Assessment of Adolescents' Self- Esteem in Secondary Schools

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الخلاصة:

أهداف الدراسة لتقييم مستوى تقدير الذات للمراهقين البدناء في المدارس الثانوية **منهجية البحث** دراسة وصفية أجريت في المدارس الثانوية لمدينة النجف الأشراف للمدة من 1 كانون الأول 2011 إلى 6 نيسان 2012.اختيرت عينة عشوائية متعددة المراحل من (1350) طالب، تم اختيارها باستخدام عينات احتمالية. جمعت البيانات باستخدام استبانه مصممة ومكونة من ثلاثة أجزاء (1) نموذج البيانات الاجتماعية والاقتصادية و يحوي 14 فقرة (2) مؤشر مقياس تقدير الذات الذي يتألف من 25 فقرة (3) القياسات الجسمانية الذي يشمل الوزن والطول . حددت ثباتية استمارة الاستبيان من خلال أجراء الدراسة المصغرة وحددت مصداقيتها من خلال مجموعة مكونة من (24) خبيرا. **النتائج** أظهرت نتائج الدراسة أن هناك علاقة ذات دلالة إحصائية بين البدانة وبين جنس المشاركين في الدراسة و تسلسل الطالب في الأسرة، مستوى التعليمي للام والوضع الاجتماعي والاقتصادي.بينما لا توجد علاقة ذات دلالة إحصائية بين البدانة وغيرها من المتغيرات. و أظهرت النتائج أيضا وجود علاقة كبيرة جدا بين البدانة وتراجع مؤشر تقدير الذات. وهناك علاقة كبيرة بين مؤشر تقدير الذات وترتيب الطالب في الأسرة، والمستوى التعليمي للأب ، والوضع الاجتماعي والاقتصادي. في حين كانت علاقة غير هامة مع المتغيرات الأخرى. **الاستنتاجات** استنتجت الدراسة أن غالبية المراهقين البدناء في المدارس الثانوية لديهم مشاكل في تقدير الذات، وكانت النسبة المئوية للبدانة (17.3٪). **التوصيات** توصي الدراسة إعطاء الفرص للطلاب للمشاركة في المنظمات والمؤتمرات والفعاليات المدرسية لتعزيز مستوى احترام الذات وبناء الثقة بالنفس وتنفيذ البرامج التعليمية للمدرسين في المدارس الثانوية حول كيفية خفض البدانة بين طلابها. وينبغي عمل منهج صحي منظم موجه لوسائل الإعلام من قبل وزارة التربية والتعليم لزيادة المعرفة والوعي الصحي لكافة طلاب المدارس حول البدانة ومشاكلها الصحية على المراهقين وأثارها النفسية على مستوى تقدير الذات.

Abstract:

Objectives: To assess the secondary schools obese adolescents' self esteem level. **Methodology** A descriptive study is carried out at AL-Najaf AL-Ashraf City, from December 1st, 2011 to April 6th, 2012.A multi stage sample of (1350) subjects; it is selected throughout the use of probability sampling. The data are collected through the use of semi-constructed questionnaire, which consist of three parts (1) Economic Sociodemographic data form that consist of 14-items (2) Index of Self Esteem Scale that consists of 25-items (3) Anthropometric Measurements which consist of Weight and Height. Reliability of the questionnaire is determined through a pilot study and the validity through a panel of (24) experts. **Results** The finding of the present study indicate that there is highly significant relationship between the obesity and the study participants' gender, their order in the family, mother education level, and family socio-economic status. While the obesity and the other variables indicated no significant relationship. The results also shows highly significant relationship between the obesity and the index of self esteem. There is a significant relationship between the index of self-esteem domain and the order of student in family, fathers' education level, and socio-economic status. Other variables indicated no significant . **Conclusion** Present study concluded that the most of the secondary schools obese adolescents have self-esteem problem, and percentage of obesity (17.3%).**Recommendation** the study recommends that the students would be given an opportunities to participate in social organizations, conferences, and study projects to promote their level of self-esteem constructing and implementing educational programs for secondary schools teachers about how to decrease obesity among their students. Mass media approach should be employed by the Ministry of education to increase students knowledge and awareness of the obesity as a health problem.

Key wards: assessment, obese, adolescent, self-esteem, secondary school

INTRODUCTION

Childhood obesity has now become the most prevalent nutritional disease in developed countries. For example, the prevalence of obesity, defined as a body mass index (BMI) equal to or above the 95th percentile for children of the same age and sex [1].Obesity is increasing dramatically worldwide and is projected to affect 1.12 billion people by 2030 [2].The prevalence of obesity is continuing to rise at an alarming rate in many parts of the world and is a major challenging public health issue. The latest projections of the World Health Organization (2010) indicate that globally in 2005, 1.6 billion adults were overweight and 400 million were obese, and that by 2015, 2.3 billion will be overweight and more than 700 million will be obese [15].

Until quite recently, obesity in children was viewed as a cosmetic problem. The major risks associated with obesity in children and adolescents were those consequences that resulted when obesity persisted into adulthood [3].Adolescence is the final critical period for the development of obesity in childhood [4].Some obese adults were fat as children, so child fatness may be a risk factor in its own right for later disease [5].

The rate of obesity and overweight is increasing. Obesity has become a major health problem in large and medium-sized cities. Comparison of data from 1985 and 1990 shows that the proportions of overweight and obesity increased from 2.75 percent to 8.65 percent among boys and from 3.38 percent to 7.18 percent among girls. The rate among boys in urban areas was up to 12 percent in 1995. Both genes and environment have an impact on obesity [6].

The shifts in obesity and related dietary and physical activity patterns across the globe during the past two decades have been remarkable. The rate of increase in obesity has accelerated, particularly for children and adolescents. The large-scale shifts in intake of calorically sweetened beverages, fried foods, and animal food products are striking, accompanied by powerful changes in patterns of eating. Concurrent trends toward reduced physical activity and increased sedentary behavior have led to dramatic shifts in energy balance. The worldwide increases in intake of caloric sweeteners and the increased snacking and food consumption away-from home are serious causes for concern [7].Obesity, in childhood as in adolescence, is not a uniform condition. Some obese children hide severe emotional and personality disturbances behind their obesity. The risk of disordered eating increased during adolescence and correlated with depressive patterns of behavior and low self-esteem [8].

The aims of the study are to identify the secondary school adolescents obesity, to assess the secondary schools obese adolescents' self esteem levels, and to find out the association between the obese adolescents' self esteem and their socio-

demographic characteristics of age, gender, parents education levels, family type and socio-economic status.

METHODOLOGY

Study Design: A descriptive study is conducted through the period between December 1st, 2011 to April 6th, 2012 in-order to assess obese adolescents' self esteem in secondary schools at Al-Najaf Al-Ashraf City.

Study Sample: A multi stage sample of (1350) subjects, were selected throughout the use of probability sampling. The sample of study is divided into two stages which include: First stage: schools selection by stratified- cluster. AL-Najaf City divided to six districts. The schools Selected randomly (18) schools boys and girls, from (110) total schools in AL-Najaf City. Second stage: students' selection by disproportional stratified sampling. From each schools randomly selected (75) students. The total of students were (1350), (675) boys and (675) girls, their age between 13 to 16 years.**The Study Instruments:** A literature draft of instrument questions was developed by the investigator after extensors which addressed the demographic socio-economic data, a draft instrument was developed and pretested with (50) adolescents, the content validity was established after experts reviewed. Furthermore, changes were made in the questionnaire to various terms according to recommendations and notes of experts and Ministry of Planning/Central Council of Statistics. The final study instrument consisted of six major parts and those parts are:**Part 1: Economic-Sociodemographic Data Form:** An economic-sociodemographic data sheet, consisted of many items categorized as general information (gender, birth date, level of education, total number of siblings and number of student between siblings); and socioeconomic data(parents social status, parents occupation status, parents education levels, family type, family number, number of rooms, type of house, house area, house content and car possession)**Part 2: Index of Self Esteem Scale (ISE-25-items).**The adolescents' self esteem was measured by the Arabic version (ISE) .this is a 25-item questionnaire that uses a 5 –point Likert-type scale for responses [9]. Instruments are generally used to assessment of obese adolescents' problems with self –esteem. **Part 3: Anthropometric Measurements: Weight** Electronic weighting was used to obtain the weight. The scale was placed on a hard-floor surface. **Height** was measured for all participants, with the students bare footed and head upright.

Data collection: Data collected by utilizing of the Adopted & developed questionnaire.Weight, Height are checked for each respondent. The data collection process has been performed from February 19th 2012 until April 16th 2012. Each subject takes approximately (5-10) minute to respond to the interview. **Data Analyses:** In order to achieve the early stated objectives, the data of the study were analyzed through the use of statistical package of social sciences (SPSS) version 16through descriptive and inferential statistical analyses.

RESULTS

Table (1) Distribution of the study sample by their overall measurement through BMI percentiles

BMI percentiles		No.	%
BMI percentiles	Underweight (<5th percentile)	32	2.4
	Normal weight (5-84th percentile)	880	65.2
	Overweight (85-94th percentile)	205	15.2
	Obesity (=>95th percentile)	**233**	**17.3**
Total adolescents' selected		**1350**	**100**

Table (1) shows that more than half of the study sample in regard to their BMI perce: has normal weight (65.2 %), only (17.3 %) were obese, and (15.2 %) was overweight.

Table (2) Correlation between the index of self-esteem results and the different general information

General information		Index Self-esteem				p-
		Self-esteem Problem		No problem		
		No.	%	No.	%	
Gender	Male	426	49.1	249	51.	0.363
	Female	442	50.9	233	48.	
Age (years)	13	181	20.9	86	17.	
	14	200	23.0	127	26.	
	15	248	28.6	124	25.	0.218
	16	239	27.5	145	30.	
Number of sibling	1	11	1.3	8	1.7	
	2	55	6.3	27	5.6	
	3	132	15.2	77	16.	
	4	173	19.9	98	20.	
	5	180	20.7	101	21.	
	6	123	14.2	67	13.	
	7	96	11.1	44	9.1	0.977
	8+above	98	11.3	60	12.	
Order of Student in family	First		24.8	158	32.	
	Middle	509	58.6	252	52.	**0.007***
	Last	144	16.6	72	14.	
Father alive	Yes	808	93.1	461	95.	0.058
	No	60	6.9	21	4.4	
Mother alive	Yes	860	99.1	477	99.	0.835
	No	8	.9	5	1.0	

		No.	%	No.	%	p-value
Parents Social Status	Married	827	95.3	463	96.	0.318
	Separated	16	1.8	12	2.5	
	Divorced	24	2.8	7	1.5	
	Others	1	.1	-	-	
Father educational level	Illiterate	43	5.0	19	3.9	**0.011***
	Read&Write	109	12.6	52	10.	
	Primary	159	18.3	98	20.	
	Intermediate	180	20.7	72	14.	
	Secondary	161	18.5	87	18.	
	College/Institu	193	22.2	128	26.	
	Higher edu.	23	2.6	26	5.4	
Mother educational level	Illiterate	64	7.4	39	8.1	0.151
	Read&Write	150	17.3	62	12.	
	Primary	210	24.2	129	26.	
	Intermediate	196	22.6	102	21.	
	Secondary	126	14.5	62	12.	
	College/Institu	112	12.9	82	17.	
	Higher edu.	10	1.2	6	1.2	
SESS	High	179	20.6	126	26.	**0.049***
	Middle	633	72.9	332	68.	
	Low	56	6.5	24	5.0	

Table (2) reflects the correlation between the index of self – esteem and the different studied general information. The results shows that is a significant relationship between the index of self-esteem domains and the order of student in family, fathers' education level, and socio-economic status at p-value (0.007, 0.011, and 0.049) respectively. there is a non significant relationship with the other general information at p-value more than (0.05).

Table (3) Correlation Between the BMI Percentile Results and the Different General Information

		Body mass index (Kg/m2) percentile								p-value
		Underweight		Normal		Overweight		Obese		
		No.	%	No.	%	No.	%	No.	%	
Gender	Male	19	59.4	461	52.4	77	37.6	118	50.6	**0.001***
	Female	13	40.6	419	47.6	128	62.4	115	49.4	
Age	13	10	31.3	171	19.4	37	18.0	49	21.0	0.587
	14	5	15.6	207	23.5	51	24.9	64	27.5	
	15	8	25.0	255	29.0	54	26.3	55	23.6	
	16	9	28.1	247	28.1	63	30.7	65	27.9	
Number of	1	1	3.1	11	1.3	3	1.5	4	1.7	0.590
	2	-	-	51	5.8	10	4.9	21	9.0	
	3	7	21.9	132	15.0	34	16.6	36	15.5	
	4	5	15.6	175	19.9	41	20.0	50	21.5	
	5	4	12.5	182	20.7	41	20.0	54	23.2	
	6	5	15.6	136	15.5	24	11.7	25	10.7	

sibling	7	6	18.8	94	10.7	23	11.2	17	7.3	
	8+above	3	12.5	99	11.3	29	14.2	26	11.1	
Order of Student in family	First	13	40.6	227	25.8	50	24.4	83	35.6	**0.007***
	Middle	15	46.9	519	59.0	121	59.0	106	45.5	
	Last	4	12.5	134	15.2	34	16.6	44	18.9	
Father alive	Yes	30	93.8	829	94.2	194	94.6	216	92.7	0.823
	No	2	6.3	51	5.8	11	5.4	17	7.3	
Mother alive	Yes	32	100.	871	99.0	202	98.5	232	99.6	0.664
	No	-	-	9	1.0	3	1.5	1	.4	
Parents Social Status	Married	31	96.9	838	95.2	195	95.1	226	97.0	
	Separated	1	3.1	20	2.3	4	2.0	3	1.3	0.960
	Divorced	-	-	21	2.4	6	2.9	4	1.7	
Father educational level	Illiterate	-	-	47	5.3	6	2.9	9	3.9	
	Read&Wri	6	18.8	104	11.8	24	11.7	27	11.6	
	Primary	10	31.3	181	20.6	34	16.6	32	13.7	
	Intermedia	6	18.8	162	18.4	42	20.5	42	18.0	0.109
	Secondary	5	15.6	158	18.0	41	20.0	44	18.9	
	College/In	5	15.6	203	23.1	50	24.4	63	27.0	
	Higher	-	-	25	2.8	8	3.9	16	6.9	
Mother educational level	Illiterate	4	12.5	66	7.5	16	7.8	17	7.3	
	Read&Wri	9	28.1	145	16.5	26	12.7	32	13.7	
	Primary	6	18.8	249	28.3	45	22.0	39	16.7	
	Intermedia	7	21.9	192	21.8	40	19.5	59	25.3	**0.004***
	Secondary	3	9.4	111	12.6	36	17.6	38	16.3	
	College/In	3	9.4	107	12.2	41	20.0	43	18.5	
	Higher	-	-	10	1.1	1	.5	5	2.1	
SESS	High	1	3.1	142	16.1	65	31.7	97	41.6	**0.0001***
	Middle	19	59.4	674	76.6	137	66.8	135	57.9	
	Low	12	37.5	64	7.3	3	1.5	1	0.4	

 Table (3) indicates the correlation between the BMI percentile results and the different general information. The study results indicate that there is highly a significant relationship between the BMI percentile result and the study gender participants, student order in the family, mother education level, and socio-economic status at p-value (0.001 , 0.007 , 0.004 , and 0.0001)respectively. While there is a non significant relationship between the BMI percentile results and the other information(date of birth, number of sibling, father alive, mother alive, parents couple, parent separation, and father educational level) at p-value more than 0.05 .

Table (4) Correlation Between the BMI Percentiles Results and the index of self esteem

		BMI percentiles								p-value
		Under-weight		Normal weight		Over-weight		Obesity		
		No.	%	No.	%	No.	%	No.	%	
Index Self-esteem	Self-esteem Problem	21	65.6	534	60.7	127	62.0	186	79.8	0.0001*
	No problem	11	34.4	346	39.3	78	38.0	47	20.2	
*significant at p-value less than 0.05										

Table (4) shows a highly significant association between the BMI percentile results and the index of self esteem p-value (0.0001).

DISCUSSION

Part-1-: Discussion of the BMI Percentiles Related to the Adolescents' in Secondary Schools (table 1, 3)

The study results (table 1), reflects that more than half of the study sample in regarding to their BMI percentile has normal weight (65.2 %), only (17.3 %) were obese, and (15.2 %) was overweight. The correlation between the BMI percentile results and the different general information (table 3). The study results indicate that there is highly a significant relationship between the BMI percentile result and the study participants gender, student order in family, mother education level, and socio-economic status at p-value (0.001 , 0.007 , 0.004 , and 0.0001)respectively. While there is a non significant relationship between the BMI percentile results and the other information(age, number of sibling, father alive, mother alive, parents social status, and father educational level) at p-value more than 0.05 .

Part-2-: Discussion of the Index of Self-Esteem Domain's Related to the Adolescents' in Secondary Schools (table 2, 4)

The correlation between the index of self – esteem and the different studied general information (table 2).The study results show that there is a significant relationship between the index of self-esteem domains and the order of student in family, fathers' education level, and socio-economic status at p-value (0.007, 0.011, and 0.049) respectively. While there is a non significant relationship with the gender, age, number of sibling, father alive, mother alive, parents social status, and mother educational level at p-value more than (0.05). Females tend to be more critical of less satisfied with their overall body image than their male peers [11].Self-esteem is higher in boys than girls during adolescence[12].

The study results (table 4), This table shows the correlation between the BMI percentile results and the index of self esteem. The results show that there is a highly significant relationship between the BMI percentile results and the index of self esteem at p-value (0.0001). In this study, the obesity and self-esteem (table 4), the study results shows that (79.8%) of obese adolescents have a self-esteem problems, while (20.2%) of obese adolescents have no problem with self-esteem. Green(2005) reported that the obese adolescents often suffer from lower self-esteem and a negative self-image, thus creating heightened levels of psychological distress Hence, those who are overweight are at risk of not only a host of physical problems and ailments but also the psychological damage caused by ridicule and social isolation [13]. Yet empirical research indicates that not all obese persons suffer from low self-esteem [14].

CONCLUSIONS:

According to the present study findings, the researcher concluded the following

1.The study confirms that the majority of obese are male, while the majority of overweight were female.

2.The study confirms that obesity most common occurs among adolescents in middle child in the family.

3.The study indicates that the obesity associated with mother educational level.

4.The study indicates that the obesity has a significant relationship to SESS.

5.The study indicates that most of obese adolescents have problem with their self-esteem.

6. Excess weight is also likely to lead to prejudice in the school, lower self-esteem and reduced self confidence.

RECOMMENDATIONS:

For better adolescents' weight status and improved their self esteem in secondary schools the investigator recommends the following for:

1. Based on these study data, approaches focusing solely on self-esteem seem unlikely to be particularly effective in the management of obesity in the elementary adolescent years.

2. Interventions for overweight/obese adolescents age group, the focus should be on reducing body weight, to improve self-esteem effect.

3. Psychological treatment, support and counseling provided to obese adolescents and their families.

4. Regular visit should be scheduled for schools to detected obesity.

5. Implement a coordinated school health approach to prevent obesity.

6. Educate parents, teachers, and other individuals who interact with adolescents about potential medical and psychosocial consequences of adolescent's obesity.

7. Adolescents should be encouraged to practice sports and routine exercise.

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