

**DEVELOPMENT AND EVALUATION OF A HOME  
BASED ACTIVITY KIT FOR PRESCHOOLERS WITH  
ATTENTION DEFICIT HYPERACTIVITY DISORDER  
(ADHD)**

*Dissertation submitted to*

**MAHATMA GANDHI UNIVERSITY  
IN PRATICAL FULFILLMENT OF THE REQUIREMENT FOR  
THE AWARD OF THE DEGREE OF MASTER OF SCIENCE  
IN  
CHILD DEVELOPMENT**

By

**SUSMI MANOHARAN**

**(Register no:120011013086)**

**DEPARTMENT OF HOME SCIENCE  
ST.TERESA'S COLLEGE, ERNAKULAM**

**AUGUST,2014**

**DEVELOPMENT AND EVALUATION OF A HOME  
BASED ACTIVITY KIT FOR PRESCHOOLERS WITH  
ATTENTION DEFICIT HYPERACTIVITY DISORDER  
(ADHD)**

By

**SUSMI MANOHARAN**

**(Register no:120011013086)**

**DEPARTMENT OF HOME SCIENCE**

**ST.TERESA'S COLLEGE, ERNAKULAM**

**IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE  
DEGREE OF MASTER OF SCIENCE IN CHILD DEVELOPMENT**

**August, 2014**

**CERTIFIED AS A BONAFIED RESEARCH WORK**

**Signature of the  
Head of the Department**

**Signature of the Guide**

## **CERTIFICATE**

I here by certified that the dissertation titled “Development and Evaluation of a Home based Activity kit for preschoolers with Attention Deficit Hyperactivity Disorder” prepared and submitted by Ms. Susmi Manoharan is her original investigation, which she carried out under my guidance and supervision.

**Signature of the Head of the Department**

**Signature of the Guide**

**Dr. Dhanya N.**

Assistant Professor  
Department of Home Science  
St. Teresa’s College  
Ernakulam

## **DECLARATION**

I hereby declare that this research work titled “Development and evaluation of a Home based Activity kit for preschoolers with Attention Deficit Hyperactivity Disorder” is a bonafide record of research work done by me during the course of research.

**Place :-**

**Date :-**

**Susmi Manoharan**

## **ACKNOWLEDGEMENT**

This thesis is the result of hard work and commitment whereby I have been accompanied and supported by many people. It is a pleasant aspect that I now have the opportunity to express my deep sense of gratitude to those helping hands.

First and foremost, I bow my head in quiet reverence before God, the provider and the prime cause of this endeavor, for guiding me throughout the thesis work.

I hereby express my sincere gratitude to Rev. Dr. Sr. Celine.E and Dr. Helan A.P., Principal, St. Teresa's College, Ernakullam for granting me permission to commence this thesis in the first instance.

I would like to express my deep and sincere gratitude to Dr. Sheelamma Jacob. K, MSc, M.Phil, Ph.D, Head of the Department of Home Science for her valuable support and encouragement during the time of research.

I am deeply indebted to my guide Dr. Dhanya N, Ph.D, MSc., M.Phil, M.A., M. Phil, MBA for being the source of inspiration and support behind all my activities. Her wide knowledge and deep insight into the topic has enriched the work in the best possible way. Her patience, understanding and guidance have provided a good basis for the present thesis.

I feel privileged to express my sincere thanks to all the teachers in the Department of Home Science for their voluble suggestions.

I gratefully acknowledge the Headmistresses of the Commdeal Special Preschool, Ernakulam, Assadeepam special school, Aluva for permitting me to do my study among the students of these schools.

My parents, family members, friends and all my well-wishers deserve special mention for their inspiration, support and prayer.

Finally, I would like to thank everybody who was important in the successful realization of this thesis.

**Susmi Manoharan**

## **CONTENTS**

<b>CHAPTER</b>	<b>TITLE</b>	<b>PAGE NO.</b>
<b>1</b>	<b>INTRODUCTION</b>	<b>1-6</b>
<b>2</b>	<b>REVIEW OF LITERATURE</b>	<b>7-19</b>
<b>3</b>	<b>METHODOLOGY</b>	<b>20-25</b>
<b>4</b>	<b>RESULTS AND DISCUSSION</b>	<b>26-35</b>
<b>5</b>	<b>SUMMARY AND COUNCLUSION</b>	<b>36-39</b>
	<b>BIBLIOGRAPHY</b>	
	<b>APPENDICES</b>	

## **LIST OF TABLES**

<b>TABLE No.</b>	<b>TITLE</b>	<b>PAGE No.</b>
1	General Information of the Selected Children	
2	General Information of the Parents of the Selected Children	
3	ADHD Case People of the Selected Children	
4	ADHD Characteristics Exhibited by Selected Preschoolers	
5	Evaluation Report of the Evolved Home Friendly Activity Kit	



## LIST OF FIGURES

<b>FIGURE No.</b>	<b>TITLE</b>	<b>PAGE No.</b>
1	Research Design	25
2	General Information of the Parents of the Selected Children	29
3	Evaluation Report of the Evolved Home Friendly Activity Kit	34



# **INTRODUCTION**

## CHAPTER 1

### INTRODUCTION

*“They can’t sit still; they don’t pay attention to the teacher, they mess around and get into trouble: they are rude; they get mad when they don’t get their own way”* –This is how it was described when it was first identified as Attention Deficit Hyperactivity Disorder (David, 2010). Attention Deficit Hyperactivity Disorder hereafter referred to ADHD is an impairing disorder resulting from abnormal level of inattention, hyperactivity and impulsive behaviours ( Russella, 2009).

According to DSW-IV criteria, a child is said to have Attention Deficit Hyperactive Disorder (ADHD) if the child consistently; for at least six months, and to a degree that is maladaptive and inconsistent with the child’s developmental level, shows (1) inattention (2) hyperactivity and (3) impulsivity (Santrock, 2010).

ADHD was first clearly described by Still in 1902. Twin studies indicate that 75 percent to 90 percent of ADHD is caused by genetic factors. If one person in a family is diagnosed with ADHD there is a 25-35 percent probability that another family member also has ADHD, compared to a 4-6 percent probability for someone in the general population. Between 10 percentage and 35percentage of children with ADHD have a first degree ADHD. Approximately one-half of parents who had ADHD have a child with the disorder.

Early childhood (2-6) is a time of remarkable physical, cognitive and social and emotional development. Infants enter the world with a limited range of skills and abilities (David 2007). Watching a child develop new motor, cognitive language and social skills is a source of wonder for parents (Weintraub, 2007). The clinical diagnosis of Attention Deficit Hyperactivity Disorder (ADHD) in preschool children is challenging. The first problem in diagnosis is the nonspecificity of ADHD symptoms in the 2- to 5-year-old age range. The essential symptoms of ADHD-

inattention, impulsivity, and overactivity are common daily behaviours of most preschool-aged children. Indeed, studies have shown that up to 40 percent of children by the age of 4 years have sufficient problems with inattention to be of concern to their parents and preschool teachers (Sonuga,2005). Yet studies also show that the vast majority of these concerns are transient in nature and generally remit within 3 to 6 months (Lee, 2008). Even among those children whose symptoms are frequent and severe enough to warrant a diagnosis of ADHD in the preschool years, only 48 percent will have this same diagnosis by later childhood or adolescence. These findings suggest that the appearance of significantly inattentive or overactive behaviours by age 3 to 4 years, by themselves, are not indicative of a persistent pattern of ADHD into later childhood or adolescence in at least 50 percent of those preschool children so characterized. A changing pattern of ADHD symptoms with development, with hyperactivity, impulsivity, and aggression emerging early in the preschool years and attention deficits emerging later in the school-aged years, may account for some of these differences (Vaughan, 2009). Approximately five percent to 10 percent of preschoolers with parental or teacher concerns about inattention eventually develop a pattern of persistent inattention consistent with ADHD.

Parents of a child with ADHD in three to six age group describe them as restless, always up and on the go, acting as if driven by a motor and frequently climbing on and getting into things (Barkley, 2010). They are more likely to encounter accidental injuries as a result of their overactive, inattentive, impulsive and often fearless pattern of behaviour 'Child proofing' the home at this age becomes essential to reduce the risk of injury as well as to protect family valuables (David, 2007). Persistent in their wants, demanding of parental attention and often insatiable in their curiosity of their environment, ADHD preschoolers pose a challenge to the child rearing skills of their parents (Patricia, 2008). Such children require far more frequent and closer monitoring of their ongoing conduct than do normal preschoolers. Although temper tantrums may be a common instance even for normal

preschoolers, their frequency and intensity are often exacerbated in ADHD children. Mothers of these children are likely to find themselves giving for more commands, directions, criticisms, supervision and punishment than do mothers of normal preschoolers (Campbell and Minde, 2007). Although the mothers of ADHD preschoolers are likely to report feeling competent in their sense of knowing how to manage children, the finding will progressively decline as these children grow older and parents find that the typical techniques used to manage normal children are less effective with ADHD children (Mash and Johnson 2008). The coexistence of additional difficulties such as sleep problems, toilet training difficulties and motor and speech delays in a small percentage of ADHD children is likely to further tax the patience and competence of many of their parents. Placements of these children in day care; a progressively increasing practice for preschool children in our society, is likely to bring additional distress as day care personnel complain about the child's disruptive aggression towards others in many cases, and difficulties in being managed (Barkley, 2007). Such children are often noted to be out of their seats, wandering in the classroom inappropriately, disrupting the play activities of other children, excessively demanding peer interactions and being especially noisy and talkative (Campbell, 2005). It is common to find the more active and aggressive among these ADHD children to actually be kicked out of preschool (Reebye, 2007). So begins the course of school adjustment problems that affect many of these children throughout their compulsory educational careers.

Childhood should be playful. Play is said to be the work of children. But, sometimes, the ability to play becomes strained when children have conditions such as Attention Deficit Hyperactive Disorder (Einarsdottir, 2008). Part of living with a child with ADHD is to understand the special needs of these children in order to maintain a happy and healthy balance. This includes the necessity of selecting the right playthings. So playtime activities do not become more stressful by conflicting with what these children can comfortably manage and enjoy. One way we have heard

ADHD described as a performance disorder and not a deficiency of knowledge or skill. It is primarily manifested as a set of symptoms that interfere with the ability to focus on a task and get it completed (Harpin, 2005).

Child psychologists and psychiatrists value the importance of play as therapy for preschool children with ADHD. The right types of play allow children to express themselves in ways they can't do otherwise (Meredith, 2009). Play within the right context and within the right supervision can also improve a child's focusing abilities and help him or her to learn the basics of getting along more cooperatively with other children. Many situations, proper managing of a child's environment and activities can do a lot to keep the symptomatic behaviour under control. A toy doesn't have to be full of moving or electronic to stimulate a child's imagination (Barbera, 2009) Children with ADHD often have difficulty with multi-steps instruction and have an inability to stay focused on the task of hand. They frequently become frustrated with themselves in these situations (Bachor, 2008).

ADHD kids love to build things, and their visual spatial skills are usually sharp. Parents can use play to help their children achieve impressive gains in attention and social skills. The market abounds with expensive and therapeutic toys and games specially designed to help children with ADHD. However experts believe that many conventional toys itself can be beneficial.

Mahone and his colleague at Krieger (2012) are among the first to use neuro imaging to study the brain of preschool children with symptoms of ADHD. They recently discovered that children with ADHD have a smaller caudal nucleus a small structure in the brain that is associated with cognitive and motor control than their typical peers. They hope that intervention can begin earlier to facilitate better educational outcomes.

## **Relevance of the study**

The families of children with ADHD have to contend with a greater number of behavioural developmental and educational disturbances. This often requires that more time, logistics and energy be spent. It is not surprising that these increased demands are frequently associated with more stress on marital and family functioning. The financial burden of treating ADHD and its associated psychiatric disorders can add to these difficulties. When family environments are chronically stressful, both the adults and children are at greater risk of physical and mental health problems. In families affected by ADHD, marital conflict is common, and has been consistently linked with poorer health and mental outcomes. If diagnosed early and given proper training in the school years, their character will improve tremendously. They spend most of the time at school and home. In school there are highly equipped and costly equipments to reduce their hyperactivity but at home these toys are absent due to their costly nature. So there is a need for alternative play materials that are home friendly and cost effective which can be used even by low income families to help reduce the hyperactivity tendencies of such children. It was in the light of this background that this study titled “Development and Evaluation of a Home Based Activity Kit for Preschoolers with Attention Deficit Hyperactivity Disorder (ADHD)” was undertaken for study.

**Aim:-** To Develop and Evaluation a Home based Activity Kit for Preschoolers with Attention Deficit Hyper active Disorder (ADHD)

### **Overall objective:-**

- To identify preschool children showing symptoms of ADHD in the selected areas and collect their general and specific details
- To study the general information of the parents of the selected preschoolers



**Specific objective:-**

- To develop a home based activity kit for preschoolers with ADHD
- To evaluate the evolved kit.

**Operational Definition**

According to Barkle (2010), Attention Deficit Hyperactive Disorder is a development disorder of self control. It consists of problem with attention span, impulsive control, and activity level.

In this study, Attention Deficit Hyperactive Disorder (ADHD) refers to problems with attention, hyperactivity and impulsivity in the age group of 3-6 years of age.

# **REVIEW OF LITERATURE**

## **CHAPTER 2**

### **REVIEW OF LITERATURE**

The literature is reviewed to bring clarity and focus to the research objectives, to improve methodology, broaden the researcher's knowledge and to contextualize the findings. The study titled "Development and Evaluation of a Home-based Activity Kit for Preschoolers with Attention Deficit Hyperactive Disorder (ADHD)" has been reviewed under the following subtopics.

- 2.1 Attention Deficit Hyperactive Disorder
  - 2.1.1 Definition
  - 2.1.2 History
  - 2.1.3 Causes
  - 2.1.4 Symptoms
- 2.2 Family challenge with ADHD
  - 2.2.1 How ADHD affects family functioning
  - 2.2.2 Parenting difficulties with ADHD
- 2.3 Counselling and education of the parenting family members
- 2.4 Intervention at home

#### **2.1 Definition: - Attention Deficit Hyperactivity Disorder (ADHD)**

Attention Deficit Hyperactivity Disorder (ADHD) is a development disorder of self control. It consists of problem with attention span, impulse control and activity level. It is not just a temporary state that will be out grown, a trying but normal phase of childhood (Barkley, 2006).

According to Cooper and Bilton (2007) Attention Deficit Hyperactivity Disorder is a medical diagnosis that is applied to children and adults who are

experiencing significant behavioural and cognitive difficulties in important aspects of their lives (eg. In their familial and personal relationships at school and work) these difficulties can be attributed to problems of impulse control, hyperactivity and inattention. It is believed that these problems are caused primarily by dysfunctions in the frontal lobes of the brain.

ADHD refers to a family of related chronic neuro-biological disorder that interferes with an individual's capacity to regulate activity level (hyperactivity), inhibit behaviour (impulsivity) and attend to tasks (inattention) in developmentally appropriate ways (national institute of mental health 2010).

Interestingly there is no clear and widely accepted definition for ADHD. Because of the multidisciplinary nature of the field, there is ongoing debate on the issue of definition, and currently at least twelve definitions appear in the professional literature. There are several technical definitions offered by various health and education sources. Overall most experts agree on the following descriptions.

- It is a quite chronic behaviour or psychological disorder of childhood (usually beginning in the pre-school years) that may follow them to their adult years, if not diagnosed and treated properly earlier.
- It may cause them to experience significant behavioural and cognitive difficulties in their day-to-day life, schooling and work situations at the different stage of their life.
- Parents and teachers cannot be blamed for the upsurge of this disorder in the children it is not caused by parental or school failure to discipline or control the child.
- Although what causes ADHD exactly is not know, yet the researchers believe that it is resulted through some deficiencies or dysfunctions of the brain (caused through genetic inheritance or injury to the brain).
- Deficiencies like deficits in certain chemicals called neurotransmitters and dysfunctions of certain lobes of the brain bring impairment in the controlling functions of the brain. It is responsible for making the affected child disabled in terms of self-control.

- Inability in exercising self-control may give birth to three, major problems particularly related to inattention, hyperactivity (exhibiting too much acting out behaviors) and impulsivity (acting without thinking) the very hallmarks or symptoms of the ADHD.
- The symptoms of ADHD provide red signals for taking its cognition at the earliest possible. Its presence in the children provides a big challenge to the parents and teachers in terms of its control and treatment. If not cared properly, it may cause unimaginable damage not only to the affected child but also may prove a source of danger to the well being of the society.

### **2.1.2 Historical Background of the ADHD**

ADHD although not widely known across the globe has a long history of more than 200 years. It was first recognized as early as the mid nineteenth century by a German Dr. Heinrich Hoffman in 1845 in the form of a child's disorder characterized with impulsivity and fidgety (lack of ability to control the behavior). Despite such revelation and recognition of the impulsive and fidgety behavior of the children by Hoffman. The work in these direction remained almost in the dark phase. It only got momentum in 1902 through the efforts of George .F. Still. In his publications related to a series of lectures to the Royal College of physicians in England he described a group of impulsive children with significant behavioural problems (Still, 1902). He called such children as having 'defective moral control', inability to refrain from inappropriate behaviour. He also emphasized that such behaviour is caused by a genetic dysfunction and not by poor child rearing.

Still (1902), in this way did a pioneer work in declaring that the passionate, deviant, spiteful and lacking inhibitory volition behaviour of some children has no indication of parental or other environmental causation. This view was quite strengthened later on by observations of the effects of the worldwide epidemic of viral encephalitis (a disease of viral encephalitis a disease affecting the brain) which took place in 1917. The observation revealed that the infection left some children

impaired in the areas of attention, memory and impulse control. Studies carried out on victims of head injuries during World War II provided further support to these views (David, 2009).

As a result, a new level 'Minimal Brain injury' (MBI) was assigned to refer to children who in spite of having no abnormal, neurological symptoms were found to exhibit behaviour such as impulsive and fidgety behaviour on account of subjecting to brain injury. The researchers conducted afterwards, demonstrated their dissatisfaction with the ideas that these symptoms are the exclusive products of the brain damage. They showed compelling evidence indicating a strong genetic basis for the condition. As a result, in 1960 'Minimal Brain Injury' level was replaced by 'Hyper active child syndrome'. Note up to this time behavioural inhibition was considered as the key component of the child's disorder or problems associated with what is as the key component of the child's disorder or problems associated with what is finally known as ADHD today. However by 1980s researches began to surface Attention Deficit Disorder (ADD) was emerged. It continued for long in the shape of ADD with or without 'hyperactivity' till the new official term, Attention Deficit Hyperactivity Disorder (ADHD) was chosen by psychiatric experts and its symptoms were published by the American Psychiatric Association in its Diagnostic and static Manual of Mental Disorders in 1984. Thus the modern concept and views related to the child's disorder known previously as 'defective moral control', 'Minimal brain injury or dysfunction', 'hyperactive child syndrome' and Attention deficit Disorder are now known worldwide by the term Attention Deficit Hyperactivity Disorder (ADHD) coined and defined by the American Psychiatric Association in its mental disorders manual. Although a term 'Hyper Kinetic Disorders' has also been coined and defined by the World Health Organization (WHO) for description of the symptoms similar to ADHD, yet in comparison, the term ADHD is more popular and global (Kennedy, 2012).

### **2.1.3 Causes**

ADHD is usually attributed to neurological factors, Genetic factors, Environmental factors. The latest research and efforts in searching out the causes of ADHD have been able to provide sufficient evidence for concluding that ADHD is mainly a neurological disorder in the following manner. The use of the developed neuro-imagery techniques (capable of seeing into or imaging the brain) like functional Magnetic Resonance Imaging (MRI), Positron Emission Tomography (PET) and Single Photon Emission Computed Tomography (SPECT) has helped in discovering that structural organs of the organ like pre-frontal and frontal lobes of the cerebrum, basal ganglia and cerebellum are found to be structurally smaller in individuals with ADHD. In addition, these areas of the brain are found to have less activity and blood flow in the ADHD individuals. It has been also found that children with ADHD has less total gray matter (brain tissue containing nerve cells and blood vessels) than children without ADHD (Castellanas and Swanson, 2012).

Researches have revealed that the more cognitive aspects of ADHD for examples, the inattention and disorganization are related to impairments in the pre-front and frontal cortex where as the hyperactivity aspect of ADHD is related to the impairments in the basal ganglia and cerebellum (Hallahan, Lloyd and Kauffman et al, 2005). Researchers have established that certain chemicals in the brain called neurotransmitters play a major role in ADHD behaviour.

In fact our brain is a strange complex interconnection of nerve cells assembly a big telephone network. However where in telephone network the connections are electrical, in the brain, these are chemical. One nerve cell (neuron) releases a small amount of chemicals (known as neurotransmitters) for picking up by a second nerve cell. If there goes any impairment in this transmission anywhere, then certainly it will adversely affect the functioning of our brain. So the disturbances (like levels of activity) in the neurotransmitters named, dopamine and norepinephrine are found to be more involved with ADHD (Castellans and Swanson, 2002).

In this way, the abnormality or dysfunction of the brain and impairment in neurological functioning have been widely associated with ADHD. A good analogy here is Cerebral Palsy (CP). Children with CP are prone to involuntary shifts of their attention, involuntary expression of their impulse and involuntary Motor activity (Copper and Bilton, 2007). Genetic factors are said to be the quite common cause of ADHD. Barkley (1988) on the basis of leading research evidence had claimed that heredity accounts about 80 percent of children with ADHD.

Swanson (2000) have been able to identify a gene name the Dopamine transporter gene (DAT 1) involved in regulating the amount of dopamine (the neurotransmitters) in the brain. It has been estimated that this particular gene is responsible for causing ADHD by sucking up dopamine too fast and not leaving it in the synaps (the small gaps between neurons) long enough and then causing impairment in brain's connectivity. Another gene named DRD4 is also found to be involved with ADHD by causing specific neuron, less sensitive to dopamine. Though such impairment there arises serious breaks in the connectivity of the different neurons thus resulting ultimately in the impairment of neurological functioning. (Barkeley, 1988). Twin studies indicate that 75percent- 90 percent of ADHD is caused by genetic factors. If one person in a family is diagnosed with ADHD there is a 25percent- 35percent probably that another family member also has ADHD, compared to a 4percent- 6 percent probability for someone in the general population. Between 10percent and 35percent of children with ADHD have a first degree relative with past or present ADHD. Approximately one half of parents who had ADHD have a child with the disorder.

Environmental factors may prove a cause of ADHD by brining functions and impairments in the structure and functioning of the brain.

A child may get affected by them at any time during prenatal or postnatal stages including the occasion of delivery.

- Complications during pregnancy and birth, such as toxemia.



- Fatal exposure to alcohol, smoking, drug abuse or high levels of lead both at pre and post – natal stage.

#### **2.1.4. Symptoms**

The symptoms of ADHD include inattention and/or hyperactivity and impulsivity. These are traits that most children display at some point or another. But to establish a diagnosis of ADHD, sometimes referred to as ADD, the symptoms should be inappropriate for the child's age. Adults also can have ADHD; in fact, up to half of adults diagnosed with the disorder had it as children. When ADHD persists into adulthood, symptoms may vary. For instance, an adult may experience restlessness instead of hyperactivity. In addition, adults with ADHD often have problems with interpersonal relationships and employment. There are three different categories of ADHD symptoms: inattention, hyperactivity, impulsivity. Inattention may not become apparent until a child enters the challenging environment of school. In adults, symptoms of inattention may manifest in work or in social situations.

A person with ADHD may have some or all of the following symptoms:

- Difficulty paying attention to details and tendency to make careless mistakes in school or other activities; producing work that is often messy and careless
- Easily distracted by irrelevant stimuli and frequently interrupting ongoing tasks to attend to trivial noises or events that are usually ignored by others
- Inability to sustain attention on tasks or activities
- Difficulty finishing schoolwork or paperwork or performing tasks that require concentration
- Frequent shifts from one uncompleted activity to another
- Procrastination
- Disorganized work habits

- Forgetfulness in daily activities (for example, missing appointments, forgetting to bring lunch)
- Failure to complete tasks such as homework or chores
- Frequent shifts in conversation, not listening to others, not keeping one's mind on conversations, and not following details or rules of activities in social situations

Hyperactivity symptoms may be apparent in very young preschoolers and are nearly always present before the age of seven. Symptoms include:

- Fidgeting, squirming when seated
- Getting up frequently to walk or run around
- Running or climbing excessively when it's inappropriate (in teens this may appear as restlessness)
- Having difficulty playing quietly or engaging in quiet leisure activities
- Always being 'on the go'
- Often talking excessively

Hyperactivity may vary with age and developmental stage.

Preschoolers with ADHD tend to be constantly in motion, jumping on furniture, and having difficulty participating in sedentary group activities. For instance, they may have trouble listening to a story. School-age children display similar behavior but with less frequency. They are unable to remain seated, squirm a lot, fidget, or talk excessively. In adolescents and adults, hyperactivity may manifest itself as feelings of restlessness and difficulty engaging in quiet sedentary activities.

Impulsivity symptoms include:

- Impatience
- Difficulty delaying responses
- Blurting out answers before questions have been completed
- Difficulty awaiting one's turn

- Frequently interrupting or intruding on others to the point of causing problems in social or work settings
- Initiating conversations at inappropriate times

Impulsivity may lead to accidents such as knocking over objects or banging into people. Children with ADHD may also engage in potentially dangerous activities without considering the consequences. For instance, they may climb to precarious positions. Many of these symptoms occur from time to time in normal youngsters. However, in children with ADHD they occur frequently -- at home and at school or when visiting with friends. They also interfere with the child's ability to function as other children of the same age or developmental level. ADHD is diagnosed only when children consistently display some or all of the above behaviors in at least two settings, such as at home and in school, for at least six months. (Arnold, E., O'Leary, S., & Edwards, G.1997)

### ***Long-Term Prognosis with ADHD***

Some children with ADHD -- approximately 20% to 30% -- develop learning problems that may not improve with ADHD treatment. Hyperactive behavior may be associated with the development of other disruptive disorders, particularly conduct and oppositional-defiant disorder. Why this association exists is not known. A great many children with ADHD ultimately adjust. Some, though, especially those with an associated conduct or oppositional-defiant disorder, are more likely to drop out of school. These individuals fare more poorly in their later careers. Inattention tends to persist through childhood and adolescence and on into adulthood, while hyperactivity tends to diminish with age. As they grow older, some teens that have had ADHD since childhood may experience periods of anxiety or depression.

Several of the symptoms of ADHD may get worse as the demands at school or home increase. They include:

- Difficulty following instructions

- Being unable to get organized, either at home or at school
- Fidgeting, especially with the hands and feet
- Talking too much
- Failing to finish projects, including chores and homework
- Not paying attention to and responding to details
- Getting poor grades in school
- Being isolated from peers due to poor grades and secondary depression.( Armstrong JG,2007)

## **2.2 Family challenge with ADHD**

### **2.2.1 How ADHD affects family functioning**

Barkley (2012), a leading ADHD expert describes “vicious cycle” that he often see in ADHD families where a child’s ADHD related behavior is both a cause and an effect of family problem. It goes like these parents, facing their own problem, see a child’s behavior get worse:

- Parent respond with more punishments and less encouragement
- This hurt the child’s self-system and causes more behavioral problems.
- These problems lead to more fights with the parents
- Difficulty ignoring distractions such as sound or nearby activity frequent careless mistakes in activities difficulty organizing task
- Running or climbing in inappropriate places difficulty playing quietly children may constantly seek interactions with other.

### **2.2.1 Parenting Difficulties with ADHD**

ADHD has a huge effect on a parent’s emotional state. NIMH studies show connections between a child’s ADHD and parental stress. The more

problems a child's ADHD is causing the greater the stress. Parental depression is also linked to a child's ADHD both stress and depression can alter parents view.

Parenting any child is a tough task parenting a child with ADHD is even harder. Managing the disorders forces parents to act differently sometimes they become stricter. (Arnold, E., O'Leary, S., & Edwards, G. 1997)

### **2.3 Counseling and Education of the parent's family members**

Any treatment and education of the children with ADHD essentially need the improvement of the parent's family members. For this purpose they need to be acquainted with ADHD and its management among their children they are therefore required from the experts and professionals in the field of ADHD.

There are no ADHD children these are only children with ADHD meaning thereby that children have trouble and are not definitely the cause of their troubles. They behave in inappropriate way without exercising any self control/inhibition simply because they are unable to do so on account of the improvement in the controlling neurological mechanism. (Earls, 2008),

Their ADHD problems are usually the outcomes of the abnormalities in the structure of the brain and its functioning. The genetic inheritance brain injury or some other factors are generally responsible for such neurological improvements. Therefore there is nothing in the ADHD behavior that stands for being learned, acquired or mediated through environmental experiences, observations and imitations. The family environment handling of the children by the parents impact of the socio cultural factors thus have no link with the causation of the ADHD.

It is true that the parents teachers and elders in the family and society do not cause ADHD but they can prove a potent factor and very helping resource for (i) managing and controlling the ADHD symptoms (ii) helping the affected children in coping with their problems and capitalizing on their pulse points, abilities and talents

(ii) seeking the best treatment measure and educational provision available for the welfare and progress of their children (Wordrich, 2010)

Children with ADHD may exhibit their characteristic behavior on account of the reasons that are beyond control to their self. However, ADHD should never be taken as a glamorous or desirable condition that may get individual excused from confronting the rules that govern the lives of all the rest of us. ADHD is a potentially high debilitating condition that can lead to disastrous personal and social outcome when mishandle or misunderstood (Cooper and Bilton, 2009)

The parents, family members and teachers should never get disappointed, discouraged, and outraged for the ADHD behavior of their children. They should try to accept the child with his entire deficit, help him in reducing his problems and compensate it by encouraging his strengths and abilities. They need to remain along with the affected child in the state of get hanging on, never give up. For this purpose they may be inspired from the bibliographical sketches and activities of the children with ADHD.

## **2.4 Intervention at home**

Families can help reduce the impact of ADHD symptoms with intervention. Kamath and Barkly 2010 given in points

- Understanding the nature of ADHD and how the child experiences it will help parents sympathize with a child's struggles
- Listen to the child's feelings. Isolation can foster low self esteem and depression in young people with ADHD. The simple experience of being listened to empathically without receiving advice may have a powerful and helpful effect.
- Establish consistent routines children with ADHD are more likely to succeed in completing tasks when they occur in a predictable pattern
- Setting a time for homework, for dinner and for relaxation helps the child understanding and meet expectations

- These times should be clearly explained to the child and even written down in a visible place.
- Timers may be helpful reminders for children.
- A child may need a special spot or quiet place where distractions are reduced, such as a place away from the front door. Parents may need to remove distracting items for the area to be effective.
- Turning off television and telephone can assist in reducing distractions.
- Enlist the help of other family members, siblings deserve for staying away from the child during homework time or for providing helpful assistance to the child. Encouraging family members to assist in the process will foster a positive experience for every one
- Reduce the possibility of accidents. Remove fragile items from the child's reach. Ensure that the path for putting away one's bicycle does not require careful navigation between breakable objects.

# **METHODOLOGY**



## **CHAPTER 3**

### **METHODOLOGY**

The methodology adopted for the study entitled “Development and Evaluation of a home based activity kit for preschool level ADHD children” is discussed under the following subheadings:-

- 3.1 Selection of Area
- 3.2 Selection of Sample
- 3.3 Methods and Materials
- 3.4 Analysis and Interpretation

#### **3.1 Selection of Area**

The area selected for the present study was Kanjikuzhi Panchayath of Alappuzha district. Owing to the reason that it was a rural area inhabited mostly by people whose occupation was of a daily wage kind consisting of coolies and labourers, these people were just only able to identify that the child was quite abnormal but were not aware of terms such as ADHD etc, its symptoms, remedies and the like. They were also unaware of their role in helping the child and also could not procure toys that could help in improving the child’s attention span because of the cost. They were sending their children to nearby anganwadies as they were unmanageable at home or they were timed away from the roll charts due to their hyperactivity.

#### **3.2 Selection of Sample**

The sample selected for the study included 30 preschool children in the age range of three to six years and their mother or father from Kanjikuzhi Panchayath Alappuzha. Purposive sampling technique was adopted. Children showing signs and symptoms of ADHD (namely hyperactivity, less attention span and impulsivity) were identified with the help of the teacher and reported. The parent (mother and

father) of the selected children numbering 30 were also selected in order to administer the kit and evaluate it.

### **3.3 Materials and Methods**

The study was divided into four phases.

- Phase I : Preparation of questionnaire to collect background information.
- Phase II : Preparation of activity kit
- Phase III : Administration of the activity kit information.
- Phase IV : Collection of information and evaluation feedback.

#### **Phase I: Preparation of questionnaire to collect background details of the selected children and parents**

The selected ADHD children were not exposed to a hospital atmosphere and so their ADHD disorder was not identified. The main challenge for the researcher was to ascertain the level of ADHD disorder in these children.

The self designed questionnaire consisted of 2 parts

- (i) The whole family details of the selected children and their parents
- (ii) In the second part it was aimed to study the level of ADHD symptoms in the selected children

Among the questions first 3 questions were to study the genetic background of the disorder. The other questions were to measure the hyperactivity, impulsivity and inattentiveness of the child.

A copy of the prepared tool is given in Appendix 1.

## **Phase II: Preparation of activity kit**

Before directly stepping down into the preparation of the kit, the researcher focused on three preliminary steps.

- (a) Listing the activities done in special preschools along with the procedures.
- (b) Making a list of play materials commonly available.
- (c) Basic concepts that are to be taught and kept in mind while dealing with these characters.

To get activities listed in the special pre-school, the researcher visited institutions such as Ashadeepam, Aluva and Commdeal, Ernakulam which are specially dealing with the remediation of ADHD. The investigator collected details on the activities done in order to get an idea of what kind of activities are to be included and its procedures so that it would form a base on which new home based activities could be formulated.

The parents who brought children to these institutions were also interviewed just to find out about the problems they faced in bringing up their children and to estimate and understand about their needs.

Next the researcher made a list of the basic concepts and activities that were generally taught to these children and what they were actually supposed to know and be familiar with by the time they complete six years of age.

Based on this information the researcher identified and drew an outline of the concepts to be focused upon and the procedure and activities that could be used to develop or build this concept in the character. So the general idea of the activity kit was to develop activities which could be done at home using low cost materials. Each activity focused on two important aspects namely (i) reduce impulsivity and increase attention span in the child and (ii) develop a concept in them. Procedure of doing the activity was also clearly merged within the basic concept. The kit evolved thus consisted of ten activities and was made using low cost locally available materials (Vide Appendix II).

### **Phase III: Administration of the activity kit**

After the preparation of the tool, the next step was to evaluate its worth and quality among children. The researcher approached about 10 Anganwadies in Kanjikuzhi Panchayath and explained to the centre head about the tool development and took permission to evaluate students and parents from the centre.

Thirty children who were reported to show symptoms of ADHD as identified by the anganwadi teacher were selected from Kanjikuzhi panchayath. The investigator also observed the children for a period of two days. After she was convinced about the symptoms she collected the details of the children from the anganwadi teacher. The investigator then met the parents of the selected children when they came to collect their wards and collected their background details too. She then explained to them about the kit evolved and its benefits. Each parent was provided with a booklet and the kit containing the 10 activities with all the materials required for each activity. The parents were also briefed about each activity and its mode of conduct. They were told to do the activities daily and were given 30 days time for the same. The contact number of the investigator was provided to the parents so that they clarify their doubts if any while doing the activity.

### **Phase IV: Evaluation of the kit evolved**

Checklist is an important tool for gathering facts for educational survey. It is a type of questionnaire with set of categories for the respondent to check. It is used to record the presence or absence of the phenomena under study. In the present study the checklist was self-formulated by the investigator. The intention of the checklist was to critically evaluate the package developed by the investigator based on ten criteria namely applicability, scope, persisting interest, ease of handling, concept formation, reduction of hyperactivity, reduction of impulsivity, improve attention,

obeying rules, home friendly and low cost. The parents were asked to score each activity separately and then also provide an overall evaluation of the kit in general.

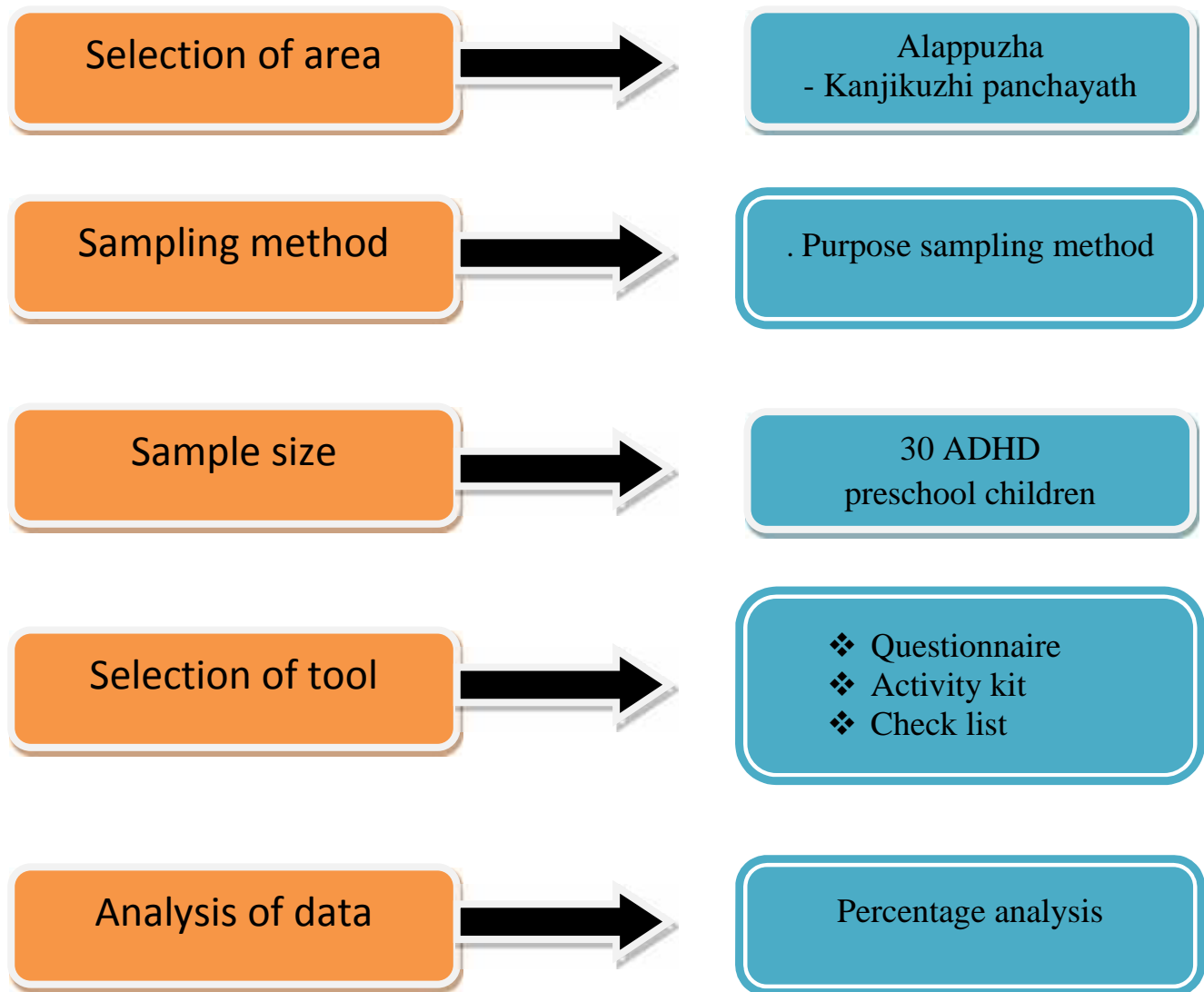
The ten aspects were rated on a five point rating scale as follows:-

<b>Rating scale</b>	<b>Scores assigned</b>
Excellent	4
Good	3
Average	2
Fair	1
Below average	0

A copy of the checklist is given in Appendix III.

### **3.4 Analysis and interpretation**

The details of the children and parents and the evaluation scores of the activity kit done using the checklist were all consolidated and tabulated. The results are interpreted in the form of percentages.



**Figure 1**  
**Research design**

# **RESULT AND DISCUSSION**

## **CHAPTER 4**

### **RESULTS AND DISCUSSION**

The result of the study titled “Development and Evaluation of a Home-based Activity Kit for Preschoolers with Attention Deficit Hyperactivity Disorder (ADHD)” is given under the following subheadings:-

#### 4.1 Profile of the Respondents

##### 4.1.1 General information of the selected ADHD children

##### 4.1.2 General information of the parents of selected children

#### 4.2 ADHD Case Profile of the Selected Children

#### 4.3 Symptoms of ADHD Depicted by the Selected Children

#### 4.4 Evaluation of the Evolved Kit by Selected Parents

#### **4.1 Profile of the Respondents**

The tables below furnish the general information of the respondents.

##### **4.1.1 General information of the selected ADHD children**

The following table portrays information about the selected children.



**Table 1**  
**General Details of the Selected ADHD Children**

Aspects/	Respondents (Children)	
	Number(N=30)	Percentage (%)
<b>Gender</b>		
Male	19	63
Female	11	37
<b>Age</b>		
3yrs-4yrs	10	33
4yrs-5yrs	8	27
5yrs- 6yrs	12	40
<b>Number of children in the family</b>		
1	1	3
2	29	97
> 2	-	-
<b>Birth order of the children</b>		
1	17	59
2	12	41

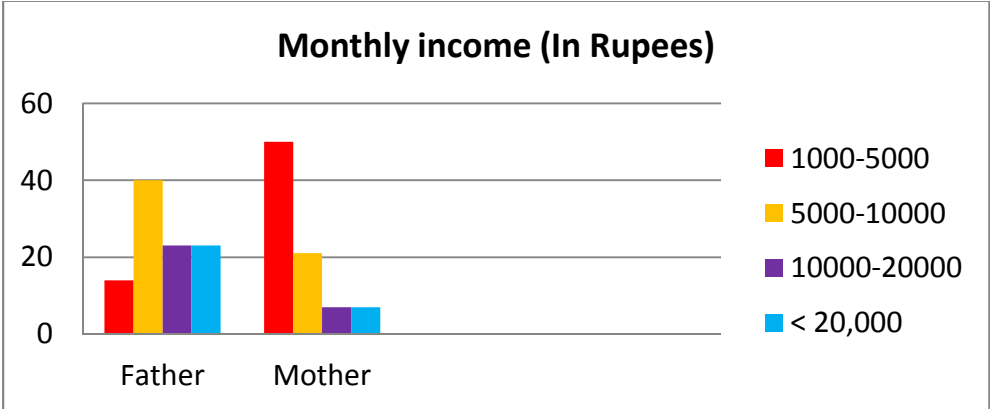
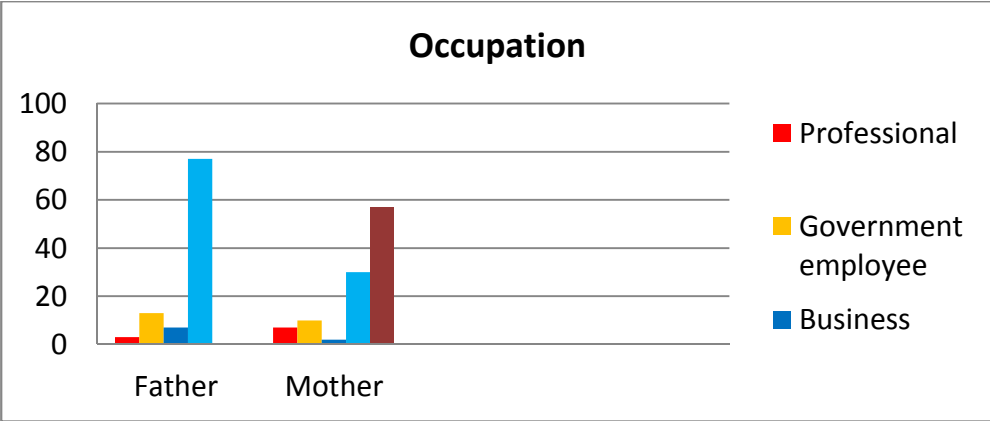
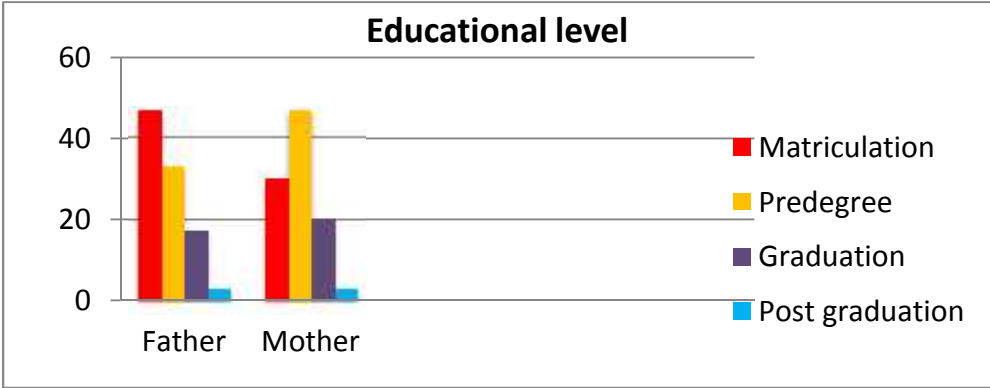
Out of the 30 children selected for the study, 63 percent were males and 37 percent were females. This disparity may be linked to the fact that ADHD is seen more among the male population than the female group. The age group selected for the study was 3-6 years and it was seen that 40 percent belonged to the 5-6 years old category and 33 percent were aged between 3-4 years. It was noted that 97 percent of the children selected belonged to families having two children. Fifty nine percent of the children selected were first born.

#### **4.1.2 General Information of the Parents**

Table 2 and Figure 1 portray details related to the parents of the selected children.

**Table 2**  
**General Information of the Parents of the Selected Children**

<b>Category</b>		<b>Number(N=30)</b>	<b>Percentage(%)</b>
<b>Educational level</b>			
Father	Matriculation	14	47
	High school	10	33
	Graduation	5	17
	Post graduation	1	3
Mother	Matriculation	9	30
	High school	14	47
	Graduation	6	20
	Post graduation	1	3
<b>Occupation</b>			
Father	Coolie	23	77
	Business	2	7
	Government employee	4	13
	Professional	1	3
Mother	Coolie	9	30
	Government employee	3	10
	Professional	2	7
	Home maker	17	57
<b>Monthly income</b>			
Father	1000-5000	4	14
	5000-10,000	12	40
	10,000-20,000	7	23
	<20,000	7	23
Mother	1000-5000	7	23
	5000-10,000	3	10
	10,000-20,000	1	3
	<20,000	3	10
<b>Type of family</b>			
	(a)Nuclear family	24	80
	(b) Joint family	6	20



**Figure 2**  
**Graph Representing the General Information of the Parents of the Selected Children**

As seen in the above Table 2 and Figure 1, educational qualification of the fathers of the selected children show that 47 percent were educated only up to tenth standard and 33 percent up to high school. Only three percent had completed post graduation while there were 17 percent graduates. The same level of education was seen among the mothers of the selected children also.

As regards their occupation in parlance with their level of education, 77 percent of fathers and 30 percent of mothers were coolies (daily wage workers). Mothers (87%) were home makers. Thirteen percent fathers and 10 percent mothers had some small level government jobs, a meager percent were employed in professions of a higher cadre.

Inquiry into the income revealed that fathers (40%) earned between Rs. 5000/- to Rs. 10,000/- on a monthly basis while 23 percent mother had a source of income of Rs. 1000-5000/- only on a monthly basis. This income level however was very low as the table shows that fathers (23%) and mothers (10%) earned less than Rs. 20,000 which was the maximum limit mentioned by the sample taken for the study. This justifies that they would not be able to buy toys and other costly play materials available in the markets which could help reduce the levels of hyperactivity of their children. The type of family which most of them came from were nuclear in set up (80%) as indicated by their responses.

#### **4.2 ADHD Case Profile of the Selected Children**

The pattern of completion of milestones and other aspects related to the identification of ADHD in the selected children are reported in the following table.

**Table 3****Case Profile of Selected Children in relation to ADHD**

<b>Statement</b>		<b>N=30</b>	<b>%</b>
<b>Pattern of completion of milestones</b>			
Raising head	Normal	30	100
Turn over			
Sitting			
Standing with support	Abnormal	-	-
Walking			
<b>Person who identified first</b>			
Mother		24	80
Neighbour		2	7
Teacher		3	10
Relatives		1	3
<b>Number who referred the child to a doctor for confirming the condition (ADHD)</b>			
Yes		-	-
No		30	100
<b>Reported condition of ADHD in family earlier / genetic background</b>			
Yes		12	40
No		18	60

It was interesting to note that none of the selected children showed any abnormality in the completion of their milestones. All of them (100%) had normal milestone completion pattern.

As regards the details of the person who identified symptoms of ADHD in the selected children, in 80 percent of the cases it was the mother who did it first. This may be because mothers are the ones who spend more time with the children than other family members. In 10 percent cases it was the teacher whereas neighbours and relatives played a very minimal role in identification.

It was really shocking to note that none of them had consulted a doctor ever after they identified symptoms of special behavior in their character. This may be typically an indication of their lack of awareness of the condition and the need for early intervention. Forty percent of the respondents reported that there were similar cases reported in the family earlier which clearly indicate there is genetic link to the precipitating condition.

#### **4.3 Symptoms of ADHD Depicted by the Selected Children.**

The following table shows the characteristics pertaining to ADHD depicted by the children in their daily life as reported by their parents.

**Table 4**  
**Characteristics Exhibited by Selected Preschoolers**

<b>Details</b>	<b>Responses as reported by selected parents</b>			
	<b>Yes</b>		<b>No</b>	
	<b>N=30</b>	<b>%</b>	<b>N=30</b>	<b>%</b>
Easily distracted	30	100	-	-
Have difficulty in focusing on one thing for a period of Time	30	100	-	-
Bored with a task after only few minutes	30	100	-	-
Exhibit difficulty in focusing attention on organizing a task	30	100	-	-
Trouble in completing or turning in home work Assignment	30	100	-	-
Seem to be not listening when spoken to	30	100	-	-
Become easily confused	30	100	-	-
Difficulty in processing information as quickly and accurately as others	30	100	-	-
Fidgets and squirms in their seats	30	100	-	-
Struggle to follow instructions	30	100	-	-
Talk non stop	30	100	-	-
Desk around, touching or playing with anything	30	100	-	-
Become very impatient	30	100	-	-
Blurt out inappropriate comments	30	100	-	-
Difficulty in waiting for things they want	30	100	-	-
Interrupt conversations of others	30	100	-	-

It was astounding to note that all the selected subjects (100%) showed all the signs and symptoms of ADHD as reported by the parents either to a lesser or greater degree. Symptoms indicated by the parents include easy distractibility, difficulty in focusing on one thing for a period of time; get bored with a task after just few minutes, exhibit difficulty in focusing attention on organizing a task.

Other symptoms mentioned were; they have trouble in completing their homework, seem to be deaf when they were spoken to and were easily confused as they had difficulty in processing information and following instructions. This apart most of them were reported to be talkative, exhibited behaviour tics, impatient behaviour and the like.

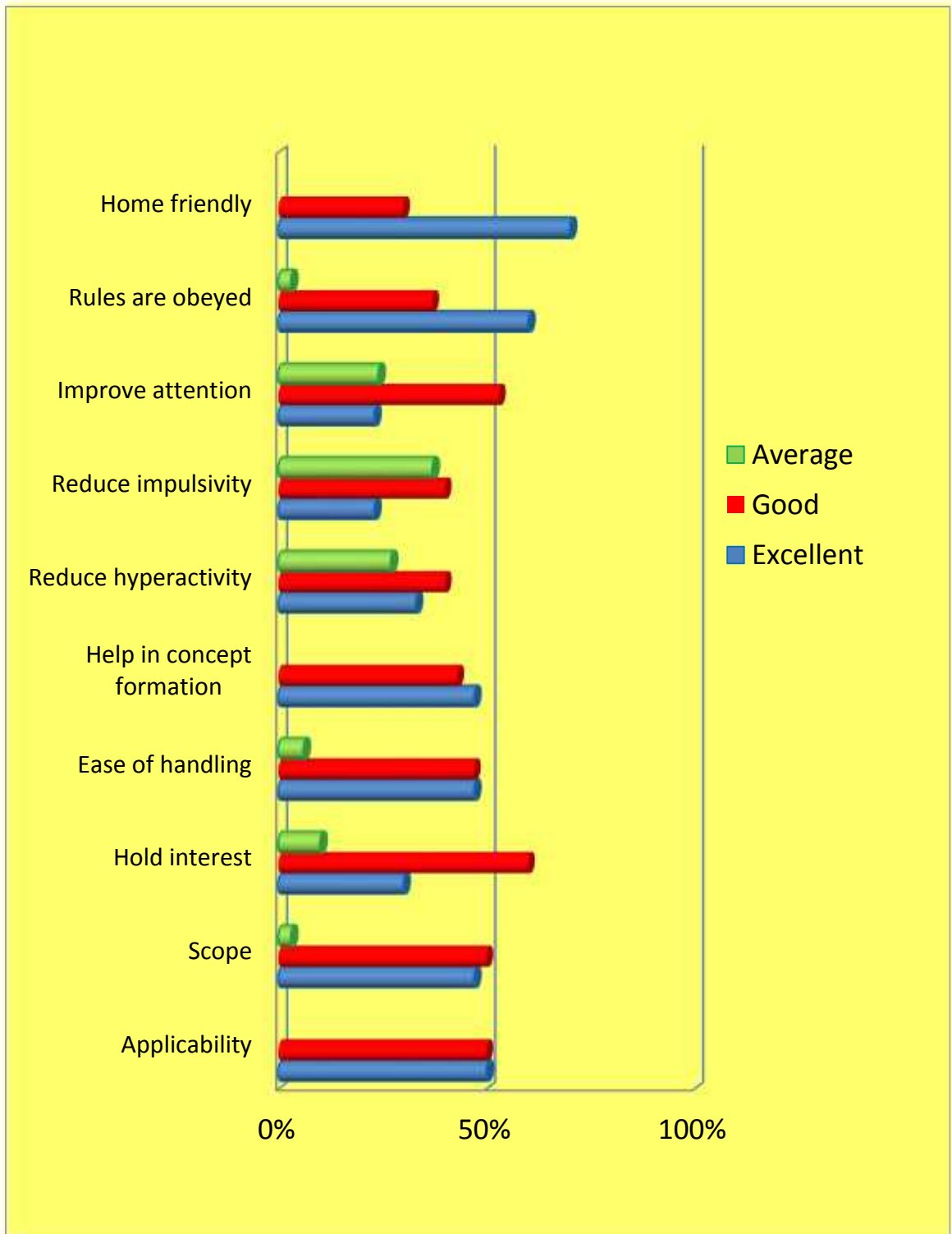
#### **4.4 Evaluation of the Evolved Kit by Selected Parents**

The evolved kit was given to the parents to be used for the children for 30 days and then evaluate its effectiveness. The report of the evaluation as given by the parents is given in Table 5 and Figure 3.



**Table 5**  
**Evaluation Report of the Evolved Home-friendly Activity Kit**

Criteria	Evaluation of parents (N=30)					
	Excellent		Good		Average	
	N=30	%	N=30	%	N=30	%
Applicability	15	50	15	50	-	-
Scope of utility	14	47	15	50	1	3
Hold interest	9	30	18	60	3	10
Ease of handling	19	63	9	30	2	7
Help in concept formation	17	57	13	43	-	-
Help to reduce hyperactivity	1	3	12	40	8	27
Reduce impulsivity	7	23	12	40	11	37
Improve attention	7	23	16	53	7	23
User friendly	18	60	11	37	1	3
Home friendly and low cost	21	70	9	30	-	-



**Figure 3**

**Graph Showing the Evaluation Report of the Evolved Homebased Activity Kit**

The parents were asked to evaluate the kit on the basis of 10 given criteria on a 5 point scale. The kit was marked excellent/good by 50 percent each in terms of its applicability. As regular its utility, 50 percent found it to be good and 47 percent scored it to be excellent. Sixty percent indicated that it helped to hold the interest of the child to a fairly good extent. Regarding aspects such as ease of handling and concept formation, 63 percent and 57 percent marked it excellent. In aspects such as relevance in reducing hyperactivity, impulsivity and improving attention the kit was marked good by 40 percent and 53 percent. This would be attributed to the reason that all the selected children showed all symptoms of ADHD which means that mere intervention would not be that effective if used alone as these children also needed medical intervention. Sixty percent and seventy percent reported that the kit was excellent in terms of user friendliness, home friendliness and low in cost. On the whole the kit was marked excellent by forty three percent and good by forty two percent of the parents who used the kit.

# **SUMMARY AND CONCLUSION**

## CHAPTER 5

### SUMMARY AND CONCLUSION

The present study titled “Development and Evaluation of a Homebased Activity kit for Preschoolers with Attention Deficit Hyperactivity Disorder (ADHD) was conducted in Kanjikuzhi panchayath, Alappuzha district using a self thirty ADHD preschool children in the age range of 3-6 years and their parents with the help of a self designed opinionnaire, activity kit and checklist is summarized below.

The findings that emerged from the study are as follows:

- Out of the 30 children selected for the study, 63 percent were males and 37 percent were females
- Fathers of the selected children (47%) were educated only up to tenth standard and 33 percent up to high school. Only three percent had completed post graduation while there were 17 percent graduates. The same level of education was seen among the mothers of the selected children also.
- Seventy seven percent of fathers and 30 percent of mothers were coolies (daily wage workers). Mothers (87%) were home makers.
- Fathers (40%) earned between Rs. 5000/- to Rs. 10,000/- on a monthly basis while 23 percent mother had a source of income of Rs. 1000-5000/- only on a monthly basis.
- The type of family which most of them came from was nuclear in set up (80%) as indicated by their responses.
- All the selected children (100%) had normal milestone completion pattern.
- None of the selected children’s parents had consulted a doctor even after they identified symptoms of special behaviour in the character of their children.
- In 80 percent of the cases it was the mother who did identify the symptoms first.

- Forty percent of the respondents reported that there were similar cases reported in the family earlier which clearly indicate there is genetic link to the precipitating condition.
- All the selected subjects (100%) showed all the signs and symptoms of ADHD as reported by the parents either to a lesser or greater degree. Symptoms indicated by the parents include easy distractibility, difficulty in focusing on one thing for a period of time; get bored with a task after just few minutes, exhibit difficulty in focusing attention on organizing a task.
- The utility of the kit was marked as good by 50 percent and 47 percent scored it to be excellent.
- Sixty percent indicated that the prepared kit helped to hold the interest of the child to a fairly good extent.
- Regarding aspects such as ease of handling and concept formation of the kit, 63 percent and 57 percent marked it excellent.
- In aspects such as relevance in reducing hyperactivity, impulsivity and improving attention the kit was marked good by 40 percent and 53 percent.
- Sixty percent and seventy percent reported that the kit was excellent in terms of user friendliness, home friendliness and low in cost.
- On the whole the kit was marked excellent by forty three percent and good by forty two percent of the parents who used the kit.

## **Conclusion**

The main focus of the study was to prepare a home based activity kit to help reduce symptoms of ADHD namely hyperactivity and impulsivity and improve their levels of attention. Results indicate that the kit evolved was quite effective except for the reason that these children selected were on the higher degree of ADHD which actually needed medical attention but were not actually getting it. This higher degree of ADHD may also be attributed to the parents lack of awareness and thereby lack of early intervention which may have aggravated the condition. However it may be

concluded that this kit would be highly beneficial for those identified with mild to moderate levels of ADHD and those undergoing therapy. This kit would help in reducing their levels of hyperactivity/ impulsivity and increase their attention span and also help them learn concepts necessary for their formal learning. The intended study was therefore quite successful.

### **Recommendations for further research**

- This study could be implemented on a large sample.
- Awareness programme on ADHD can be conducted as it was found that the rural manner were quite unaware of this special conditions.
- The activity kit can be elaborated with advanced equipments for urban ADHD children
- Appropriate activities for each items can be developed for each age of class.
- The availability of home friendly activity kit for ADHD children in market is less so marketing such products can be useful.

### **Limitations of the study**

- ADHD level is different for different children so the kit is not equally applicable for all.
- If there is medicinal support then only there will be maximum benefit for the Activity kit.
- It is difficult to identify the ADHD disorder in preschool children.

## APPENDIX- III

### EVALUATION FORM FOR EVALUATING THE BOOKELET ON “DEVELOPMENT OF A HOME BASED ACTIVITY KIT FOR PRESCHOOL LEVEL ADHD CHILDREN”

#### PRRLIMINARY DETAILS

- NAME :-
- AGE :-
- SEX :-
- FATHER'S NAME :- OCCUPATION :-
- MOTHER'S NAME :- OCCUPATION :-
- NUMBER OF SIBLINGS :-

1. Interest shown by students in their doing activities?

Excellent	<input type="text"/>	Good	<input type="text"/>
Average	<input type="text"/>	Fair	<input type="text"/>
Below average <input type="text"/>			

2. Scope of doing the activities in repeated times?

Excellent	<input type="text"/>	Good	<input type="text"/>
Average	<input type="text"/>	Fair	<input type="text"/>
Below average <input type="text"/>			

3. Rate of exhibition in transition nature (shift from this activity to another)

Excellent	<input type="text"/>	Good	<input type="text"/>
Average	<input type="text"/>		<input type="text"/>
Below average <input type="text"/>			



4. The extent up to which rules are obeyed

Excellent  Good

Average  Fair

Below average

5. The extent to which interest is shown towards the activity by the student from beginning to the end

Excellent  Good

Average  Fair

Below average

6. The influence of the activity on the understandings of the child

Excellent  Good

Average  Fair

Below average

7. The possibilities enriched by the activity in transforming the hyperactive energy to productive purpose

Excellent  Good

Average  Fair

Below average

8. The extent to which the basic concept is in calculated in children

Excellent  Good

Average  Fair

Below average

9. The vivid applicability of the activity in children

Excellent	<input type="text"/>	Good	<input type="text"/>
Average	<input type="text"/>	Fair	<input type="text"/>
	Below average	<input type="text"/>	

10. The extent to which the activity is home-friendly and of low cost

Excellent	<input type="text"/>	Good	<input type="text"/>
Average	<input type="text"/>	Fair	<input type="text"/>
	Below average	<input type="text"/>	