

Counselling Program for Acceptance of Body Image and its Effect on Self-Esteem among Adolescent Girls

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ABSTRACT

Background: Acceptance of body image is a challenge during adolescence, particularly for girls. **Aim of the study:** to evaluate the counseling program for acceptance of body image and its effect on self-esteem among adolescent girls. **Subjects and Methods: Research design:** quasi experimental design used. **Setting:** two settings used; Om-elabtal and Al-hosayneya preparatory schools in Zagazig city. **Subjects:** 96 girls with the lowest body image score. **Tools of data collection:** self-administered questionnaire to collect sociodemographic data, Body Image Test for Healthy Individuals and Coopersmith Self-esteem Inventory. **Results :** revealed that 21.4% of student girls weren't accepting own body image, 33.7% of them had low self - esteem. After implementation of the counselling program, there were a statistically significant pre-post difference in both body image and self-esteem scores. In addition, results identified the counselling program as positive predictor of body image, while living with both parents and having net at home were the negative predictors. Additionally, findings indicated that the counselling program, having net at home and having hobbies were positive predictors of self-esteem, while previous failure and birth order were negative predictors. **Conclusion:** it was concluded that both body image was accepted and self-esteem was improved after implementation of the counselling program. **Recommendations:** it was recommended that further nursing interventions should be conducted to improve adolescents' self-esteem, applied on large scale, taking into account changing pubertal status, and the different effects on female students during program planning.

Key words: Adolescent girls, body image, self -esteem, counseling program.

Introduction:

Adolescence represents a critical period for healthy body image development. It marks a time of rapid and intense emotional and physical changes. During adolescence, there is tremendous pressure placed on physical appearance, body image and related self-concepts.^(1&2)

During the periods of adolescence, morphological changes occur in both sexes. Such sudden changes in physical appearance may influence adolescents' assessment of own body image, which is a multidimensional construct involving the accuracy of the perception that the person has regarding body shape and size, along with the feelings this representation may cause. The concern with weight is a major factor associated with increased body image non-acceptance.⁽³⁾

Along with the physical, emotional and social changes adolescents' experience, they also undergo changes in relationships as peer and family relationships contribute to how adolescents perceive themselves. During adolescence, there is a possibility of heightened self-awareness and concerns of how an adolescent girl's peers portray body image.⁽⁴⁾

In Arab countries, body image non-acceptance is highly prevalent among adolescent girls. In Egyptian study, it was found that 28.8% weren't accepting own body image, 31.7% had average body image and 39.4% were accepting it^(5&6)

Since preparatory school is where children develop own individual identities, the classroom is an important place for body image

education. Body image is the perception that a person has of physical self, but more importantly the thoughts and feelings the person experiences as a result of that perception. These feelings can be positive, negative or a combination of both and are influenced by individual and environmental factors.⁽⁷⁾

The internal or mental health effects of body image non-acceptance can lead to obsessive striving for perfection, low self-esteem, depression, conflicts over issues of control, family problems, discomfort with a changing body, and psychological or social isolation. Sometimes young girls become so concerned with body image that it can take over most other aspects of own lives⁽⁸⁾

Self-esteem is a large part of adolescents' self-understanding and is likely to be a fluctuating and dynamic construct, susceptible to internal and external influences during adolescence. Self-esteem is widely recognized as a central aspect of psychological functioning during adolescence⁽⁹⁾

Adolescents with low self-esteem have a difficult time dealing with problems, are overly self-critical, and can become passive, withdrawn, and depressed. Adolescents may hesitate to try new things, may speak negatively about themselves, are easily frustrated, and often see temporary problems as permanent conditions and are pessimistic about themselves and own life.⁽¹⁰⁾

Girls tend to be more susceptible to having low self-esteem than boys, perhaps because of increased social pressure that emphasizes appearance more than intelligence or athletic ability. Delayed puberty also can affect self-esteem in adolescents. Adolescents who are late to mature

often feel self-conscious about own failure to go through puberty at the same time as peers. In contrast, early physical maturation can be embarrassing for girls, who may feel gawky and self-conscious in newly developed bodies.^(11&12)

Body image and self-esteem are related but distinct concepts. Body image describes one's attitude toward a single aspect of the self, namely the physical body, while self-esteem relates to one's view of the self as a whole. Self-esteem may involve an evaluation of one's overall worth and is generally not limited to the physical body. Nevertheless, the way people think and feel about own bodies is often strongly connected to overall view of themselves.⁽¹³⁾

The effects of body image on self-esteem can be especially powerful during the adolescence years. Although it's perfectly normal for adolescent to have negative thoughts and feelings towards self once in a while, finding ways to be positive is the key to building a healthy body image and positive self-esteem.⁽¹⁴⁾

Significance of the Study

Adolescent girls are less satisfied with own bodies than boys.⁽¹⁵⁾ Body image is central to adolescent girls' self-definition, because they have been socialized to believe that appearance is an important basis for self-evaluation and for evaluation by others. Also Saab⁽¹⁶⁾ found that 36 % – 50 % of the adolescents are not accepting own body size.

Not accepting own body image is a risk factor for poor self-esteem, onset of eating disorders, obsessive thinking about one's weight and appearance, self-mutilation, onset of poor life style such as smoking and many more social problems. All of this could also lead to poor academic behaviors, low grades, high level of

school absenteeism due to social anxiety regarding one's appearance and eventually early school dropout.⁽¹⁷⁾

Community health nurses play a pivotal role in addressing body image concerns as preventative measures within a school. She can work with students struggling with negative body images so that health promotion activities and prevention strategies can be implemented in order to further ensure enhanced self-esteem, as well as improved academic performance⁽¹⁸⁾

Aim of the study:

The present study aimed to evaluate the counselling program for acceptance of body image and its effect on self-esteem among adolescent girls.

Research Hypothesis

Body image will be accepted and consequently self-esteem will be improved after implementation of the counselling program.

Subjects and methods:

Research design:

A quasi experimental design was used in this study

Study setting:

This study was conducted in two preparatory schools in Zagazig city. The first was Om-elabtal governmental school; Western Educational Administration; in which the pilot study was carried out; and the second school was Al-hosayneya governmental school; Eastern Educational Administration, the settings were randomly selected from Zagazig city schools.

Study subjects:

Multistage cluster sampling used; the study girls randomly selected from the school. Using a power of 80% to detect a significant change at self-esteem of adolescent girls before and after an intervention program = 23%, precision of 10% and $\alpha = 5\%$. Subjects of the study consisted of 537

adolescent girls selected from the above mentioned schools according to the following inclusion criteria:

- Age 12-15 years.
- Free from any physical or mental disability.
- Free from chronic diseases.
- Accept to participate in the study.

Then, 96 adolescent girls with the lowest score in body image test completed the attendance of the counselling program

Tools of data collection:

Three tools are used in this study

I- Self-administered questionnaire sheet to collect sociodemographic data as age, year, number of siblings, mother and father education, residence, crowding index, both parents live together, income and presence of computer or net at home.

II- Body image test for healthy individuals

This test was adopted from Ali⁽¹⁹⁾ and consists of 30 statements include negative view to the body, movement restriction, isolation at home, dissatisfaction of body, loss of body esteem....etc.

Scoring:

Items were scored 0, 1, 2, and 3 for the responses never, rarely, sometimes, and often, respectively. The scores were reversed for negative items. The respondent was considered to have acceptable body image if the percent score was 80% (≥ 72) or more and not acceptable if less than 60% and average if $60 < 80\%$ (< 72).

III- Coopersmith Self-esteem inventory

This inventory was adopted from Mousa, and Desouki⁽²⁰⁾ and consists of 25 statements include desire to be another one, difficulty of speaking in public, easily annoyed at home, desire to leave home...etc .

Scoring :

The responses “applies to me” to “does not apply to me” were scored respectively 1 and 0. The scores were reversed for negative items. The scores of the statements were then summed-up to a maximum total of 25 grades. The level of self-esteem was considered high or good if the total score was equal to or higher than 21, average (13-20), and low (<13).

Content Validity & Reliability:

Validity of the content of body image test and self-esteem inventory was examined by panel of seven experts from Nursing faculty and Education faculty, Zagazig University. Experts reviewed the content for clarity, relevance, applicability, understanding and ease for implementation.

Internal consistency of tools was assessed by calculating Cronbach's alpha coefficient, which shown in the following table

Item	N of Items	Cronbach's Alpha
Body image test	30	0.984
Self-esteem inventory	25	0.675

Field work:

The field work was carried out within the period of 7 months from 1st October, 2015 to the end of April, 2016. After securing all official permissions, four classes were chosen randomly from each grade (1st& 2nd) in Om-elabtal school and 2 classes from each grade (1st& 2nd) in Al-hosayneya school. All students in chosen classes were assessed for body image non-acceptance by using body image test.

The researcher first introduce herself, explained the aim of the study to each group. Oral consent was obtained from student girls and they were assured that the collected data were treated confidentially and used

only for research purpose. The researcher read, explained the tool items to the students and clarified the method of filling in the tools. Sometimes, the student needed clarifications for the questions; therefore, the researcher answered them without any judgmental words or changing the meaning of the questions. The average time to fill in all tools was 35-50 minutes. Based on this phase, the participants who had the lowest body image scores were selected for the program. This phase lasted for two months (started in October, 2015 and ended in November, 2015).

Based on results obtained from data analysis of assessment phase and review of the literature, the researcher designed the counselling program session content according to the students' needs and the study aim. Identified needs, requirements and deficiencies were obtained into aim and objectives of the counselling program and set in the form of the booklet.

Pilot study:

A pilot study was conducted on 10% (54 student girls) students at the 1st& 2nd year preparatory school, and then excluded from the study. The aim of pilot study was to test clarity of language, applicability of items and time consumed for filling in the tool items.

Administrative and ethical considerations:

The study protocol was approved by the pertinent committees at Faculty of Nursing, Zagazig University. A simple explanation about the aims of the study was illustrated to students, oral consent taken from student girls. The researcher emphasized that the participation was voluntary, and any participant can withdraw at any time without any need to justify decision, any raised questions were answered, and the collected data

were treated confidentially and used only in the current study.

An official request to conduct the study was directed from faculty of Nursing, Zagazig University to the first undersecretary of the manager of directorate of education at Sharkia Governorate. The director referred the researcher to the director of selected school with approval letter, and then the researcher met each director individually and explained the aim of the study and the nature of tool used for data collection. The researcher gave the director and social worker a copy of tool and approval letter.

Statistical analysis

The collected data were organized, tabulated and statistically analyzed using SPSS software (Statistical Package for the Social Sciences, version 20, SPSS Inc. Chicago, IL, USA). Data were presented using descriptive statistics in the form of frequencies and percentages for qualitative variables, and means and standard deviations and medians for quantitative variables. Cronbach alpha coefficient was calculated to assess the reliability of the developed tools through their internal consistency.

Quantitative continuous data were compared using Student t-test in case of comparisons between two independent groups and paired t-test for dependent groups. When normal distribution of the data could not be assumed, the non-parametric Mann-Whitney was used. Qualitative categorical variables were compared using chi-square test. Whenever the expected values in larger than 2x2 cross-tables, no test could be applied whenever the expected value in 10% or more of the cells was less than 5. Spearman rank correlation was used for assessment of the inter-relationships among quantitative variables and ranked ones. In order to identify the independent predictors of the body image and self-esteem

scores, multiple linear regression analysis was used and analysis of variance for the full regression models was done. Statistical significance was considered at p-value <0.05.

Results:

Table (1) revealed that 21.4% of studied girls were not accepting their body image, while 33.7% of them had low self – esteem.

Table (2) clarified that the mean age of studied girls was 13.5 ± 0.7 years old, 57.3% of them were in the second year. Concerning birth order, mean birth order was the second to third, while number of siblings ranging from 0 to 6 for all studied girls.

Table (3) illustrated that 89.6% lived in urban areas, 94.8% of them lived with both parents and 5.2% were not due to divorce or death (60% & 40% respectively). In addition 56.3% of studied girls had crowding index less than 2 and only 7.3% had insufficient income and 70% had internet at home.

Table (4) showed that 45.8% of studied girls' fathers had completed university education, while 58.3% of them work as employees. In addition, 40.6% of girls' mothers had university education, 63.5% of them were housewives and 36.5% were workers.

Table (5) illustrated that there were a statistically significant pre-post differences in both body image and self-esteem scores ($p < 0.001$).

Table (6) clarifies the best fitting multiple linear regression model for the body image score. It indicated that attendance of the counselling program was a statistically significant positive predictor of body image of studied girls (p -value <0.001). Moreover, the table also clarifies that living with both parents and having net at home were the statistically significant negative predictors of body image (p -value 0.019 & 0.033) respectively.

Table (7) represents the best fitting multiple linear regression model for the self-esteem score. It indicated that the attendance of the counselling program, having net at home and having hobbies were statistically significant positive predictors of self-esteem (p-value 0.001). In addition, the table reveals also that previous failure and birth order were statistically significant negative predictors of it (p-value 0.014 & 0.070) respectively.

Discussion:

The current study findings revealed that nearly one quarter of adolescent girls were not accepting own body image; this could be attributed to comparing their own body image with media models and peers.

This result was in line with findings of Hatata et al.⁽⁵⁾ in Egypt who found that nearly one quarter of adolescents weren't accepting own body image. In addition, Rech and colleagues⁽²¹⁾ in state of Paraná, Southern Brazil, found that two thirds of adolescents were not accepting own body image. On the same line, Petroski et al.⁽²²⁾ found that nearly half of Portuguese adolescents were not accepting own body image. Additionally, Ferrari et al.⁽²³⁾ in Brazil found that more than two thirds of studied students were not accepting own body image.

Therefore, according to Golan et al.⁽²⁴⁾, there was an increased need for nursing interventions aimed at increasing body image acceptance among adolescents, in order to prevent negative consequences of non-acceptance, which consistent with current study aim and hypothesis.

After implementation of counselling program, body image was accepted. This has also been confirmed through regression analysis, which identified the counselling program as the most influential positive independent factor on body image, and this achieved the first part

of study hypothesis. This improvement might be attributed to the content of the program, which pressed on positive thinking, in addition to simplicity of language, avoiding purely scientific terms. Additionally, the desire of adolescent girls to attend the counselling program, as it was interesting for them, there was an interaction and participation from all adolescent girls.

These foregoing present study findings are in agreement with those of Housein⁽²⁵⁾ and Mahfouz⁽²⁶⁾ in Egypt, which revealed that the counseling program was positive for adolescent girls to accept own body image. Additionally, O'Dea and Abraham⁽²⁷⁾ in Sydney, Australia found that there was a statistically significant improvement in the body image scores of both male and female students following the attendance of the educational intervention.

On the other hand, the present study found that living with both parents had negative impact on girls' body image, as most of current study sample lived with both parents, due to the nature of Egyptian society, which inhibits adolescents' separation from parents. From the researcher point of view, this is quite plausible since living with both parents might expose adolescent girl to parental criticism about own weight and physical limitations which is a crucial factor in developing non-acceptance of body image. Also both mother and fathers' attitudes towards own bodies are correlated to body image non-acceptance among adolescents

On the same line, findings of Hyun and colleagues⁽²⁸⁾ in Korea revealed that most of the adolescents lived with their father and mother together, which negatively affect body image perception.

It is not surprising that media has just a strong influence on body

image as it does on self-esteem. Present study found that having net at home was another negative predictor of body image, as body image affected by how an individual compares himself to those media images. Furthermore, it provides a role model by emphasizing certain body types; girls tend to feel bad after watching the idealized images. As the images of slim women are repeated on media, these forms become the standards of attractiveness.

In line with the foregoing finding, a study by Tiggemann and Miller ⁽²⁹⁾ found that internet use in general was a strong negative predictor of body image non-acceptance and particularly there was a strong association between non-acceptance of body image and social networking sites (SNS) use. In the same line, Watson and Vaughn ⁽³⁰⁾ found that the ideal body image, as reinforced by the media, is the cause for the large amount of body image non-acceptance found in many individuals, especially girls.

On contrary Van Vonderen and Kinnally⁽³¹⁾ found that no significant link was observed between using internet or media comparison and body image non-acceptance. This discrepancy might be attributed to including both males and girls, while current study included only girls.

The present study results revealed a statistically significant positive correlation between father education and body image. This might be explained that the high education of fathers can affect the way of thinking of daughters about their body image, and influence daughters' perception of body image in various ways including modeling, their own weight concerns, and communication in varying forms.

Similar finding was in Mahfouz ⁽³⁴⁾ study in Egypt, which revealed that the high educational level of girls'

parents has a positive correlation to the girls' body image. Also in congruence with the foregoing current study results, strong positive correlation between father education and body image were reported by Oloo and colleagues ⁽³²⁾ in Guyana, who found that fathers' education in the United States were positively correlates to body image. Adolescents with parents who have a Master's degree reported higher body image than adolescents whose parents earned lower degrees.

On the other hand, in Taha and colleagues ⁽³³⁾ study conducted in three different Arab countries Egypt, Kingdom of Saudi Arabia, and Yemen, found that there was no statistically significant relationship between father's education and body image. This difference might be due to difference in sample size and age of participants, which is higher than the present enrolled adolescent girls.

Findings of current study indicated that one third of adolescent girls had low self- esteem. This result might be due to the fact that, during adolescences, girls may experience some sort of emotional disturbance, which can lead them to believe they are unattractive and decreases self-esteem. Additionally, the first decrease in self -esteem occurs at the onset of early adolescence when the young person's separation from childhood creates a loss of contentment with being defined and treated any longer as just a child . In the same line, Mahfouz ⁽³²⁾ in Egypt found that most of adolescent girls had low self- esteem. On contrary, results of Ferrari et al ⁽²³⁾ revealed that the only small percentage of Nigerian adolescents had low self- esteem. Those contradictions might because the variation of cultures and the environment.

The main findings of this study revealed that attendance of

counselling program had significantly improved self-esteem, and this achieves the third part of the hypothesis. This improvement might be due to the exiting, interactive and simple method of teaching which depended on sharing ideas, role modeling and allowance of adolescent girls to express feelings in public. Accordingly Park and Park⁽³⁵⁾ found that the counselling program improved adolescent girls' self-esteem in preparatory school.

Present study found that only small percentage of student girls had previous academic failure. A student's achieving success or consistently failing, strongly affects their individual self-esteem.

In this respect, present study found that academic failure was one of the factors which negatively affected self-esteem. This might be explained as academic incompetence felt by the adolescents due to their inability to match the expectations of parents and siblings or might be due to parents' comparison between adolescent's academic achievements with others such as siblings, class mates and cousins and that parents sometimes had unrealistic expectations from them which have made them feel incompetent. The finding is in congruence with Jain and Dixit⁽³⁶⁾ who found that academic failure was one of the factors most negatively impacting the self-esteem of Indian youth.

Regression analysis of current study revealed that birth order was another factor that negatively affected self-esteem. This means that first-borns tended to have higher self-esteem compared to later-born children. This might be explained as; first-borns tend to receive a greater investment and attention from parents. In addition, they often attempt to please their parents by sharing their interests and show a strong willingness to fulfill parental

expectations and wishes and consequently appreciated from parents which certainly affect self-esteem.

In the same vein, this result was supported by the finding of Maus⁽³⁷⁾ study in American Midwestern University (MWU) which indicates that birth order is a significant factor upon self-esteem in individuals indicated a significant difference in self-esteem in relation to birth order. In the same line, Lenta⁽³⁸⁾ results suggested that the youngest children have the lowest self-esteem compared to oldest and middle children, but all other results are inconclusive.

The present study findings also revealed that having net at home was another factor that seems to influence adolescent girls' self-esteem positively. This might be interpreted as; self-esteem is a measure of how one feels about oneself, adolescents attempt to compensate lower self-esteem by seeking it in social media and internet use in order to establish a sense of belonging and increase perception of popularity.

In accordance with this, results of Pantic⁽³⁹⁾ study of one hundred internet users at York University, England implied that individuals who spend more time online have more self-esteem scores.

On contrary, Hobza et al.⁽⁴⁰⁾ found that self-esteem itself can be affected by using internet. From the researcher point of view, being exposed to thin ideal images lowers self-esteem and increases the drive for thinness in women and the drive for muscularity in men.

Moreover, present study results identified having hobbies as a positive predictor of self-esteem, which had a significant influence on it in multivariate analysis. This might be explained as, developing a hobby is one method of improving self-esteem,

hobbies can physiologically boost one's mood and thus, enhance one's self-esteem and it is also an outlet to escape the sometimes mundane, unappealing and even disappointing aspects of lives.

After implementation of the counselling program, the second part of the hypothesis wasn't achieved, as no statistically significant relationship was found between body image and self-esteem. Which means that, increases or decreases in body image do not significantly relate to increases or decreases in self-esteem. This might be interpreted by the fact that, body image describes one's attitude toward a single aspect of the self, namely the physical body, while self-esteem relates to one's view of the self as a whole. In other words, body image constitutes one part of several parts constituting self-esteem.

In the same line Essays ⁽⁴¹⁾ in Malaysia and Gorman ⁽⁴²⁾ in Ireland found that there was no statistically significant relationship between body image and self-esteem.

On the other hand, results of Dohnt and Tiggemann ⁽⁴³⁾ found that body image non-acceptance increases as self-esteem decreases. In addition, Aliyev and Türkmen⁽⁴⁴⁾ found that self-esteem and body-image are closely connected. Also, in contrast with current study results, there were several studies and theories that support that self-esteem does in fact go hand in hand with body image. It has been stated that body image is established as an important aspect of self-worth and mental health across the life span.

This contradiction might be due to differences in girls' culture, tradition or personality, as many girls identify themselves through own body. The reflection of body image gives them positive or negative feelings about

themselves resulting in positive or negative self-esteem.

Conclusion

Current study and research hypothesis concluded that, after implementation of counselling program, there was a dramatic improvement of adolescent girl's body image acceptance; also program implementation had a statistically significant effect on self-esteem. Additionally, findings of the current study revealed that there was no statistically significant relationship found between body image and self-esteem. Multivariate analysis of the present study identified some factors that affect body image positively such as the counselling program, while other factors affecting it negatively as living with both parents and having net at home. On the other hand, there were some factors affecting self-esteem positively as the counselling program, having net at home and having hobbies, while birth order and previous failure affect it negatively.

Recommendation

Based on the findings of the current study, the following recommendations are proposed:-

- Nursing interventions should be conducted to improve adolescents' self-esteem, applied on large scale, taking into account changing pubertal status, and the different effects on female students during program planning.
- Further researches should be conducted on large scale to examine the relationship between body image and self-esteem of adolescent girls to generalize the results.

Table 1: Body image and self-esteem among the total study sample (N=537)

<i>Item</i>	<i>Frequency</i>	<i>Percent</i>
Body image:		
Not accepting (<54)	115	21.4
Average (54≤72)	138	25.7
Accepting (> 72)	284	52.9
Self-esteem:		
low (<13)	181	33.7
Average (13-20)	328	61.1
High (good) (≥21)	28	5.2

Table 2: Frequency distribution of the study group by their personal characteristics (n=96)

<i>Item</i>	<i>Frequency</i>	<i>Percent</i>
School:		
Om-elabtal	63	65.6
Al-hosayneya	33	34.4
Year:		
1 st	41	42.7
2 nd	55	57.3
Age:		
<14	46	47.9
14-16	50	52.1
Range	12.0-15.0	
Mean ± SD	13.5±0.7	
Median	14.0	
Siblings:		
No	1	1.0
Yes	95	99.0
Range	0-6	
Mean ± SD	2.4±1.1	
Median	2	
Birth order:		
1 st	31	32.3
2 nd -3 rd	51	53.1
4 th +	14	14.6
Range	1-5	
Mean ± SD	2.2±1.2	
Median	2	

Table 3:Frequency distribution of the study group by their family characteristics (n=96)

<i>Item</i>	<i>Frequency</i>	<i>Percent</i>
Residence:		
Rural	10	10.4
Urban	86	89.6
Crowding index:		
<2	54	56.3
2+	42	43.8
Live with both parents:		
Yes	91	94.8
No	5	5.2
Reason for no (n=5):		
Divorce	3	60.0
Death	2	40.0
Income:		
Insufficient	7	7.3
Sufficient	89	92.7
Have at home:		
Computer	86	89.6
Internet	70	72.9

Table 4:Frequency distribution of the study group by their parents' characteristics (n=96)

<i>Item</i>	<i>Frequency</i>	<i>Percent</i>
Father education:		
Illiterate, read/write	8	8.4
Basic/Intermediate	44	45.8
University	44	45.8
Father job:		
Employee (governmental)	56	58.3
Worker (free or private)	40	41.7
Mother education:		
Illiterate, read/write	9	9.4
Basic/Intermediate	48	50.0
University	39	40.6
Mother job:		
Housewife	61	63.5
Working	35	36.5

Table 5: Mean pre- post difference in study group scores of body image and self-esteem

Item	Pre-post difference		Paired t-test	p-value
	Mean \pm SD	95% confidence interval		
Body image	62.9 \pm 17.5	59.3-66.4	35.18	<0.001*
self-esteem	1.7 \pm 3.8	0.9-2.4	4.30	<0.001*

(*) Statistically significant at $p < 0.05$

Table 6: Best fitting multiple linear regression model for the body image score (n=96)

Item	Unstandardized Coefficients		Standardized Coefficients	t-test	p-value	95% Confidence Interval for B	
	B	Std. Error				Lower	Upper
Constant	-14.88	4.678		-3.182	.002	-24.113	-5.655
Counselling program	62.885	1.502	.946	41.871	<0.001	59.922	65.848
Live with both parents	-8.008	3.390	-.054	-2.362	.019	-14.696	-1.319
Have net at home	-3.649	1.700	-.049	-2.146	.033	-7.004	-.295

Table 7: Best fitting multiple linear regression model for the self-esteem score (n=96)

Item	Unstandardized Coefficients		Standardized Coefficients	t-test	p-value	95% Confidence Interval for B	
	B	Std. Error				Lower	Upper
Constant	13.702	1.039		13.187	<0.001	11.652	15.751
Counselling program	1.667	.494	.225	3.375	0.001	.692	2.641
Birth order	-.490	.269	-.126	-1.820	.070	-1.022	.041
Have net at home	1.718	.568	.207	3.024	.003	.597	2.840
Have hobbies	1.408	.549	.177	2.564	.011	.325	2.491
Previous failure	-4.449	1.802	-.172	-2.468	.014	-8.005	-.893

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