EVENT RELATED EVOKED POTENTIAL IN OFFSPRING AT HIGH RISK FOR SCHIZOPHRENIA AND DEPRESSION

A THESIS

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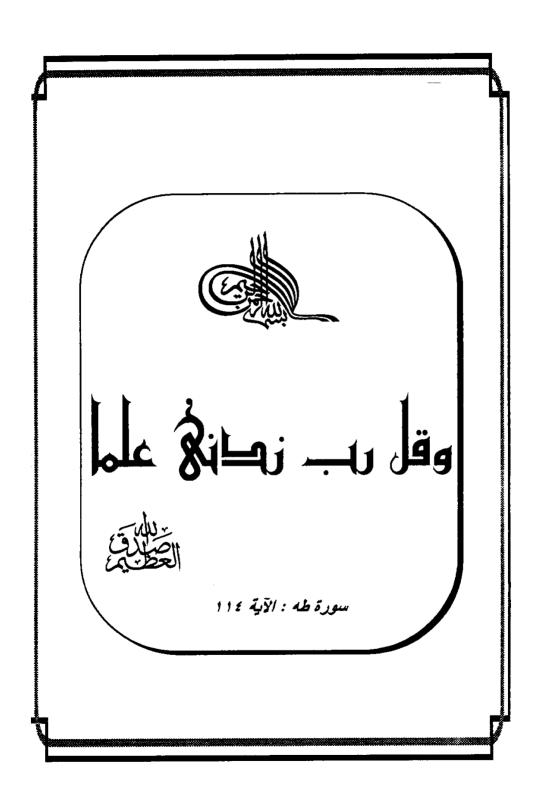
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DEDICATED TO ..

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LIST OF ABBREVIATIONS

BO Erythrocyte Blood Groups.

EPs Auditory-Evoked Potentials.

ERP Auditory Event Related Potential.

NA Anti-Nuclear Antibodies.

AEP Brain-stem Auditory Event Related Potential.

EAM Brain Electeric Activity Mapping.

PRS Brief-Psychiatric Rating Scale.

RMS Bech-Rafaelsen Melancholia Scale.

AMP Cyclic-Adenosine Mono-Phosphate.

OMT Catecholamine-0-Methyl-Transferase.

PK Creatinine Phosphokinase.

SF Cerebrospinal Fluid.

T Computerized Tomography.

BH Dopamine-B-Hydroxylase.

RD₂ Dopamine D₂ Receptor gene.

ST Dexamethazone-Suppression Test.

Z Dizygotic.

Electro-Convulsive Therapy.
EG Electro-Encephalography.
Event-Related Potential.

SH Follicular Stimulating Hormone.

Gamma-Amino-Butyric Acid.

GH Growth Hormone.

General Health Questionnaire.
HIAA 5-Hydroxy-Indole-Acetic Acid.
Human Leukocyte Antigens.

TRSD Hamilton Rating Scale for Depression.

MP ¹²³I-labelled Iodoamphetamine.

LH Leutinizing Hormone.

Mono-Amine Oxidase.

RODUCTION

INTRODUCTION

related potentials (ERP) are series of positive and negative waves that are generated above the brain stem and have a widespread scalp distribution. There are two naming systems for these waveforms, the negative (N) and positive (P) waves can be labelled in numerical order, or can be labelled by their average latency in group of healthy subjects. The major waves are the N100, P200, N200 and P300 (Oken et al., 1989). These event related potentials are also referred as cognitive evoked potentials or endogenous event related potentials (Oken, 1989).

Many researchers studied the implication of these event related potentials in different psychiatric disorders. Cohen, (1990) found significant attentuation in the amplitude of N100, and /or P300 in schizophrenics. Moreover, also the latencies of both N100 and P300 were found to be increased (Roth et al., 1986).

Rimpel et al., (1995) studied the event related potentials in the course of antidepressant treatment, they mentioned that the latency of N100 seemed to be increased significantly with therapy and the latency of P300 was decreased significantly with therapy.

As schizophrenia and depression are genetically inherited diseases and because there are many vulnerability markers in offsprings of schizophrenia and depression categories, so, many researchers started to study the importance of event related potentials in early detection of children at high risk for schizophrenia and depression.

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AIM OF THE WORK

- 1. To review the different correlates of schizophrenia and depression including event related potential.
- 2. To determine whether changes in event related potential, when present, can provide a distinction to be made among those common disorders.
- 3. To assess the value of ERPs as a diagnostic aid in early detection of subjects genetically at risk for schizophrenia and depression.