Abstract
Anecdotal evidence in Trinidad has shown a high prevalence rate of children diagnosed with ADHD. Research has consistently demonstrated that mothers of the children clinically diagnosed with ADHD are at greater risk for the development of psychological distress such as depression, hopelessness and helplessness. There is currently limited information available on the presence of such forms of psychological distress experienced by mothers of children with ADHD in Trinidad. This study assessed the levels depression, hopelessness and helplessness experienced by mothers of children diagnosed with ADHD in comparison with mothers whose children were not diagnosed with ADHD by using three t-tests. Results demonstrated that significantly higher levels of depression and hopelessness were not experienced by mothers whose children were diagnosed with ADHD. The study highlighted that higher levels of helplessness were experienced by mothers whose children were diagnosed with ADHD. These findings were discussed within the cultural context of Trinidad and the need for further research proposed alongside the limitations of the study.

Keywords: Attention Deficit Hyperactivity Disorder (ADHD); Mothers; Depression; Hopelessness; Helplessness; Trinidad.
**Introduction**

Attention Deficit Hyperactivity Disorder (ADHD) has become one of the most widely studied childhood psychiatric disorders as its prevalence has increased over the past two decades. Aside from tracking rates of ADHD and its treatment, researchers also explored parental perceptions about the disorder, the impact on family and parenting experiences just to name a few. The majority of the literature on ADHD has been based on quantitative surveys which although useful for obtaining information on large samples, rarely probe further into issues than a question or two. This study therefore attempts to fill an existing gap in the literature by examining three psychological symptoms that mothers may experience as a result of a child’s diagnosis of ADHD. In doing so, the study utilises a control group of mothers whose children were not diagnosed with ADHD in an attempt to tease out differences in mothers’ psychological symptoms, rather than solely reporting the scores of only one group of mothers.

Historically, depressive symptomatology has been a common finding in mothers who have special needs children, including those with ADHD. Increased parental anxiety or obsessive-compulsive traits were not found to be an indicator of the construct in this model. It was found that if a mother did not value or feel comfortable being a parent and had low self-esteem, she was at greater risk of experiencing general psychological distress with elevated sensitivity in interpersonal situations. Wymbs, Pelham Molina, Gngay, Wilson & Greenhouse (2008) posited that parents of youths diagnosed with ADHD in childhood were more likely to be divorced by the time the affected child was eight years old. A disruptive child’s behaviour interacts overtime with family stressors which sparks marital conflict in less educated mothers (Emery, 1999, as cited in Wymbs et al., 2008).

The authors found that having a child diagnosed with ADHD was significantly associated with mothers having a mental health condition; 20.50% for mothers of a child with ADHD and 5.6% of mothers with no diagnosis of ADHD. It is also possible that maternal depression may affect an ADHD affected child’s outcome. Although there is relatively less research data on a child’s ADHD diagnosis and hopelessness, than depression, it is of critical importance to note that depression and hopelessness tend to be highly correlated, and as such, literature pointing to the emergence of depressive symptoms may be inclusive of hopelessness symptoms (Beck, Brown, Berchick, Stewart & Steer, 1990), although not necessarily so (Greene, 1989). In support of Beck et al. (1990), Ceylan and Aral (2007) found that maternal depression and hopelessness significantly correlated, \( r = 0.72, p < 0.001 \), in mothers of disabled children in Turkey. Just as in the current study, the Beck Depression Scale and Beck Hopelessness Scale were used by Ceylan and Aral (2007).

As the previous section illustrates, a child’s diagnosis of ADHD tends to be associated with maternal psychological ill-health in the form of depression. In some cultures, ADHD is often misunderstood and sometimes mis-diagnosed because of culture-specific factors as was described by Arcia and Fernández (1998). In studying the experiences of seven Cuban American mothers in Florida of a child diagnosed with ADHD, Arcia and Fernández (1998) found that mothers often experienced “perplexity” (p.338) at their child’s symptoms, which may have led the mothers to feel helpless and stressed. One mother described her feelings as follows:
“...sometimes (a symptom of ADHD) comes to a moment that I myself feel that I cannot put up with it, you know, like it’s too much. And I feel like, ‘what am I supposed to do?’ Because it comes to the point where you don’t know what else to do,” (Arcia & Fernández, 1998, p.344).

The mothers could not find any appropriate explanation for ADHD symptoms within their Cuban cultural framework, which may have only served to exacerbate feelings of helplessness. When a cultural framework or model, such as the Cuban one, cannot explain a child’s symptoms it is possible for mothers’ negative symptoms to be heightened. It is possible that in the Trinidadian context, a culture also steeped in superstition, does not offer mothers an adequate explanatory framework for a child’s ADHD symptoms, thus leading to greater feelings of helplessness. The literature suggests that maternal helplessness is heightened in mothers who have a child diagnosed with ADHD rather than no such diagnosis; pointing to the maternal expression of a range of negative psychological symptoms (depression, hopelessness and helplessness in this study) associated with the presence of ADHD.

Drawing on the Learned Helplessness theory and the Attachment theory, the following theoretical framework is presented. The bold lines indicate the relationships investigated in this study. However, based on the literature review and theories reviewed, it is clear that these relationships operate within a larger framework, which is indicated by dashed lines. As such, it is important to note that the relationships investigated in this study do not occur in isolation but are part of a larger and dynamic system. The relationships as illustrated by dashed lines, therefore are not directly a part of this study but are incidental to understanding those that are a part of the study. As such, these relationships should be considered in future research examining ADHD and parental outcomes.

![Theoretical framework operating within the family system](image-url)

**Figure 1 – Theoretical framework operating within the family system**
2.7 Hypotheses

(1) Ho: Depression scores for mothers of children diagnosed with ADHD and mothers of children not diagnosed with ADHD will not differ significantly.

H1: Depression scores for mothers of children diagnosed with ADHD will be significantly higher than depression scores for mothers of children not diagnosed with ADHD.

(2) Ho: Hopelessness scores for mothers of children diagnosed with ADHD and mothers of children not diagnosed with ADHD will not differ significantly.

H1: Hopelessness scores for mothers of children diagnosed with ADHD will be significantly higher than hopelessness scores for mothers of children not diagnosed with ADHD.

(3) Ho: Helplessness scores for mothers of children diagnosed with ADHD and mothers of children not diagnosed with ADHD will not differ significantly.

H1: Depression scores for mothers of children diagnosed with ADHD will be significantly higher than helplessness scores for mothers of children not diagnosed with ADHD.

Methodology
This study was approved by the Ethics Committee of the Faculty of Medical Sciences, UWI, St. Augustine and it complied with the strict ethical code which included voluntary participation, the right not to answer any questions they were uncomfortable with, the freedom to withdraw from the study at any time and anonymity. The research design used in this study was a quasi-experimental correlational design. Two groups were created, one with mothers of children who were diagnosed with ADHD and the other consisted of mothers of children who were not diagnosed with ADHD. The presence of ADHD cannot be manipulated since this is a pre-existing condition and therefore should be categorised as a subject rather than an independent variable.

Purposive sampling was used, therefore forty-three women whose children had been clinically diagnosed as having ADHD at a health institution in northern Trinidad were approached for participation. Of these, 38 volunteered to participate. In an attempt to minimise confounding variables, 38 women who did not have a child diagnosed with ADHD were approached for participation. Of these only 26 agreed to participate in the study.

Four self-report questionnaires, the first instrument was a simple demographic questionnaire. The other three instruments were used to collect data on participants’ psychological symptoms of depression, hopelessness and helplessness. The Beck Depression Inventory (BDI-II) was used to test depression, the Beck Hopelessness Scale (BHS [hopelessness]) was used to test hopelessness and the Brief Helplessness Scale (BHS [helplessness]) was used to test helplessness.

Findings
It was found that mothers of children with a confirmed diagnosis of ADHD did not experience significantly higher levels of depression when compared with mothers of children who were not diagnosed with ADHD; neither were there any significantly
higher levels of hopelessness in mothers whose children with clinically confirmed diagnoses of ADHD. This was consistent with the findings of McCormick (1995) who stated in her study conducted on depression in mothers of children with ADHD that there were no statistically significant differences in depression of mothers of children with ADHD and mothers of children who did not have ADHD. The question being asked is, “does having a child diagnosed with ADHD increase the risk for depression in mothers?”, as is hypothesised in this study. Almost all of the literature reviewed on this topic will answer in the affirmative, which is contradictory to McCormick’s (1995) findings. For instance, Harrison and Sofronoff (2002) found that a child’s diagnosis of ADHD contributed to parental stress and depression.

It was also revealed that there was no statistically significant difference between levels of hopelessness experienced by mothers of children diagnosed with ADHD as opposed to those mothers of children who did not have ADHD. This is also not consistent with the reported findings in the body of scientific literature. For instance, Kendall and Shelton (2005) found that a child’s ADHD diagnosis significantly affects the family system, inclusive of family distress and hopelessness, unless an appropriate management technique was meaningfully introduced into the family system.

These two findings, that is, non-significance in depression and hopelessness scores of mothers with ADHD and non-ADHD children, are largely contradictory to previous research findings. It is important to note that these studies have not explored ADHD in the Trinidadian or Caribbean context, and may not be generalizable to such settings. So although the results of this study seem to be unique, there may be reasons for such non-significance. These possible causes are discussed, starting in the next paragraph.

There are several factors that may account for these results. These factors may be social, psychological or religious; all operating within the unique circumstances on which the culture of Trinidad is framed. In the Trinidad and Tobago setting there is a culture that mental illness / mental disorders are not taken seriously, as was described by Bishop (2010, para.1) who explained the flippancy of the general public toward mental illness in Trinidad. By example he uses the popular exclamation, which has become entrenched in Trinidadian culture, “You must be mad!” As such, it may be that mothers of children diagnosed with ADHD have not sufficiently internalised their child’s ADHD due to the somewhat lax attitude toward mental illness in Trinidadian popular culture and therefore do not exhibit significantly higher depression and hopelessness levels than mothers on non-ADHD children.

It could be that a diagnosis of ADHD is not attributed to mental illness but simply to a child acting out or exhibiting laziness as described by the National Institute of Mental Health ([NIHM], 2008) in the United States. Parents may believe that the child will possibly grow out of this behaviour sooner than later and normal childhood angst may be mistaken with ADHD symptoms. Parents may then believe that their child is well and not become depressive or hopeless.

It is also not uncommon for parents of children with behavioural and other difficulties to attribute symptoms to a supernatural source in the Trinidadian context. In local parlance, such supernatural causal chains are called “obeah” and such a belief is held quite commonly in Trinidad among the general population. This idea is solidified by
findings of a study conducted in Trinidad where 25% of pre-clinical medical students reported that a contributing factor of mental illness could be of a supernatural nature (Hutchinson, Neehall, Simeon & Littlewood, 1999). By attributing a child’s symptoms to “obeah” or a supernatural source, parents are detracting from the scientific elements of their child’s diagnosis and as such, blame is placed on the supernatural rather than a child’s mental health state. Parents may therefore feel that since the causes of ADHD are beyond human control in a scientific way, such as through therapy or medication, that the problematic symptoms are fleeting and may not internalise the negative psychological effects. This detaches the parent as responsible for caring for the child’s symptoms and also from the emotions attached to them. While this suggestion may be valid in Trinidad, further research needs to be conducted to further explore relevant relationships between supernatural belief systems and mental health.

Institutional factors may also have impacted on the results as the government of Trinidad and Tobago offers free psychiatric and psychological services in public hospitals and health centres, so many mothers may access free psychiatric help for symptomatology of depression and hopelessness that they may experience. Low socio-economic status must also be considered. The School Feeding Programme Policy of Trinidad and Tobago where school children are given breakfasts and lunches each day in school has helped to ease the financial burdens of parents thereby decreasing the psychological symptoms of depression and hopelessness of the mothers of children with ADHD. Free early childhood, primary, secondary and tertiary education are also available to citizens of Trinidad and Tobago. The availability of strong institutional support, whether in the form of free and increasingly accessible mental health care, child nutrition or education, may each affect child and parental mental health outcomes and may also have a cumulative positive impact on mental distress of mothers of children diagnosed with ADHD. Social policies that address strong gender policies for women in particular, giving them a voice in society where their needs are heard and support can be rendered, may account for the results obtained for the research questions that address whether mothers of children diagnosed with ADHD are more depressed and hopeless than mothers of children not diagnosed with ADHD. Such policies may empower women to seek early treatment for their children and themselves, thus mitigating negative psychological symptoms.

Another explanatory factor for the contradiction of the current study’s findings relating to depression and hopelessness is possibly the presence of strong social support systems in Trinidad and Tobago, in the form of the extended families, where there are other members in the family who can assist in parenting and ease the psychological burdens of parenting the ADHD child, thus easing the mental health burdens of mothers.

Formal religious systems and beliefs play an important role in Trinidad and Tobago (Brereton, 1996). A great number of people more particularly women appear to have a very strong religious base and obtain their strength from God. This strength may empower them to deal with the stresses encountered in their lives, which includes parenting a child with ADHD, and they may rely on prayer and religious guidance for changes in their child’s behaviour and also for dealing with any psychological distress that they may experience.
Unlike the results relating to depression and hopelessness, the findings of the study also suggest that mothers whose children were diagnosed with ADHD scored significantly higher on helplessness than mothers whose children were not diagnosed with ADHD. Helplessness in the Trinidian context must therefore be viewed as distinct from depression and hopelessness although literature has suggested that they are positively correlated (Abramson, Metalsky & Alloy, 1989).

According to Barkely (1995, as cited in Lougy & Rosenthal, 2002, p.59) the words spoken by a mother of a child with ADHD express the pain and fear that is sometimes experienced by parents on a daily basis, such as “Help me, I’m losing my child”. The authors further stated that parents are in pain, knowing that few understand their feelings of loss and blame themselves for their child’s ADHD. Parents imagined running away. An ADHD child can be demanding and his or her care routine may be challenging. An ADHD child may test the best of a parent’s patience and understanding leaving them emotionally drained. Parents feel that they are in the eye of a storm and there is no relief in sight (Lougy & Rosenthal, 2002, p. 64). These may also be the sentiments expressed by the mothers in this study, leading to elevated helplessness levels.

In Trinidad and Tobago even though health care is free to the public it must be considered if enough is being done in the mental health domain. There are two Child Guidance Units in Trinidad, one located in the Southern Region and one in the Central region. However those units are grossly understaffed operating with only one Consultant Psychiatrist, one Clinical Psychologist and two Social Workers to service the entire region it represents. With the issue of short staff and limited resources it is unquestionable that quality and accessibility of care will be compromised, which was raised as a concern by PAHO (1998) of the Trinidian mental health care system.

A child with a confirmed diagnosis of ADHD needs comprehensive care, this care extends to the schools, the family and the community. This care is costly financially and in terms of time and emotional energy. All stakeholders need to be educated on the condition of ADHD so as to decrease knowledge gaps and sensitize appropriately. For instance, clinicians, educators and parents need to be sensitized to new information and treatment modalities for ADHD. Support groups for parents and children of ADHD can be initiated in health centers with trained facilitators who could design programmes geared towards meeting the needs of parents and children. Behaviour management programmes must be implemented early so as to increase the likelihood of positive outcomes. Parents with poor behaviour management skills experience more parental stress when addressing their children’s disruptive behavior (Heller, Baker, Henker, & Hinshaw, 1996; Stormont, Spurgen & Zentall, 1995, as cited in Schiedenhelm, 2005). Therefore, early intervention, training and therapy may all be useful in alleviating helplessness experienced by mothers.

The Education Ministry should hold workshops with teachers to inform and educate them on the disorder so that intervention can be swift once a child is diagnosed with ADHD. There also needs to be a more positive supportive collaboration between the home and the school, in order for the stigmatization that follows any type of mental disorder to be quelled as early as possible and for early intervention and treatment to commence. It is fair to state that many parents who have children diagnosed worth
ADHD feel like failures, they perceive their children as being less than perfect, which can cause strong feelings of helplessness.

Based on the results, the theoretical basis for the study in the form of the Learned Helplessness and Attachment theories offer support, although not fully. They do not explain why depression and hopelessness were similar for both groups of mothers. However, they do lend themselves to helplessness scores being elevated in mothers of children diagnosed with ADHD. It may not be sufficient to exclude these theories from the discussion on maternal ill-health based on the results of this study alone. If future research finds similar results, that is, non-significance between psychological symptom scores, then the theories should be amended for the particular context of Trinidad to perhaps include mitigating factors, such as institutional and familial support, which can moderate mothers’ negative psychological symptoms.

Overall the results demonstrated that mothers of children diagnosed with ADHD were not more depressed or hopeless than mothers of children who were not diagnosed with ADHD. These findings do not support the majority of the literature. However the findings of the study highlighted that the mothers of children diagnosed with ADHD were more helpless than the mothers of children who were not diagnosed with ADHD. These contradictory findings calls for more research to be conducted in to further substantiate the findings and to explore ADHD using different terms of reference, or drawing on a more comprehensive range of research questions.

**Limitations**
This study has several limitations. Time constraints did not allow for a pilot study to be conducted and based on the previous research done in cross-cultural settings that pointed to their reliability, a pilot study was not carried out. Test-retest reliabilities of the measurement tests were not conducted. Practically, it was also difficult for mothers to make themselves available at two separate testing times, therefore making test-retest reliabilities impossible to conduct.

The sample size was relatively small by quantitative standards. However, the sample was drawn from a clinical population, which greatly reduces sample size. There has been a thrust for psychologists to move away from using large non-clinical samples in favour of smaller clinical samples in an attempt to conduct more rigorous and meaningful research for particular sub-sets of the clinical population.

A correlational design was used in the study and therefore, causation could not be established. Mothers could have experienced helplessness before the onset of her child’s ADHD or vice versa. Since participation was voluntary the data may have been skewed. That is, the data may be sample specific. It is possible that mothers who did not volunteer to participate may have different experiences, but these were missed because on their non-participation.

In addition to voluntary participation, the study also used self-report measures. The data could also have been skewed because of this. It is possible that the participants did not feel comfortable disclosing depressive or hopeless symptoms or that some mothers may have exaggerated their helplessness symptoms. The severity of ADHD was not known for the children whose mothers participated. It may be that depressive and hopeless symptoms were not exhibited because the severity of ADHD was
relatively low. It is also possible that the control group, that is, mothers whose children were non-ADHD skewed the findings. It may be that some of these children do have ADHD but were never clinically diagnosed.

The following recommendations can be considered for further research in this subject area. Further validation of the measurement instruments should be conducted in Trinidad, especially the adapted form of the BHS (helplessness). This will allow future researchers to be more definitive in their conclusions; however, exploratory research done in this study should prove instrumental in future research as it raises many of the concerns that future researchers are likely to encounter.

Maternal and parental psychological symptoms may affect a child’s ADHD and his or her outcomes. For example, maternal depression may exist before the onset of a child’s ADHD and may worsen a child’s symptoms. So the inter-relationships between parent and child need to be considered. It is possible that in Trinidad, the negative psychological symptoms experienced by mothers may not be depression or hopelessness. Therefore, other maternal symptoms, such as anxiety and anger, should be explored. The range of maternal symptoms used in this study may not have been broad enough to capture other types of psychological distress. Future researchers should examine the effects of a child’s ADHD on other caregivers, for example, fathers and grandparents. It may also prove useful to examine the effects of a child’s ADHD diagnosis on siblings’ psychological health and the child’s own psychological health.
Bibliography


gloriamootoo@yahoo.com
Gloria.ramdeen-mootoo@sta.uwi.edu