



# IN DIFFERENT METHOD OF THE EVALUATION OF STATE OF FEELING ( *cognitive functions/ socioemotional adaptation*) OF OBESE CHILDREN; **Goodenough Harris ‘The Draw-A-Person’ Test**

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## Introduction

Psychosocial problems which the obesity caused is one of the most important reasons that impede success of treatment. Researches indicate that , majority of all obese children have depression. In this study, the effect of obesity on state feeling (*cognitive functions and socioemotional adaptation*) were investigated in a special test. To this end obese and nonobese young patients were compared by a special test determines the ability of mind and concepts

## Material and Methods

Our study included 26 patients between the ages of 4-14 years (14 obese- 9 nonobese). Organic obesity, chronic disease and medication history were excluded from this study. After received a detailed history and physical examination, anthropometric assessment in all cases *Goodenough Harris Draw a Man Test* (GEH BIC) test was performed. *The criteria used in this test and their meanings are indicated in annex-1.* Implementation and interpretation of the test was performed by the same specialist.

## Results

14 obese and 9 nonobese patients mean ages were respectively  $8.86 \pm 2$  years and  $9.86 \pm 0.89$  years. Anthropometric evaluation are shown in Table 1. According to Goodenough Harris Draw a Man Test , 8 cases of the 14 obese patients did not draw hand, and 11 cases of the obese patients did not draw finger. Despite that, only 5 cases of the nonobese group drew less numbered fingers. Six of the obese cases drew little figures. Examples of their drawings of obese patients are also shown *fig1.*

Figure-1: Examples of drawings of our obese patients



TABLE-1: Anthropometric evaluation of obese and nonobese cases

	OBESE	NONOBESE	TOTAL
NUMBER OF CASES	14(%66.6)	7(%33.3)	21
DISTRIBUTION OF BOYS GIRLS	G:6(%42.9) B:8(%57.1)	G:4(%57.1) B:3(%42.9)	G:10(%47.6) B:11(%52.4)
AGE	MEAN:8.86±2 MINIMUM:6 MAX:12	MEAN:9.86±0.89 MINIMUM:9 MAX:11	MEAN:9.19±1.806 MINIMUM:6 MAX:6
BMI(KG/M2)	MEAN:25±2.97 MIN:20.39 MAX:30.48	MEAN:15.44±2.74 MIN:13 MAX:21.3	MEAN:21.83±5.42 MIN:13 MAX:30.45
PUBERTY	PREPUBERTAL:11(%78.6) PUBERTAL:3(%21.4)	PREPUBERTAL:7(%100) PUBERTAL:0	PREPUBERTAL:18(%85.71) PUBERTAL:3(%14.28)

## ANNEX1: Goodenough Harris ‘The Draw-A-Person’ Test

The Goodenough-Harris Drawing Test (GHDT) is a non-verbal assessment of young children's levels of intellectual maturity which are inferred from the detail and concepts included in human figure drawings(1). To evaluate intelligence, the test administrator uses the Draw-a-Person: QSS (quantitative scoring system). This system analyzes fourteen different aspects of the drawings (such as specific body parts and clothing) for various criteria, including presence or absence, detail, and proportion. In all, there are 64 scoring items for each drawing. A separate standard score is recorded for each drawing, and a total score for all three. The use of a nonverbal, nonthreatening task to evaluate intelligence is intended to eliminate possible sources of bias by reducing variables like primary language, verbal skills, communication disabilities, and sensitivity to working under pressure. The purpose of the test is to assist professionals in inferring children's cognitive developmental levels with little or no influence of other factors such as language barriers or special needs(2).

## Conclusion

**In obese group, tiny figure drawing and drawing figures without hand-finger, were significantly higher than in nonobese group. According to Goodenough Harris Draw a Man Test, drawing figures without hand-finger is the sign of sense of guilt, and tiny figure drawing is also symbolize the lack of self-confidence. These data suggests that , obese child have intense feelings of guilt and lack of self-confidence.**

## References:

1. Maley, Claire (2009) Young children's human figure drawings: an investigation using the Goodenough-Harris Drawing Test and the Rasch Model for measurement. PhD thesis, James Cook University.
2. Ter Laack, J.; de Goede, M.; Aleva, A. (2005). "The Draw-A-Person Test: An Indicator of Children's Cognitive and Socioemotional Adaptation?". Journal of Genetic Psychology (Heldref Publications).

