all possible combinations of the levels of BMI were significant. Specifically, and as expected, the obese participants had the highest levels of actual ideal weight discrepancy ( $M = 21.84, SD = 11.74$ ), whereas the overweight participants experienced significantly lower levels of actual ideal weight discrepancy ( $M = 10.79, SD = 7.74$ ) than the former. The participants in the normal weight category had significantly lower actual ideal weight discrepancy ( $M = 2.36, SD = 5.77$ ) than the previous categories. The underweight participants scored the lowest actual ideal weight discrepancy, with the data revealing that the direction of the discrepancy was to gain weight rather than lose weight ( $M = -2.16, SD = 6.78$ ).

Concerning the socioeconomic status, the ANOVA indicated no significant differences between the three groups (low, medium, high) on the actual ideal weight discrepancy ( $F(2, 2150) = 2.33, p = .098, \eta^2 = .002$ ).

## Discussion

The current study aimed to evaluate the relationship between the actual ideal weight discrepancy construct and the following variables: self-esteem, appearance satisfaction, investment in appearance, weight-related anxiety, internalization of the thin and athletic ideals, the perception of the media as a good source of information in regards to appearance, the perception of the media as a source of pressure, and disordered eating symptomatology. The current study also aimed to assess for significant predictors of actual ideal weight discrepancy in boys and girls as well as group differences.

The results of the study confirm the first hypothesis, as it appears that the individuals with increased discrepancy between their actual and ideal weight have higher levels of weight-related anxiety, invest more time in their appearance, perceive the media as a source of pressure regarding their appearance, but also, consider the media as a good source of information regarding their appearance, have more disordered eating symptomatology and have a higher level of internalization of the thin and athletic ideals. Additionally, they have lower levels of self-esteem and appearance satisfaction.

Part of these findings confirm the results of [Valutis et al. \(2009\)](#) who suggested that the actual ideal weight discrepancy is significantly related to decreased appearance satisfaction and weight-related anxiety. The results also support the literature concerning the relationship between the actual ideal weight discrepancy construct and the perception of the media as a source of pressure and a good source of information regarding appearance ([Agliata & Tantleff-Dunn, 2004](#); [Dittmar, Halliwell, & Ive, 2006](#); [Field et al., 1999](#); [Groesz, Levine, & Murnen, 2002](#)).

Regarding the internalization of the thin and athletic ideals, a significant relationship was found in relation to the actual ideal weight discrepancy, which is in accordance with other findings as well ([Dittmar & Howard, 2004](#); [Homan, 2010](#)).

The second hypothesis of the study also appears to be partially confirmed as there are different predictors of actual ideal weight discrepancy for boys and girls. This finding is in accordance with studies in Cyprus investigating differences between the two genders in regards to their appearance satisfaction ([Christodoulidou & Argyrides, 2014](#)). The findings also reveal that weight-related anxiety and satisfaction with appearance are the top two predictors of the actual ideal weight discrepancy in both boys and girls. It seems that the feelings about one's weight discrepancy are guided by one's anxiety towards his/her appearance and feelings of attractiveness in both boys and girls. These findings suggest no gender differences in the effects of these two variables on the actual ideal weight discrepancy. Furthermore, in boys, the consideration of the media as a good source of information plays an important role in their weight discrepancy whereas in girls, it is self-esteem, the internalization of the thin ideal and pressures from the media that affect their weight discrepancy.

The differences between the two genders might be explained in terms of the consequences of being exposed to the thin ideal. As [Dittmar, Halliwell, and Ive \(2006\)](#) reported, girls were more likely to experience a decrease in their body satisfaction, lower levels of self-esteem and self-confidence, and an increased desire to become thinner,



whereas the male participants of Agliata and Tantleff-Dunn's (2004) study, were exhibiting depressive symptoms and dissatisfaction with their muscle mass, when exposed to the thin ideal.

Regarding the third hypothesis, the findings revealed a significant difference between boys and girls regarding their actual ideal weight discrepancy with girls scoring significantly higher levels of discrepancy, thus supporting Christodoulidou and Argyrides' (2014) findings which suggested gender differences. Additionally, participants who exhibited disordered eating behaviors and attitudes (EAT – 26 score  $\geq 20$ ) had higher levels of actual ideal weight discrepancy and wished to lose more weight than those who did not exhibit these behaviors and attitudes (EAT – 26 score  $< 20$ ). This finding suggests a positive relationship between the actual ideal weight discrepancy construct and the risk of developing disordered eating symptomatology. It seems that a large discrepancy in the actual and ideal weight is also accompanied by disordered eating symptomatology. It is possible that individuals with a large discrepancy between their actual and ideal weight are making significant attempts to decrease this discrepancy, one of which would be disordered eating behaviors (strict diets, vomiting, fasting, etc.).

The difference between the four categories of Body Mass Index (underweight, normal weight, overweight and obese) was also significant. It was found that participants in the underweight group wanted to gain more weight, whereas the participants in the other three groups wanted to lose weight. The findings suggest that the higher the BMI of the participants, the higher the actual ideal weight discrepancy. This makes the BMI categories an important factor influencing the actual ideal weight discrepancy.

Finally, the results revealed no significant differences between the actual ideal weight discrepancy in regards to age (15 vs. 18 year olds), place of upbringing and residence (rural and urban) and socioeconomic status (low, medium, high). The discrepancy is very similar in all of these groups indicating that the sociocultural effects causing the discrepancy is very evident across all levels of these variables.

## Application to Counseling Psychology

The relationships found between the actual ideal weight discrepancy and the variables examined in this study could provide important information to the counseling psychologists across Europe regarding several aspects of the adolescent client's everyday life. This information could be used as a way to improve empathy with the client. Specifically, a counselor may empathize with the anxiety and dissatisfaction that may be stimulated when a client is watching television programs that are exhibiting the thin ideal. Furthermore, this information could be used as a starting point for gaining information on the way adolescents are dealing with their actual ideal weight discrepancy. Additionally, a counselor should turn his/her attention to constructs that need to be reinforced as possible protective factors such as self-esteem, and to constructs to be aware of as risk factors, such as eating related behaviors and attitudes. This shift of focus might turn out to be beneficial for the outcome of the psychotherapeutic work. In other words, the results give psychologists a sense of direction when working with clients with significant discrepancy between their actual and ideal weight. Moreover, the differences regarding the predictors of actual ideal weight discrepancy between boys and girls provide significant information regarding the preventing aspects of any intervention that would be organized and implemented at any level (either the media, or the school, or specific groups of adolescents) that addresses this age group. Additionally, a counselor should be aware that adolescent girls who exhibit distorted eating behaviors and adolescents who fall into the "overweight" or "obese" BMI categories are at-risk for having high levels of actual ideal weight discrepancy and the development of disordered eating symptomatology. Finally, counselors could benefit from the above information when using them as quick screening criteria, especially when working in schools.

## Conclusion

As previously stated, Cyprus has some unique characteristics which make research on body image and disordered eating behavior of interest. The results of this study offer important additional information to the body image and disordered eating literature regarding a construct (actual ideal weight discrepancy) never examined before in Cyprus and not extensively examined in the general literature. Therefore, the results are not limited to Cyprus as many European countries in the Mediterranean region are facing similar situations with high internalization scores and body dissatisfaction (Argyrides, Kkeli, & Koutsantoni, 2016). This information could be used by Cypriot and other European mental health professionals when working with children and teenagers who are struggling with their self-esteem, their body image and who are at-risk for, or exhibit disordered eating symptomatology. Moreover, the data and results provide the possibility of conducting preventive interventions, specifically directed to this age spectrum, which could take place either at the school setting, or through the media that appear to be highly influential.

What is more, further research should be conducted, preferably in a qualitative manner, in order to try and assess the direction of the relationships found. This would in turn lead to more effective ways of confronting and resolving these specific issues.

The current study is limited to the geographic location of the participants (Cyprus) as well as the specific age group which it assesses and generalizations should be made with caution. Moreover, the data collection was in the form of self-report questionnaires, which always raises doubts on whether the answers reflect the actual weight of the participants or their self-perceived weight.

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## Competing Interests

The authors have declared that no competing interests exist.

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