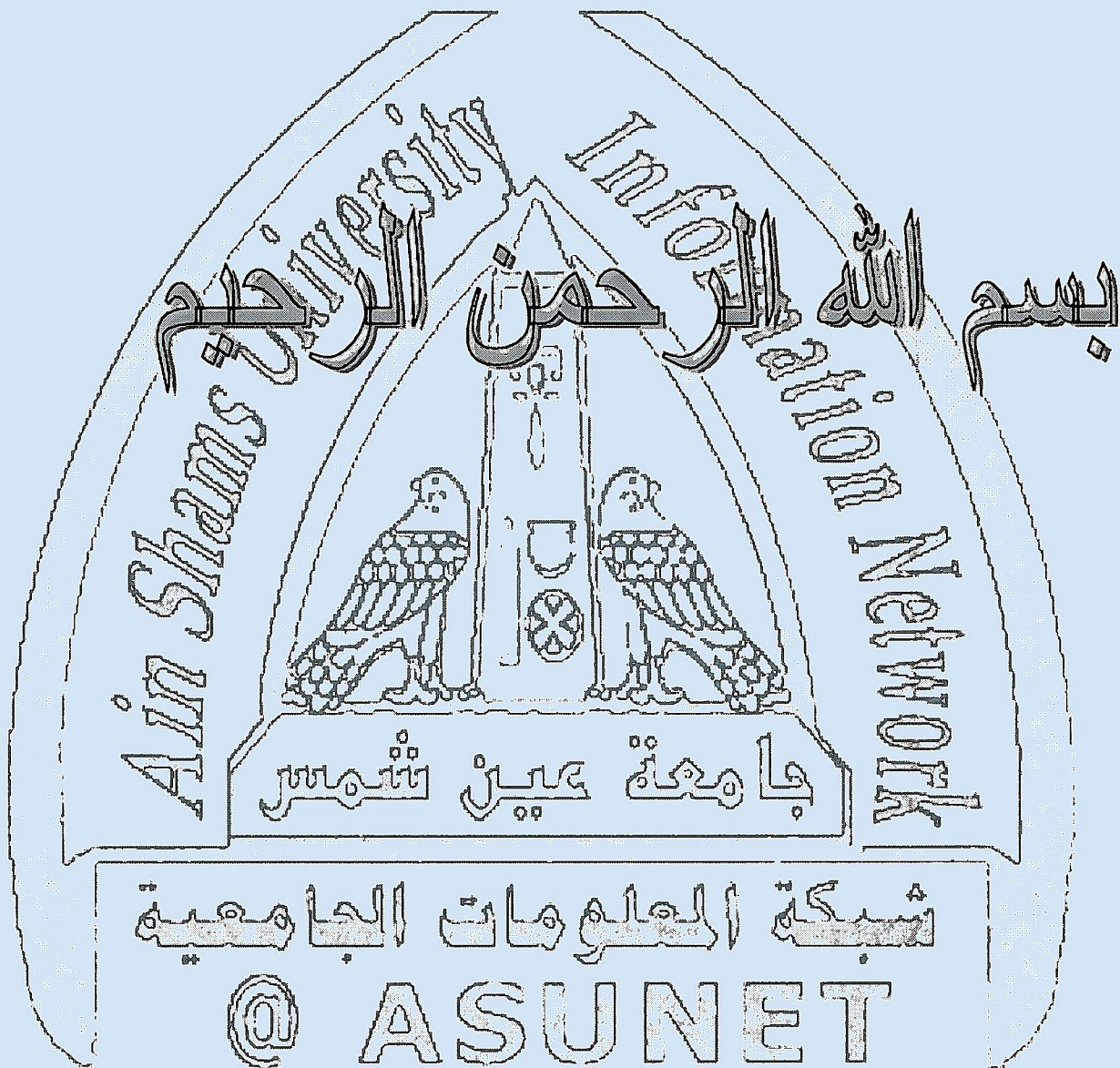




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شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم

بعض الوثائق الأصلية تالفة

**COGNITIVE DEFICITS AND BEHAVIORAL DISORDERS
IN CHILDHOOD PARTIAL SEIZURES**

THESIS

Submitted in Partial Fulfillment of Requirements For
Medical Doctorate Degree in Neurology

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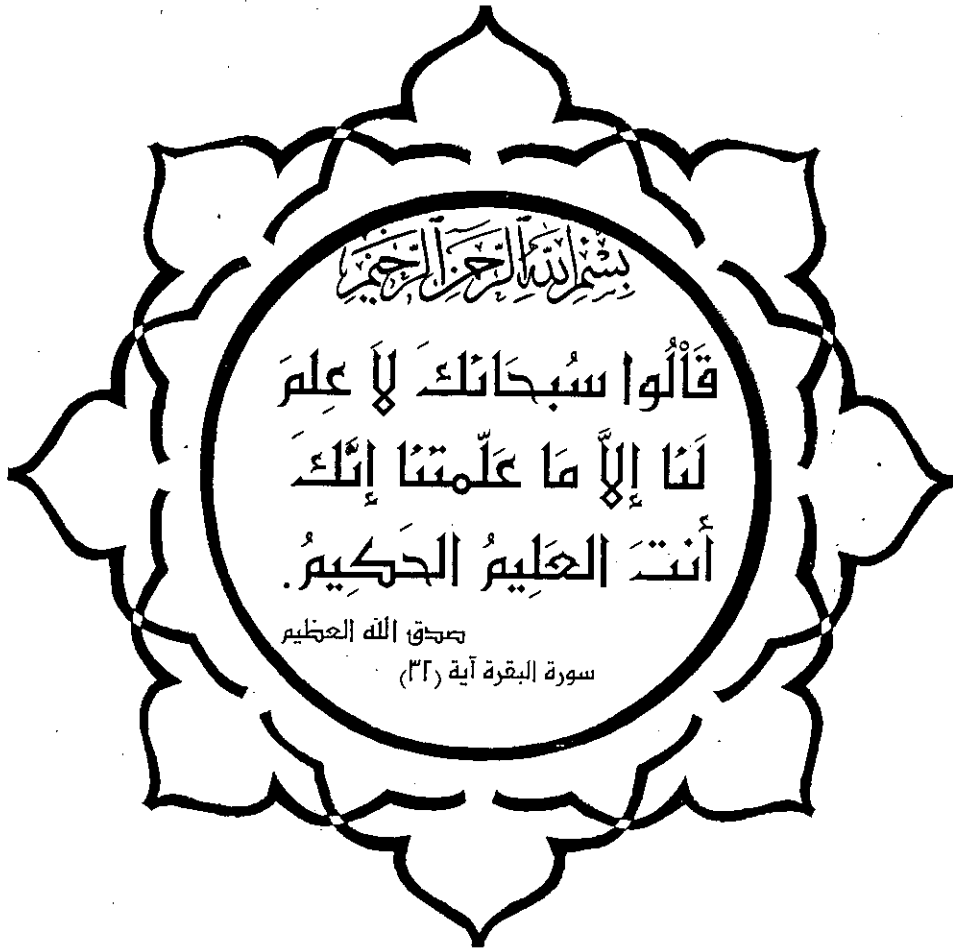
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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قَالُوا سُبْحَانَكَ لَا عِلْمَ
لَنَا إِلَّا مَا عَلَّمْتَنَا إِنَّكَ
أَنْتَ الْعَلِيمُ الْحَكِيمُ

صدق الله العظيم

سورة البقرة آية (٣٢)

ABSTRACT

The negative impact of epilepsy on learning process is well-established; leading to scholastic underachievement, and social maladjustment. The aim of this work is to shed light on the nature of the cognitive deficits and behavioral disorders in epileptic patients with normal I.Q. To achieve this aim, 140 children with partial epilepsy and 50 control children with age from 8 to 16 years were subjected to a battery of laboratory, neurophysiological, radiological and psychometric assessments.

Results: The performance of the epileptic patients was significantly worse than that of the control children in all applied psychometric tests for cognitive abilities and behavioral characteristics. The performance of patients who were on polytherapy was worse than that of those who were on monotherapy. There were significant negative correlations between the severity of EEG changes and the performance of the applied psychometric tests for cognitive abilities. There were significant negative correlations between the P300 latencies and the performance of the tests used for evaluation of cognition and behavior.

Conclusion: Epilepsy has a bad impact on both cognitive and behavioral characteristics of children.

Key Words: Epilepsy, Childhood, Cognition, Behavior, Psychological Assessment.

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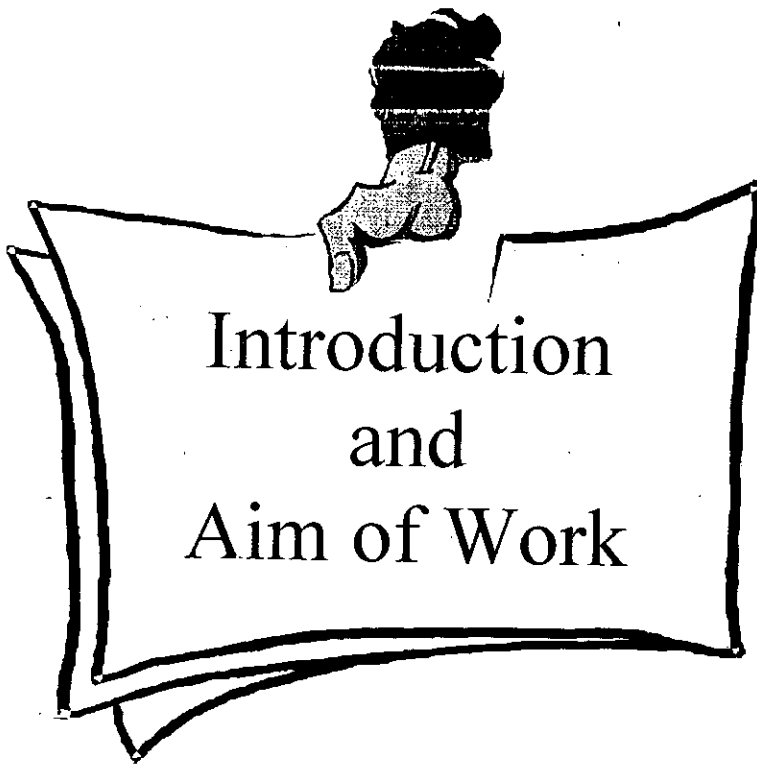
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Introduction
and
Aim of Work

INTRODUCTION

There are accumulating evidences that epilepsy must be considered as a major risk factor for learning disabilities in children, these evidences make a consensus about the necessity for extensive assessment of learning problems occurring in children with epilepsy (*Aldenkamp et al., 2000*).

Moreover, *Aldenkamp et al., (1990)* considered that the associated cognitive impairments and behavioral disturbances in epileptic children were regarded as a factor mediating between epileptic conditions and inability to learn in school.

It is worth noting that, the disturbance in cognitive functions, and the neurobehavioral problems in children with epileptic seizures even in those with normal intelligence or with epileptic syndromes that thought to be independent of structural brain disease are well-established by many authors (*Seidenberg et al., 1986; Mitchell et al., 1992; Giovagnoli et al., 1997; Croona et al., 1999; Aldenkamp et al., 1999; and Bailet and Turk, 2000*)

However, several cautions must be considered when interpreting the relationship between epilepsy and the disturbance of cognition and behavior, which is exceptionally complex and needs a multifactorial approach (*Maquet et al., 1995; and Perrine and Kiolbasa, 1999*).

The effects of epilepsy on learning have been investigated by examination of different processes, which are integral to learning behavior, such as attention, information processing, and memory. Furtherly, as the educational outcome is a