

**A COMPARATIVE STUDY OF SELECTIVE ANTHROPOMETRIC
MEASUREMENTS OF EGYPTIAN CHILDREN WITH SUPERIOR
VERSUS AVERAGE INTELLIGENCE AT AGE 6-8 YEARS**

THESIS

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Ph.D. in Childhood Studies

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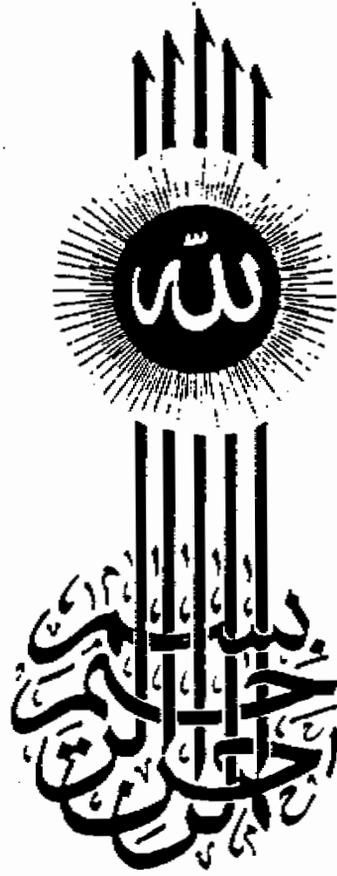
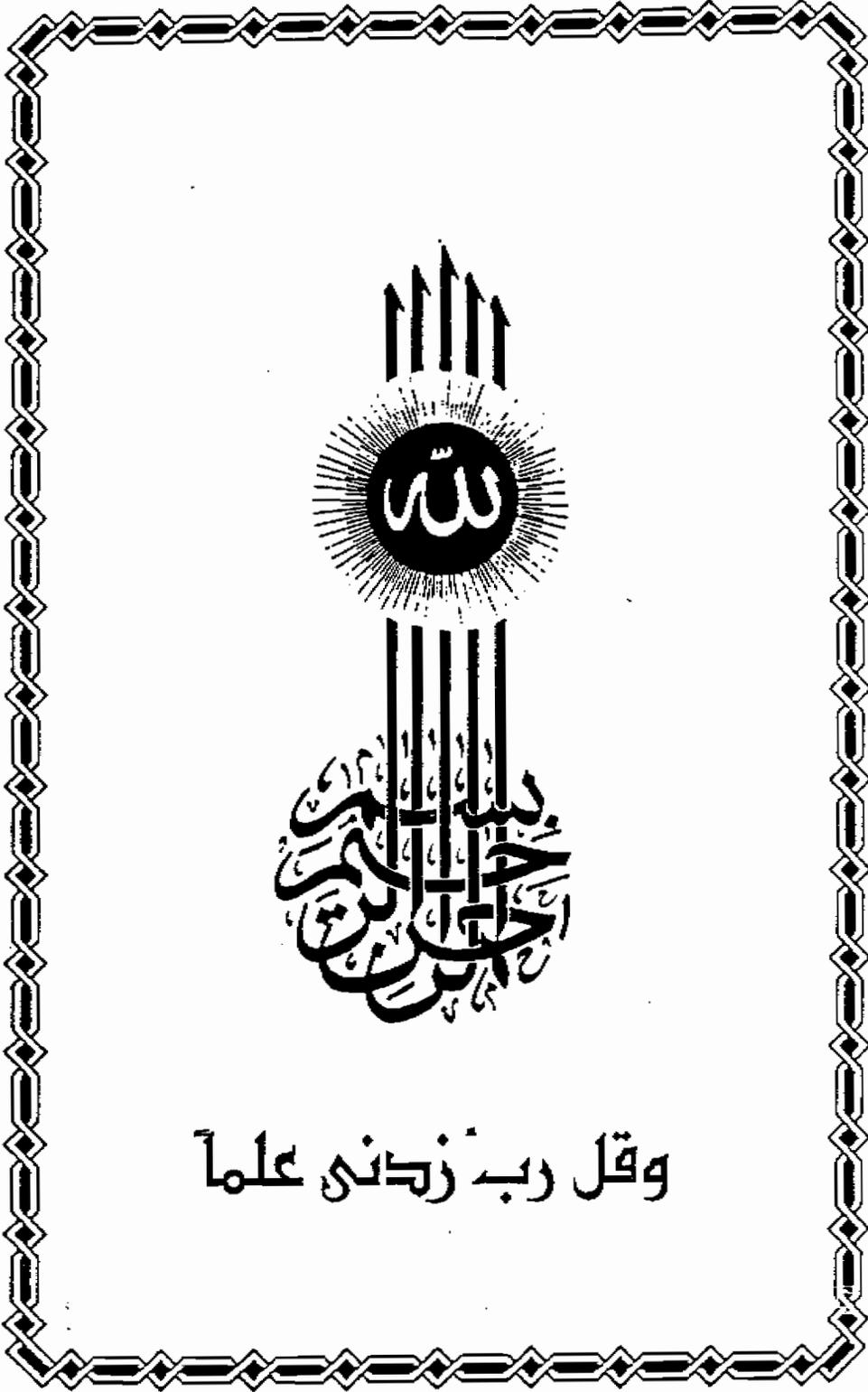
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ABBREVIATIONS

AAMD:	American Association of Mental Deficiency
Cir.:	Circumference
Cm:	Centimeter
Fig.:	Figure
IQ:	Intelligence quotient
Intel.:	Intelligence
Kg.:	Kilogram
Lt.MAcX:	Left midarm circumference
Lt. TSF:	Left Triceps Skinfold Thickness
m:	Month
mm:	Millimeter
NCHS:	National center of health statistics.
PEM:	Protein energy malnutrition
Rt.MACX:	Right Midarm Circumference
Rt. TSF:	Right triceps skinfold thickness
r:	Correlation coefficient
SE:	Standard error
SD:	Standard deviation
SDS:	Standard deviation score
t:	t-test
\bar{x} :	Mean
%:	Percent
3 rd :	Third
6 th :	Sixth
<:	Less than
>:	More than
$\sqrt{\quad}$:	Square root.

**INTRODUCTION
AND AIM OF THE WORK**

INTRODUCTION AND AIM OF THE WORK

Growth studies provide a means of monitoring developmental plasticity and are important in evaluating the impact of environmental stress (*Buschange et al., 1983*).

Waston, 1967, Sorva and others 1990, stated that growth of young children is an extremely sensitive indicator of the general state of their health and any adverse changes in the environment can disturb growth before or without any clinically diagnostable disease.

Association between physical growth and mental development has interested many scholars in the field (*Tanner, 1969, Tanner, 1978, Lasky et al., 1981, Pollitte et al., 1982 and Ounsted et al., 1988*).

However, the human growth is not a steady uniform process all over the growth period but certain periods are characterized by marked change in rate and increment of growth e.g pubertal growth spurt. Nevertheless, in the man's medical and social heritage the age of 7 years constitute special interest in marking between periods of growth. The ancient Greeks classify the human growth into stages each of 7 y. period

(Tanner, 1981). In our culture, there is indication that age of 7 is an important turning point.

Fisch et al., 1976 and Ounsted et al., 1988, analysed the developmental scores for height, weight and head circumference of group of children at the age of 7 years who had been small, average or large for gestational age at birth. The physical status at birth and at seven years age were positively correlate and they noticed as well a significant positive correlation between head circumference and developmental scores.

Willerman, 1972, also demonstrated an association between high birth weight and high IQ at age of 4 years among Negro children.

Commonly, medical professionals are mostly involved with pathology and disease, as well as information concerning impairment, deviation and regression of child development. Much less information is available about children with superior intelligence (*Cattell, 1915; Terman, 1924; Cole, 1956; Strodbeck, 1958; Gallagher, 1959; Stouffer et al., 1959 and Willerman et al., 1974*).

It would be helpful to learn more about bright children in order to understand better the development of children with lower intellectual capacities and probably improve them (*Fish et al., 1976*).

Aim of The Work

The purpose of this study is to:

1. Assess intellectual and physical status of Egyptian samples of male and female children at age of seven years.
2. Assess sex differences in both physical and intellectual status.
3. Investigate intellectual level of these children with superior intelligence quotients (IQ).
4. Compare the values of the anthropometric measurements used in this study for children with superior and those with average intelligence quotients IQ.

REVIEW OF LITERATURES