Emotional intelligence in a group of children with ADHD-Institute of Psychiatry Ain Shams University

A thesis by

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CONTENTS

LIST OF ABBREVIATIONS

Tei	**:**	Trait emotional intelligence
ADHD	**:**	Attention Deficit Hyperactivity Disorder
IQ	**:**	Intelligence Quotient
No.	**:**	Number
DSM-IV	**:**	Diagnostic and Statistical Manual of Mental disorder 4th edition
DSM-5	**:**	Diagnostic and Statistical Manual of Mental disorder 5th edition
ICD-10	**:**	International Statistical Classification of Diseases and Related health problems,10th revision

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ABSTRACT

Attention-deficit hyperactivity disorder (ADHD) is a disorder of inattention, impulsivity, and hyperactivity that affects 8-12% of children worldwide

In ADHD; the inability to inhibit responses is associated with increased emotional reactivity, lower frustration tolerance, decreased empathy and a diminished ability to self regulate emotions thus it has been hypothesized that emotional intelligence is affected in ADHD

Emotional intelligence is a term used to describe the ability of an individual to recognize their own and other people's emotions, to discriminate between different feelings and label them appropriately, and to use emotional information to guide thinking and behavior

In light of this evidence, the research team was motivated to investigate the TEI in a sample of Egyptian children with ADHD compared to group of age, sex, IQ and socio-demographically matched normal children. In addition to study the correlation between symptoms profile, subtypes of ADHD and components of TEI.

From the findings of the present study, we can conclude that trait emotional intelligence is greatly affected in children diagnosed with ADHD and that emotional deficits are corner stone features of that disorder.

Comparing the three subtypes of ADHD regarding trait emotional intelligence yielded that the emotional perception deficit was more with symptoms of inattention , while emotion regulation deficits was more with hyperactivity.

It was also concluded that low impulsivity facet of trait emotional intelligence is a very important skill which was less in ADHD children and that may affects peer relations, social problems symptoms and behavior regulation.

So overall there was significant association between ADHD as measured by Conner and TEI facets. Thus increase severity of ADHD symptoms associated with lower score on the global score of TEI and lower score on the most of the subscales

Keyword: Attention-Deficit, Hyperactivity Disorder, Emotional Intelligence, Impulsivity, Social Problems

INTRODUCTION

In the past two decades Attention Deficit Hyperkinetic Disorder became one of the most recognized disorders. Attention-deficit hyperactivity disorder (ADHD) is a disorder of inattention, impulsivity, and hyperactivity that affects 8-12% of children worldwide. Although the rate of ADHD falls with age, at least half of children with the disorder will have impairing symptoms in adulthood. Twin, adoption, and molecular genetic studies show ADHD to be highly heritable, and other findings have recorded obstetric complications and psychosocial adversity as predisposing risk factors ***(Barkley, 2009)***.

Research has assessed that neurobiological, cognitive and behavioral correlates of ADHD, with evidence to support underlying deficits in executive functions and behavioral inhibition, it has also been suggested that these deficits have implications in essential socio-emotional domains ***(Barkley, 1997)***.

In ADHD; the inability to inhibit responses is associated with increased emotional reactivity, lower frustration tolerance, decreased empathy and a diminished ability to self regulate

emotions thus it has been hypothesized that emotional intelligence is affected in ADHD ***(Friedman et al., 2003)***.

Emotional intelligence is a term used to describe the ability of an individual to recognize their own and other people's emotions, to discriminate between different feelings and label them appropriately, and to use emotional information to guide thinking and behavior **(*Coleman & Andrew 2008*)**.

There are several models of emotional intelligence; the *trait model* is one of those which was developed by Konstantin Vasily Petrides in 2001. It "encompasses behavioral dispositions and self perceived abilities and is measured through self report" ***(Petrides et al., 2001)***.

Moreover, research cites impairments in emotion processing, ranging from perception of emotional states in others to the experience of emotion in oneself, as one consequence of these deficits in affective appraisal and social processing, children and adolescents with ADHD display substantial difficulty interacting with peers and forming relationships ***(Scime & Norvilitis, 2006; Blaskey et al., 2007; Martel, 2009; Sobanski et al., 2010)***.

Children with ADHD are theorized to have impaired executive functioning, which links potentially with both TEI ***(Perner et al., 2002)*** and impairment of it can lead to some of the symptomatology seen in ADHD ***(Charman et al., 2001; Petrides et al., 2006)***. Till recently very few investigations of TEI has been carried out in an ADHD population, although it has strong implications in childhood, that the study can potentially shed some light on the social difficulties shown by many children with ADHD.

In light of this evidence, the research team was motivated to investigate the TEI in a sample of Egyptian children with ADHD compared to group of age, sex, IQ and socio-demographically matched normal children. In addition to study the correlation between symptoms profile, subtypes of ADHD and components of TEI.

HYPOTHESIS

This study hypothesized that Egyptian children aged (8-12) diagnosed with ADHD have higher rates of low emotional intelligence than normal Egyptian children.

OBJECTIVES

This study was conducted to:

1- Compare between TEI in a group of children with ADHD and group of age, sex, IQ and socio-demographically matched normal children

2- Correlate between components of TEI and symptoms profile of ADHD.

CHAPTER (1)

Attention Deficit Hyperactivity Disorder

Attention deficit hyperactivity disorder (ADHD) is one of the most prevalent psychiatric disorders in children which greatly impairs social and cognitive functions in affected individuals.

Historically, a series of names including minimal brain damage syndrome, minimal brain dysfunction, hyperkinetic reaction of childhood, and attention deficit disorder have been used to describe the disorder now known as attention-deficit/hyperactivity disorder ***(American Psychiatric Association, 1994)***.

Prevalence of ADHD:

ADHD is the most common psychiatric disorder of the childhood; the prevalence ranges from 5-12% in school-aged children with male to female ratio around 3:1 in children and adolescents, though it is believed that females are under-diagnosed. Approximately 8-10% of males and 3-4% of females, under the age of 18 have ADHD ***(Sadek, 2014).***

ADHD's onset occurs around 3 years of age in both sexes ***(Neuman et al., 2005)***.About 80% of children with ADHD will continue into adolescence and 60% will maintain their core symptoms into adulthood ***(Sadek, 2014)***.

Co-morbidities with ADHD:

ADHD is a clinically heterogeneous condition, in which symptom overlap and comorbidity with other conditions is the rule rather than the exception ***(Yoshimasu et al., 2012)***.

Children with ADHD are more likely to experience one or more psychiatric comorbidities by the age of 19 as autistic spectrum disorders, motor coordination problems, tic disorders, sleep disorders, specific learning disorders such as dyslexia, and child-psychiatric disorders such as depression, anxiety, oppositional defiant and conduct disorders ***(Yoshimasu et al., 2012)***

A study made by ***Ghada A.M., and her collegaues*** in 2015 was done to study anxiety disorders among a sample of children with ADHD, the study found that the most frequent anxiety disorder in was generalized anxiety disorder followed by social anxiety disorder as it was 38.6% and 34.3%, respectively, whereas the least frequent was that of obsessive compulsive disorder (2.9%).

Another study done by ***Ghada A.M., and her colleagues*** in 2013 was done to study comorbid depression among children with ADHD, the study revealed that twenty three (32.9%) patients had depressive symptoms while 19 (27.1%) patients had MD. Depression and depressive symptoms were significantly more among females and more among combined and inattentive type.

Etiology:

ADHD is best understood as a multifactorial disorder in which genetic and environmental factors play a complex role. Researchers are looking at possible environmental factors, and are studying how brain injuries, nutrition, and environmental factors might contribute to ADHD ***(Gilliam et al., 2011)***.

A study made by ***(Bishry et al., 2013)*** studied the risk factors for ADHD in a sample of Egyptian adolescents, the study concluded that the diagnosis of ADHD was significantly associated with low socioeconomic state (8.0%), first sib order (42.5%), quarrelsome home atmosphere (21.8%). One third of the ADHD sample was exposed to cold family relations and criticism with a highly significant association, a similar percentage was exposed to parental aggression and abuse but displayed significant statistical association . Students with ADHD were significantly exposed to postnatal complications (23%), and had more joint (20.7%) and chest (26.4%) diseases; their school performance and IQ scores displayed very highly significant lower values than the control group. Risk factors associated with ADHD were family history of psychiatric illness, history of head trauma, first sib order, delayed sphincter control, epilepsy and parental disharmony.

A- Genetic Factors:

Studies of twins show that ADHD often runs in families, family-genetic studies indicate that ADHD aggregates in families,