



TITLE: Anger Expression, Anger Control and Depression in Parents of Diagnosed ADHD Children and Parents of Children with No Diagnosed Psychological Disorder.

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ABSTRACT

This research proposes to study Anger Expression, Anger Control and Depression in Parents of Diagnosed ADHD Children and Parents of Children with No Diagnosed Psychological Disorder.

It is basically to find out if there is any significant difference between parents of ADHD kids and parents of kids with no psychological disorder in anger expression, anger control and depression.

Method:

Sample: 240 people were purposively selected for the study from 13 private schools in Pune, India with the consent of school authorities as well as participants.

Tools; State-Trait Anger Expression Inventory–2 (STAXI-2), Beck Depression Inventory by Beck (BDI) .

Statistical analysis: SPSS software was used to calculate the Means of the groups, calculation of the Standard Deviations (SD), Independent t-test. Two by Two factorial design was used to find out if there are any significant differences between the variables. Additional analysis for Anger index was calculated along with correlational analysis between variables.

Findings suggest that; 1. Anger expression-out (AX-O) among fathers of children without any diagnosed psychological disorder is significantly higher than anger expression out among fathers of children diagnosed with ADHD 2. Anger control-in (AC-I) among fathers of children diagnosed with ADHD is significantly higher than anger control-in among fathers of children without any diagnosed psychological disorder. 3. Anger control-out(AC-O) among fathers of children diagnosed with ADHD is significantly higher than anger control-out among fathers of children without any diagnosed psychological disorder. 4. Anger control-out among mothers of children diagnosed with ADHD is significantly higher than anger control-out among mothers of children without any diagnosed psychological disorder. 5. Depression among fathers of children diagnosed with ADHD is significantly higher than depression among fathers of children without

any diagnosed psychological disorder.⁶ Depression among mothers of children diagnosed with ADHD is significantly higher than depression among mothers of children without any diagnosed psychological disorder.

Key words; Anger expression out (AX-O), Anger expression in (AX-I), Anger Control Out (AC-O), Anger control in (AC-I), Anger Index (AX-Index), Depression.

CHAPTER 1

INTRODUCTION

1.1 . INTRODUCTION.

1.2. CONCEPTS THAT WERE USED IN THE PRESENT STUDY.

1.2.1. ANGER

1.2.2. DEPRESSION

1.3. STATEMENT OF THE PROBLEM.

1.4 RATIONALE AND SIGNIFICANCE OF THE STUDY

1.5 RESEARCH QUESTIONS

1.6 OBJECTIVES OF THE PRESENT STUDY

Chapter 1

1.1 Introduction

Attention Deficit Hyperactivity Disorder is one of the most common neurodevelopmental disorders in childhood. (Faraone,et al .,2021) There have been many studies conducted on ADHD and children with the same disorder . However, psychological health and mental hygiene of parents with children suffering ADHD have not been under studies and research as much as research for kids suffering ADHD.

Hence, the current study aims to find out if having ADHD children can significantly bring some changes to the psychological and mental health of parents.

Background of the study

Being a school principal in Pune India with more than 15 years of experience , the researcher has observed some differences in behavior of Parents of diagnosed ADHD children and parents of children with no diagnosed disorder in school meetings .Therefore behavioral observations about anger and depression of parents on the one hand , and researcher's interest to find out the results of the hypotheses on the other hand , are the most significant triggers to conduct the current research.

1.2 Concepts used in the present study.

1.2.1 Anger

Anger is defined as a psychobiological emotional state that is generally accompanied by arousal of the neuroendocrine and autonomic nervous system (Spielberger ,1988).

Anger stems from a sense of social injustice. Women have higher levels of anger than men, and each additional child in the household increases anger, according to data from a probability sample of 2,031 persons and it was indicated that children increase anger more for mothers than for fathers (Willigen & Ross, 1996).

Many women nowadays are overworked and under immense pressure to work full-time, care for their families, and maintain their appearance. When women are so busy, time does not allow them to think about themselves and they cannot spend time on their own which can be a big cause of anger and frustration. Many women try to hold their anger within , which just makes things worse in the long run, but holding frustrations in can lead to rage that is released at inopportune times (Chatfield,2016).

Many people feel enraged because of little irritations, such as someone cutting them off on the road. Although it may appear that this is the cause of their rage, it is more probable that they are furious about something that happened previously that they have been unable to communicate. Some specialists believe that watching violent scenes on television adds to the problem. From 2013 to 2018, television violence against women in the United States surged by 120 percent. The constant presence of violence and rage provides the message that it is a normal way of expressing oneself. When we are disturbed, however, there are far more efficient ways to communicate, such as talking rationally about our feelings. It is also crucial to remember that even if someone is not shouting and screaming, they can still be angry inside (Chatfield, 2016).

Anger directed inwards is one way to express depression. Women may internalize their rage if they don't know how to deal with their feelings. Keeping all emotions hidden can lead to depression. Anger not only suppresses the immune system, but it can also ruin relationships. People sometimes end up tiptoeing because they're afraid of flying off the handle. Taking out frustrations on children can be very harmful. Children are not aware to the fact that it was not they who made you furious. They only see someone yelling at them. They can internalize those feelings and begin to believe it is the proper way to respond when someone is distressed. However, sometimes it is perfectly acceptable to be angry (Nicholes, 2019).

People are entirely within their rights to be in rage in certain instances; for example, if they have been harmed or misled, they are allowed to be furious and upset. The most crucial distinction to make is between unresolved and resolved anger. Anger that has been resolved entails reacting proportionately and appropriately to the circumstances. Unresolved anger, such as road rage, is losing control in an inappropriate environment. If someone is continuously displaying signs of unresolved anger, they should consider whether or not their temper is out of control. (Nicholes.2019).

Anger can sometimes serve as a stand-in for other emotions. This means that people sometimes make themselves furious in order to avoid having to feel pain. People often transform their suffering into rage because it feels better to be angry than to remain in pain. Pain can transform into fury either intentionally or unconsciously. There are certain benefits to becoming furious rather than being in agony. People who are in pain tend to think about it. Angry people, on the other hand, consider harming individuals who have caused them distress. The shift in attention from self-focus to other-focus is part of the pain-to-anger transformation.

Additionally, becoming furious produces a sense of justice, authority, and moral superiority that is absent when someone is simply in pain, this serves as a fantastic smoke screen for feelings of

vulnerability. When individuals are angry, they have a reason for it. It is uncommon for someone to become enraged with someone they do not believe has hurt them in some way. (Psychology of Anger, 2016).

Anger and Gender

When it comes to rage, there is a well-established double standard that divides along traditional gender lines. When it comes to anger, men are more enraged than women, possibly because men have traditionally been considered as world defenders, rulers, and enforcers. (Yglesias, 2016).

Anger directed toward a political or societal development rather than toward one's spouse, children, or coworkers might be beneficial. Angry women, on the other hand, have been and continue to be labeled as troublemakers, despite the fact that they have utilized their rage to fight injustice, inequality, intolerance, lack of representation, and other issues. (Yglesias, 2016).

As a result, in this environment, women's wrath is put to good use. Internal rage, on the other hand, can be physically and emotionally harmful in one's personal life. At both low and high levels, the hormone testosterone in men is linked to aggression and irritability. However, it's unclear which comes first. Men are significantly more prone to be enraged at another person or object, whereas women are more prone to express their anger indirectly or to turn it against themselves. Surprisingly, the same health problems that are connected with people who are prone to rage also raise their risk of cardiovascular disease; stroke, social isolation, and hypertension affect men and women equally. (Yglesias, 2016).

Repressing anger does not make it go away; on the contrary, it makes it worse. Whether or not we are actively furious, the same physiological response occurs, with all the risks that come with

it. The more we try to suppress rage, the more anxiety, despair, irritation, resentment, chronic pain, and addictive or self-destructive behaviour are likely to arise. (Lubow, 2018).

Anger in Women

Although anger is a natural reaction, it is primarily triggered by taught behavior. If a child was raised by an angry parent or had to deal with one who was addicted to drugs or alcohol, their brain may be predisposed to anger. They may also have inherited the traits of a father who was passive-aggressive, domineering, or prone to suppressing rage. Witnessing or experiencing physical or emotional abuse can result in buried anger that will likely not come to the surface for years. Children see their parent's behavior and caregivers and will grow modeling the same behavior. On the other hand, daily activities can also affect how easily a person experiences anger. For example, feeling thirsty and hungry can simply turn people towards anger. This could be one of the reasons why it's usually recommended to eat three balanced meals and two snacks per day to keep emotions in check. Even the elderly are more prone to temper tantrums when eating meals with a high glycemic index, such as simple sweets, at least when they are stressed. Moreover, in some cases people might get angry easier in high temperature climate or in a sunny day. Hormonal imbalance can eventually affect both anger and depression, which is one of the reasons why both symptoms are so common throughout perimenopause and menopause. (Lubow, 2018).

The most typical symptoms of hormone fluctuation during pregnancy, menopause, or perimenopause include irritability and unexpected mood swings. Anger has the ability to trigger the production of pro-inflammatory chemicals in the body. Estrogen has anti-inflammatory properties, whilst progesterone has a relaxing impact generally. When progesterone-to-estrogen ratios become unstable during the perimenopausal transition, a large percentage of women,

usually for the first time, experience severe anger, fits of wrath, and snappiness. (Women's Health, 2019).

During perimenopause and menopause, some women experience their first bouts of rage, and they are frequently terrified by how poisonous their outbursts can be. Shifting hormones in women highlights a challenge to the adaptability of the endocrine system, especially around menopause. When hormone fluctuations often lead us to vent our “true” feelings, menopause opens the window to reveal who is really directing the show. It is anger for many women, and it is often quite deep-seated. Therefore, for the same reason, Supporting adrenal function and restoring hormonal balance help many women feel more in control of their emotions (Women's Health , 2019).

1.2.2 Depression

Depression is an emotion with bleakness of thought, feeling of irritation, a sense of emptiness, a question about what life is for, and inability to feel pleasure. Mostly they occur when we are tired or overburdened, when we have had a row with someone close to us or when an important relationship is not going smoothly (Kaplan, 1988).

Depression tends to cause people to focus on the negative events more closely and to blow them out of proportion (Kolakowski, 2014). Depression or major depressive disorder is a common and serious medical illness that negatively affects how people act, feel and the way they think which

is fortunately treatable. Depression causes a loss of interest in activities once enjoyed as well as feelings of sadness. It could cause a number of physical and emotional issues and can decrease a person's ability to function at home as well as workplace. Theoretically, depression is the most common psychiatric disorder. This disabling condition can adversely affect a person's family, work or school life, sleeping and eating habits, and general health. The incidence of depression has increased every year in the past century (First, Frances & Pincus, 2004).

Males and females develop depression with about the same frequency until puberty. Once puberty occurs, everyone becomes more susceptible to depression but at this point females are twice as susceptible as males (Marano, 2003).

According to DSM-5 (2013) Depression symptoms can vary from mild to severe and can include:

- Loss of interest in activities once enjoyed
- Trouble sleeping or sleeping too much
- Loss of energy or increased fatigue
- Feeling worthless or guilty
- Difficulty thinking, concentrating or making decisions
- Thoughts of death or suicide
- Increase in purposeless physical activity or slowed movements and speech
- Weight loss or gain unrelated to dieting and changes in appetite
- Feeling sad or having a depressed mood

Symptoms must last at least two weeks for a diagnosis of depression. Medical conditions (e.g., thyroid problems, a brain tumor or vitamin deficiency) also can mimic symptoms of depression so it is important to rule out general medical causes. Depression affects an estimated 1 in 15 adults (6.7%) and 1 in 6 people (16.6%) will experience depression at some time in their life. Depression can happen any time, but usually it appears during the late teens to mid-20s. Women are more likely than men to experience depression. (DSM-5, 2013).

Some studies have indicated that one-third of women will experience a major depressive episode in their lifetime. Loss of a job, the ending of a relationship or the death of a loved one is difficult experiences for a person to endure. It can be very normal to feel sadness or grief in response to such situations. Those experiencing loss usually may describe them as being depressed however, being sad is not the same as having depression. Process of grief is something unique and natural to each and every individual and shares some of the same features of depression. Grief and depression both might involve intense sadness and withdrawal from normal activities. They are also different in important ways: In grief, painful feelings come in waves, often mixed with nice memories of the deceased. In major depression, mood and/or interest (pleasure) are decreased for almost two weeks. The death of a loved one for some people can bring on major depression. Being a victim of a physical assault, losing a job or a major disaster can lead to depression. When depression and grief co-exist, the grief is more severe and lasts longer than grief without depression. Despite some overlap between grief and depression, they are different. Distinguishing between them can help people get the help, support or treatment they need (DSM-5, 2013).

In grief, self-esteem is usually maintained. In major depression, feelings of worthlessness and self-loathing are common. *Several factors can play a role in depression* Depression can run in families. For example, if one identical twin has depression, the other has a 70 percent chance of having the illness sometime in life. **On the other hand, environmental factors are important in depression.** For instance, continuous exposure to violence, neglect, abuse or poverty may make some people more vulnerable to depression. (DSM-5, 2013).

Also personality as well as biochemistry has a key role on depression .For example, people with low self-esteem, who are easily overwhelmed by stress, or who are generally pessimistic appear to be more likely to experience depression. **On the other hand, differences** in certain chemicals in the brain may contribute to symptoms of depression. (Health line parenthood ,2020).

Postpartum Depression

It is important to know that “postpartum” basically means going back to being not-pregnant. Therefore, those who have had a miscarriage or abortion can also experience many of the mental and physical effects of being in the postpartum period, including PPD. (Paulson & Bazemore, 2010)

Male partners can be diagnosed with it, too. Even though they may not experience the physical changes brought on by giving birth, they do experience many of the lifestyle ones. A 2010 study suggests about 10 percent of fathers are diagnosed with PPD, especially between 3 and 6 months after birth. (Paulson & Bazemore, 2010)

PPD can appear anywhere from a couple of weeks to 12 months after birth therefore, there's no average length of time it lasts. A 2014 research study suggested that symptoms of PPD improve over time, with many cases of depression resolving 3 to 6 months after they begin. In the same study findings suggested that plenty of women were still dealing with PPD symptoms well beyond the 6-month mark. Anywhere from 30 to 50 percent met criteria for PPD 1 year after giving birth, while a little less than half of the women studied were reporting depressive symptoms 3 years postpartum (Health line parenthood, 2020).

Post-Wedding Depression

Many people--both male and female--experience the post-wedding time period as anti-climactic. All of the planning, attention, and excitement is over and studies indicate that the first year of

marriage is one of the most difficult adjustment periods in marriage. In combination, it can lead to depression (Kolakowski, 2014).

1.3 Statement of the problem

This research proposes to study Anger Expression, Anger Control and Depression in Parents of Diagnosed ADHD Children and Parents of Children with No Diagnosed Psychological Disorder.

1.4 Rationale and significance of the study

Here in the present research parenting ADHD kids and parenting Non-ADHD kids will be compared to find out if having or not having ADHD children can make any significant difference in anger expression, anger control and depression in both mothers and fathers.

1.5 Research Questions

Is there any significant difference between mothers of ADHD kids and mothers of kids with no psychological disorder in anger expression, anger control and depression?

Is there any significant difference between fathers of ADHD kids and fathers of kids with no psychological disorder in anger expression, anger control and depression?

Are parents with ADHD children capable of controlling their anger better than other parents without ADHD children?

1.6 Objectives of the present study

1. To examine and compare Anger Expression in fathers of diagnosed ADHD children, and fathers of kids without any diagnosed psychological disorder.
- 2.To examine and compare Anger Control in fathers of diagnosed ADHD children, and fathers of kids without any diagnosed psychological disorder.
3. To examine and compare Depression, in fathers of diagnosed ADHD children, and fathers of kids without any diagnosed psychological disorder.
4. To examine and compare Anger Expression in mothers of diagnosed ADHD children and mothers of kids without any diagnosed psychological disorder.
- 5.To examine and compare Anger Control in mothers of diagnosed ADHD children, and mothers of kids without any diagnosed psychological disorder.
6. To examine and compare Depression, in mothers of diagnosed ADHD children and mothers of kids without any diagnosed psychological disorder.

CHAPTER 2

REVIEW OF LITERATURE

2.1 INTRODUCTION

2.2 PARENTHOOD AND ADHD CHILDREN

2.3 ADHD AND NON-ADHD CHILDREN

2.4 PARENT-CHILD RELATIONSHIP OF ADHD CHILDREN

2.5 PARENT MANAGEMENT TRAINING (PMT)

2.6. PARENT-CHILD RELATIONSHIP AND CHILDREN'S DEVELOPMENT

Chapter 2

Literature review

2.1 Introduction

The first chapter has explained the conceptual framework and theories related to variables included in the present study. The present chapter reviews some of the most relevant studies related to each one of the variables and their interrelationships.

2.2 Parenthood and ADHD children

Mofokeng and Wath (2017) studied the challenges experienced by mothers and fathers living with ADHD children.

This South African study sought to understand how parents coped with raising a kid who had attention deficit hyperactivity disorder (ADHD). The study used a qualitative research design. Using a purposive sample technique, ten parents of ADHD-diagnosed kids getting outpatient therapy at a mental health center were chosen.

Unstructured individual interviews were used to gather the data, which was then analyzed using open coding. There were steps taken to ensure reliability and moral research procedures.

Five themes were found: Caregiving stress, emotional and social impacts, the influence of academic difficulties, and efforts to manage caregiving stress.

Conclusion: Due to the stigmatizing views of family and community members, parents of children with ADHD face stress and anxiety while they try to manage the child's symptoms.

Parents struggle with strong emotions and poor social and professional functioning that affects their day-to-day life. In order to offer multidisciplinary interventions targeted at empowering and supporting caregivers of children with ADHD, health care professionals must be aware of the difficulties that come with raising such a child. (Mofokeng & Wath ,2017)

2.3 ADHD and Non-ADHD children

Differences in anger, aggression, depression, and anxiety between ADHD and non-ADHD children

In a study by Kitchens and Rosen (1999) it was found that children with attention-deficit/hyperactivity disorder (ADHD) and non-ADHD had different levels of rage, aggression, despair, and anxiety.

Data were gathered from kids suffering ADHD and non-ADHD children, their teachers, and their mothers. Self-report data analysis revealed that ADHD children had significantly higher levels of rage and depression than the non-ADHD children.

Mothers also noted that children with ADHD were significantly more aggressive and unhappy than non-ADHD children. Further analysis of the mothers' report data revealed a multivariate impact for the interaction between ADHD-group and gender reaching statistical significance.

Males with ADHD had significantly higher levels of depression than both males and girls without ADHD, according to analyses of the interaction. (Kitchens & Rosen ,1999).

There were no statistically significant differences between the groups, according to the teacher-report data. Further analysis showed that teachers believed ADHD children to be more depressed

and worried than non-ADHD children. However, the differences between the ADHD and Non-ADHD groups reached significance. (Kitchens & Rosen, 1999).

2.4. Parent-child relationship of children with ADHD

Mother–Child Relationships of Children with ADHD: The Role of Maternal Depressive Symptoms and Depression-Related Distortions

Hinshaw (2002) examined the impact of maternal depressed symptoms on cross-informant inconsistencies in reports of child behavioral issues and several indicators of parent-child relationships in order to test the Depression-Distortion hypothesis.

The sample consisted of 96 children aged 6 to 10 with a diagnosis of ADHD-Combined Type and their mothers, who gave baseline information prior to taking part in a randomised clinical experiment.

Child traits, self-reported maternal depressive symptoms, parenting styles, and mother-child interactions in a lab were all considered in the measurements.

Elevated symptoms of maternal depression were linked to mothers' assessments of poor parenting.

General behavioural problems, poor parenting style, and depressive symptom levels all predicted biases in the negative direction in mothers' reports of their child's ADHD symptoms.

While degrees of depressive symptoms did not predict observed parenting behaviors, maternal distortions did. These interactions between parents and children were problematic.

Exploratory analyses revealed a tangentially significant mediation effect between reports of poor parenting by depressive distortions and mother depressive symptomatology. (Hinshaw,2002)

2.5. Prent management training (PMT)

4-The Effectiveness of Parent Management Training (PMT) on Anxiety and Depression in Parents of Children With ADHD.

Moghaddam (2016) evaluated the effectiveness of (PMT) and a positive parenting plan on children's behavioral concerns and parents' depression and anxiety reduction. The participants in this research, which was carried out in Zahedan in 2011, included 36 parents of

children with ADHD whose children had been taking medication for at least 8 weeks prior to the study.

Conners questionnaires for parents and DASS anxiety and depression assessments were used to gather the data.

Results: Before intervention, the case group's mean Conners parents measure was (104.7 ± 11.04), and it was (92.4 ± 8.72) after. It was (102.3 ± 22.38) before and (102.2 ± 19.94) after the change in the control group. There was no statistically significant difference in the Conners scale in the control group ($P = 0.945$), while there was in the case group before and after the intervention ($P\text{-value} = 0.0001$). (Moghadam et al., 2016)

Conclusions: This research finally found that parent behavioral management training could lessen preschoolers' symptoms of ADHD. (Moghadam et al., 2016).

A disorder of anger and aggression: Children's perspectives on attention deficit/hyperactivity disorder in the UK.

Singh (2011) conducted research on social and moral dimensions of ADHD diagnosis. She asked children about what they know about ADHD and what they do with this diagnosis in an interview with 150 British children. According to Singh (2011) In the UK, rage and aggression are considered to be symptoms of ADHD.

Children in UK schools have a harder time controlling their behavior because of the aggressive atmosphere there. Singh stated that diagnosed children's mobilization of Attention deficit

/Hyperactivity disorder behaviors and their exploitation of the diagnosis indicates how children's active moral agency could support and compromise cognitive, behavioral and social resilience. Children use their label of ADHD and its symptomatic behaviors for moral and social purposes. Children who struggle with self-control depend more on friendships for support.

Singh concluded that mental health policy should consider the social, moral and cognitive aspects of ADHD diagnosis. (Singh,2011)

In the study of Families of kids suffering ADHD attention deficit/hyperactivity disorder (2001)

Johnston and Mash (2001) investigated what is known in family characteristics associated with ADHD. Findings show that presence of hyperactivity and attention deficit in kids is related to varying degrees with disturbances in family and marital functioning, disrupted child- parent relationships, particular patterns of parental cognitions about kids behavior , parenting stress , reduced self-efficacy in parenting and parental psychopathology when hyperactivity and attention deficit are comorbid with conduct problems .

In their review of the research on family functioning and ADHD, researchers came to the conclusion that various degrees of family and marital dysfunction are all associated with ADHD in children. (Johnston & Mash , 2001)

Some writers have drawn connections between ADHD and unstable attachment patterns. (e.g. Crittenden & Kulbotten, 2007).

2.6. Parent-child relationship and children's development

There has been a consistent emphasis on mothers' relationships with their children in research looking at how parent-child relationships affect children's development (Phares & Compas, 1992), and the literature on ADHD has not been an exception (Singh, 2003).

But studies show that fathers play a significant part in their child's emotional and behavioural growth (Videon, 2005). For instance, fathers may play a crucial role during adolescence in the development of the son's masculine identity by providing a source of support and advice about the adult world, particularly the world of men, as well as advice about sexual relationships and other related topics.

The idea has also been put forth by Chodorow (1978) that one of the main tasks for boys in most cultures is to cut ties with their mother, who serves as their major attachment figure, in order to transition into the adult male world. Therefore, father is crucial to managing the links and breaks with the mother.

Some authors found that father-son relationships had special effects on ADHD symptoms and that mothers and dads had different relationships with their children who had the disorder.

For instance, Lifford, et al., (2008) discovered that father rejection predicted ADHD symptoms in longitudinal research. (Lifford et al., 2008).

For mothers, this impact was not discovered. A negative correlation between father participation and hyperactivity was also noted by Flouri (2008). Boys with an ADHD diagnosis exhibited more "negative" behavior towards their mothers than towards their dads, according to Tallmadge & Barkley's (1983) observations.

In addition, based on whether families were observed in dyads or triads, Buhrmester et al. (1992) discovered variations in parent-son interactions. This result emphasizes the importance of understanding father-son relationships—and mother-son relationships, for that matter—within the larger systemic context in which they develop.

According to Singh's research in 2003, fathers are typically less trusting of medical diagnoses and treatments than moms. Sons' "ADHD" behaviour was attributed to "indulgent mothering," "lack of drive," and the idea that "boys will be boys." Additionally, Singh (2003) stated that a lot of fathers seemed to comprehend and empathise with their sons' behaviours, relating it to their

own behaviour as a child. In fact, a few of the study's mothers speculated that their spouses might suffer from "undiagnosed ADHD".

2.7. Parents , depression and anger.

Sperberg (1995) examined women's depression as a function of both the level of anger suppression or anger expression and level of mutuality experienced with partners. Data were gathered from 223 female volunteers enrolled in graduate and undergraduate psychology courses. The Beck Depression Inventory (Beck, 1978) measured depression. The constructs of mutuality and anger suppression/expression were measured with the Mutual Psychological Development Questionnaire (Genero, Miller, & Surrey, 1992) and the State-Trait Anger Expression Inventory (Spielberger, 1988), respectively. Factorial analyses examined the relationships between depression scores and levels of anger suppression/expression and levels of mutuality. The results failed to support the proposed interactions, but they were supportive of the relationships between higher depression scores, high levels of anger suppression/expression, and low levels of relationship mutuality.

A stepwise regression reinforced the idea that anger suppression/expression, and mutuality each make unique contributions to the prediction of women's depression scores. Finally, a series of ANOVAs supported hypotheses that level of depression was related to the degree that anger is suppressed, expressed, or controlled and to the degree of perceived mutuality (Sperberg,1995).

CHAPTER 3

METHODOLOGY

3.1 INTRODUCTION

3.2 HYPOTHESES

3.3 METHODOLOGY

3.3.1 Sample

3.3.2 Variables

3.3.3 Tools

3.4 PROCEDURE

3.5 STATISTICAL ANALYSIS

3.6 SUMMARY

3.1.Introduction

The present chapter explains in detail the methodology used in this study. This contains a comprehensive description of the variables studied , description of the sample , hypotheses , the tools used , the procedure used for data collection and the employed statistical techniques.

3.2.Hypotheses

1-Anger expression in among **fathers** of kids without any diagnosed psychological disorder is significantly higher than **Anger expression in** among fathers of diagnosed ADHD children.

2- Anger expression in among **mothers** of kids without any diagnosed psychological disorder is significantly higher than **Anger expression in** among **mothers** of diagnosed ADHD children.

3-Anger expression out among fathers of kids without any diagnosed psychological disorder is significantly higher than **Anger expression out** among fathers of diagnosed ADHD children.

4 Anger expression out among mothers of kids without any diagnosed psychological disorder is significantly higher than **Anger expression out** among mothers of diagnosed ADHD children.

5-Anger Control in among fathers of diagnosed ADHD children is significantly higher than **Anger Control in** among fathers of kids without any diagnosed psychological disorder.

6- Anger Control in among mothers of diagnosed ADHD children is significantly higher than **Anger Control in** among mothers of kids without any diagnosed psychological disorder.

7-**Anger Control out** among fathers of diagnosed ADHD children is significantly higher than **Anger Control out** among fathers of kids without any diagnosed psychological disorder.

8- **Anger Control out** among mothers of diagnosed ADHD children is significantly higher than **Anger Control out** among mothers of kids without any diagnosed psychological disorder.

9-**Depression** among fathers of diagnosed ADHD children is significantly higher than **Depression** among fathers of kids without any diagnosed psychological disorder.

10- **Depression** among mothers of diagnosed ADHD children is significantly higher than **Depression** among mothers of kids without any diagnosed psychological disorder.

3.3.Methodology

3.3.1.Sample.

N=240	Having ADHD child/children	Having child/children with no diagnosed psychological/health concerns.
Fathers	60	60
Mothers	60	60

Purposive sampling will be applied for the present study in a 2 by 2 factorial design.

3.3.2.Variables

Independent variables

Status of parents, whether they have ADHD children or not having any children with diagnosed psychological/health concerns.

Dependent variables

Anger Expression In, Anger Expression out, Anger Control In, Anger Control Out and Depression are dependent variables of the study.

Control variables.

- Age (30-40 years old)
- Education (having passed at least 12th standard and having English language proficiency for answering the questionnaires).
- The number of children for parents is 1 to 3 with minimum age of 3 for the youngest child to minimize the interference of postpartum depression for mothers.
- To minimize the interference of financial problems on the results, samples will be collected from parents whose children attend private schools.
- All participants live with their spouse and children.
- All the respondents were voluntarily parents.

Inclusion criteria

- Indian participants staying in Pune with English proficiency to complete the questionnaires are included in the study.
- Parents of ADHD children as participants of the study have minimum of one child who is diagnosed with ADHD at any level (mild, moderate, severe) .

Exclusion criteria

- Pregnant women and remarried women are excluded from the study.
- Remarried men are excluded from the study.
- Divorced participants are excluded from the study.
- Participants with less than 5 years of marital life experience are excluded.
- Participants with more than 3 children are excluded.
- Participants with physical disability and major physical issues are excluded from the study.
- Participants whose children suffer any physical disability or major physical issues are excluded from the study.

Participants will be collected from private school in Pune, India, with the permission of school managements and consent of participants.

240 participants will be selected for the current study.

3.3.3.Tools

- **Personal data sheet and consent form**

The personal data sheet includes, age, number of children, age of children, education, if ever remarried, if divorced,

, marital life duration, if they are suffering from physical disability and major physical/psychological concerns.

If their children are suffering from ADHD, physical disability, and major physical/psychological concerns.

- **State-Trait Anger Expression Inventory–2 (STAXI-2)**

The material needed for the present study will be the questionnaires (State-Trait Anger Expression Inventory–2 (STAXI-2) by Spielberger.

The State-Trait Anger Expression Inventory-2 (STAXI-2) is a 57-item inventory which measures the intensity of anger as an emotional state (State Anger) and the disposition to experience angry feelings as a personality trait (Trait Anger). The instrument consists of six scales measuring the

intensity of anger and the disposition to experience angry feelings. It consists of 4-point rating scales that assess intensity of anger at a particular moment and the frequency of anger experience, expression, and control. It is used for Clients between the ages of 16 and 63 with paper-and-pencil administration and hand scoring.

Means, standard deviation and α -coefficient were calculated according to gender, for normal adults and psychiatric patients. α coefficient measure of the internal consistency were universally high (above .84 and median $r = .88$), except for the 4 item T-ang/r subscales, where in reliability coefficients were .76 for normal adult females, and .73 for normal adult males.

Significant correlations were obtained with all three hostility measures and T-Anger for anger and hostility. Various other validation studies in the area of anger and hypertension, CHD's,

cancer ,etc, suggest that STAXI-2 is a satisfactory valid tool for measuring experience , expression and control of anger .

STAXI-2 yields scores for 6scales ,5subscales and the Anger Expression Index (AX-Index).

Overview of STAXI-2 scales and subscales :

Description of the test for required variables .

- **Anger expression in (AX-I)**

It measures how often angry feelings are experienced but not expressed (suppressed) .(Spielberger ,1988)

- **Anger expression out (AX-O)**

It measures how often angry feelings are expressed in verbally or physically aggressive behavior. (Spielberger,1988).

- **Anger control in (AC-I)**

It measures how often a person attempts to control angry feelings by calming down or cooling off. (Spielberger ,1988).

- **Anger control out (AC-O)**

It measures how often a person controls the outward expression of angry feelings. (Spielberger,1988).

Anger Expression Index (AX- Index).

It provides a general index of anger expression based on responses to the AX-O, AX-I , AC-O and AC-I Items .

Beck Depression Inventory by Beck (BDI)

It is a 21-item; self-report rating inventory that measures characteristic attitudes and symptoms of depression. The BDI takes approximately 10 minutes to complete, although clients require a fifth – sixth grade reading level to adequately understand the questions.

Internal consistency for the BDI ranges from .73 to .92 with a mean of .86. (Beck, Steer, & Garbin, 1961) . The BDI demonstrates high internal consistency, with alpha coefficients of .86 and .81 for psychiatric and non-psychiatric populations respectively (Beck, 1961).

Testing was administered in following sequence (a) personal data sheet, (b) Beck Depression Inventory, (BDI), (c) STAXI_2, State-Trait Anger Expression Inventory–2

A semi-structured interview was taken randomly from 16 volunteer participants for qualitative analysis .

The researcher took all the efforts to clarify the doubts of the participants about the research work as well as consent of the participants to do the tests .Therefore, respondents were assured about the confidentiality of their personal data and private information that no harm would involve in sharing their responses .

- Questionnaires were shared with willing and volunteer parents with their consent and participants were informed that their personal information will not be shared anywhere, and results would be shared collectively in group data for research purposes.
- Questions are short for self-awareness that will be motivating for respondents. However, only volunteer participants with English language proficiency were included because questionnaires are in English language.

3.4 Procedure

The sample for the study was purposively selected from parents of Diagnosed ADHD children and parents of kids without diagnosed psychological/health concerns. From 13 private schools in Pune, India.

. All respondents used the English version of the tests hence they all had the English proficiency to complete the questionnaires. The respondents were selected on the basis of age (30 to 40),

The number of children for parents is 1 to 3 with minimum age of 3 for the youngest child to minimize the interference of postpartum depression for mothers.

All the respondents were voluntarily parents. To minimize the interference of financial problems on the results, samples were collected from parents whose children attended private schools.

All participants lived with their spouse and children. All participants had minimum 12th standard education level with English language proficiency for answering the questionnaires.

3.5 Statistical analysis

The responses of the participants were scored as per the instructions given in the manuals. Descriptive statistics were calculated and for calculation of variables, SPSS software was used to calculate the Means of the groups, calculation of the Standard Deviations (SD), Independent t-test. Also, Two by Two factorial design was used to find out if there are any significant differences between the variables. Also for additional analysis Anger index was calculated along with correlational analysis between variables

3.6. Summary

This chapter explained in detail the methodology used in the present study. In addition , psychometric properties of the tools , hypotheses ,sample and the statistics used to analyze the data to test the hypotheses were described briefly in this chapter .

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CHAPTER 4

RESULTS

4.1 OVERVIEW

4.2 NORMALITY AND DATA SCREENING

4.3 DATA ANALYSES

4.4 RESULTS

4.5 EXPLORATORY INFERENCES

4.6 SUMMARY

CHAPTER 4

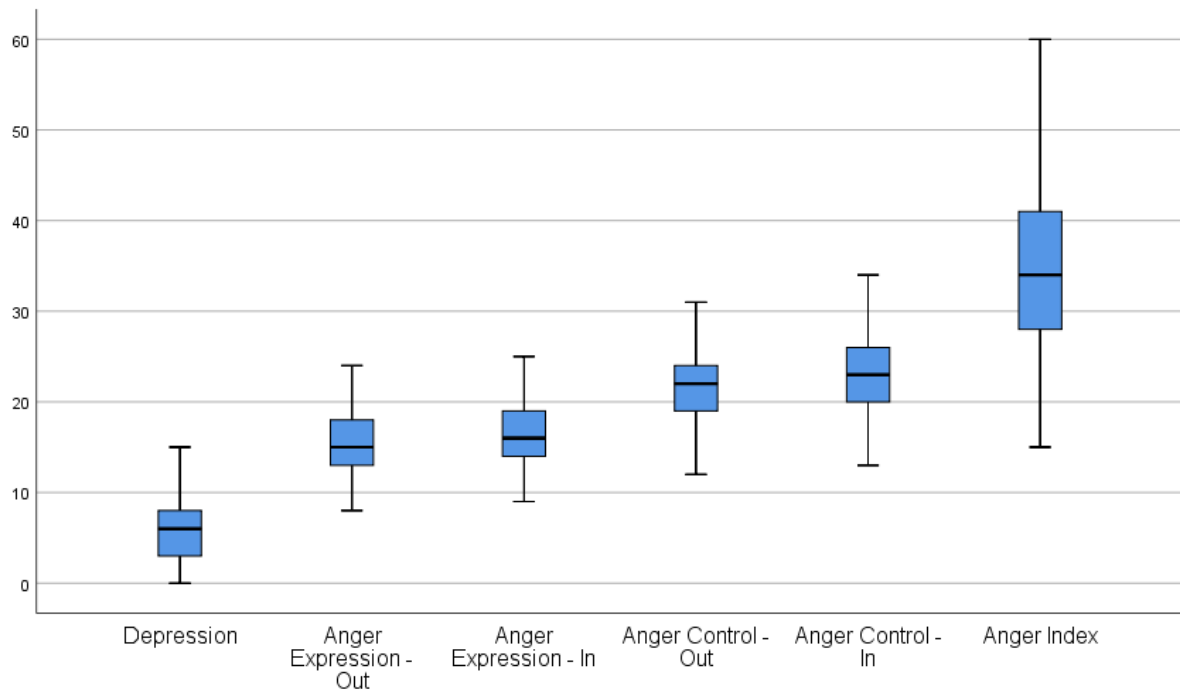
RESULTS

4.1 OVERVIEW

In this chapter a brief account of statistical analyses employed for the present work is presented. This chapter includes the interpretation and discussion of the results of data analyses in detail. Ten framed hypotheses are discussed in detail considering existing literature reviews.

4.2 NORMALITY AND DATA SCREENING

Initial sample size of 239 reduced to 231 after removing 8 outliers using boxplot (summaries of separate variables) method also known as interquartile range method. Scores that are 1.5 times the interquartile range above quartile three and 1.5 times the interquartile range below quartile one were considered as outliers for each study variable. The following boxplot was obtained after removing the outliers ($N = 231$).



Normality of the study variables were checked by their respective skewness and kurtosis values. Table 4.1 shows the skewness and kurtosis values for the study variables.

Table 4.2.1

Skewness and Kurtosis along with Std. Error Values for the Study Variables.

Variable	Skewness		Kurtosis	
	Statistic	Std. Error	Statistic	Std. Error
Depression	.349	.160	-.568	.319
Anger Expression - Out	.424	.160	-.495	.319
Anger Expression - In	.177	.160	-.554	.319
Anger Control - Out	-.003	.160	-.163	.319
Anger Control - In	-.132	.160	-.534	.319
Anger Index	.299	.160	-.476	.319

Note. N = 231.

The skewness values for study variables ranged from minimum -0.132 to maximum 0.424 , well within the normality range of -1.00 to $+1.00$ required for normality assumption.

Similarly, kurtosis values for study variables ranged from minimum -0.568 to maximum -0.163 , within the range of -2.00 to $+2.00$ required for normality. Thus, both skewness and kurtosis statistics indicated the data to be normally distributed across all study variables.

The following table provides for the sample distribution ($N = 231$).

Table 4.2.2

Sample distribution.

		Children	
		No Disorder	ADHD
Parents	Mothers	59	59
	Fathers	58	55

The following histograms provide the distribution of the study variables against the normal distribution curve.

Fig. 4.2.1

Histogram with Normal Curve on Histogram for Depression.

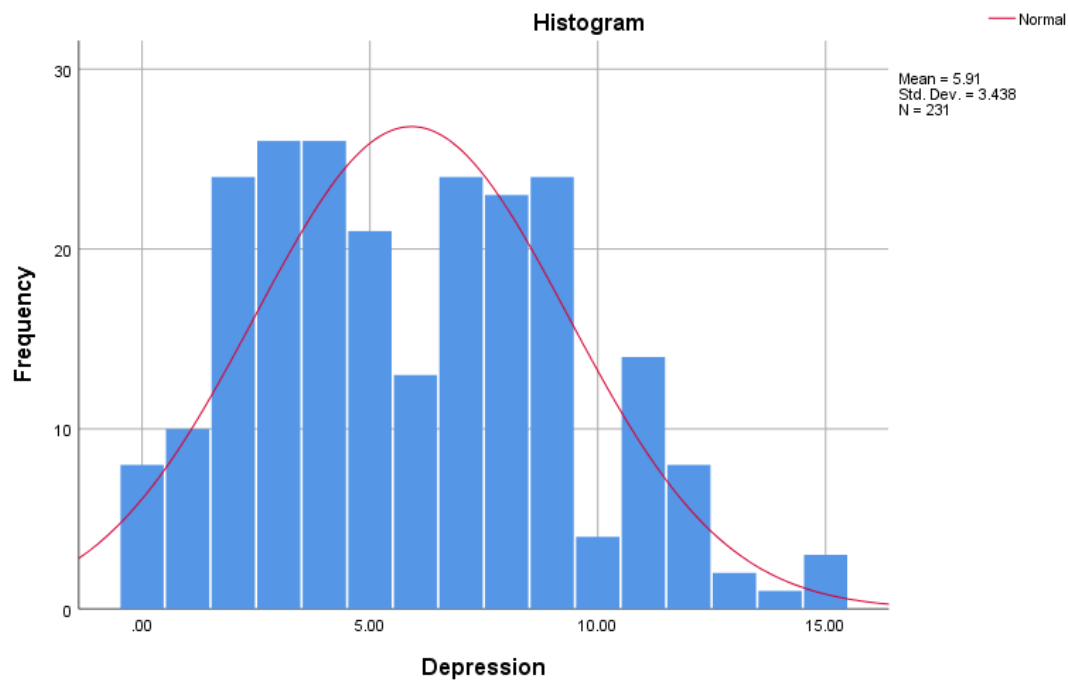


Fig 4.2.2

Histogram with Normal Curve on Histogram for Anger Expression – Out.

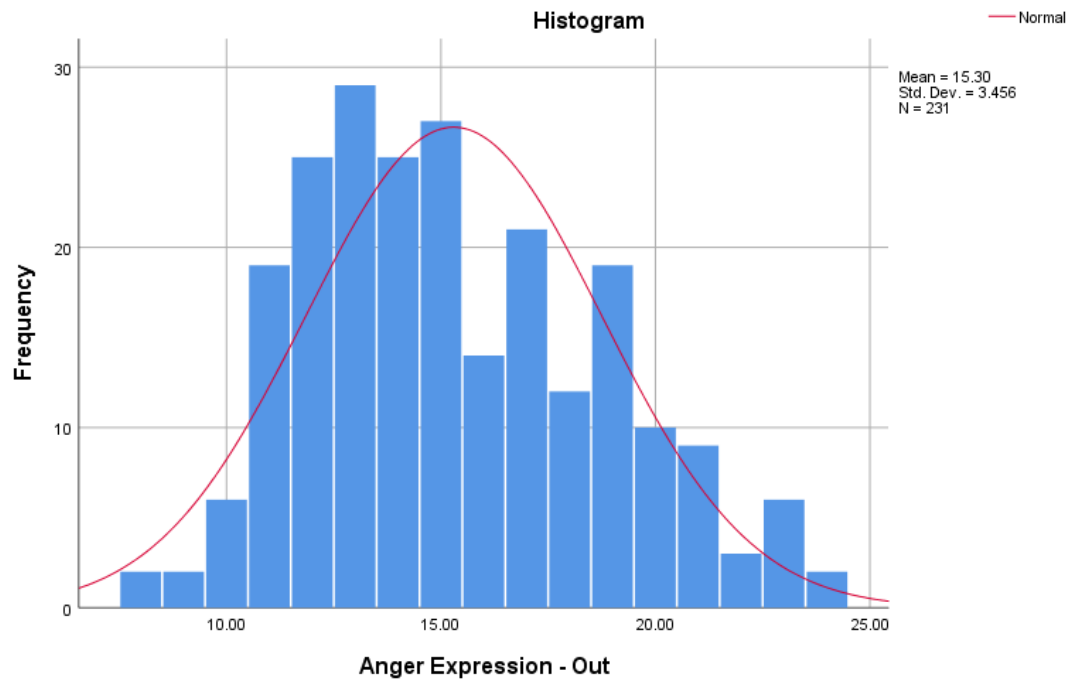


Fig 4.2.3

Histogram with Normal Curve on Histogram for Anger Expression - In

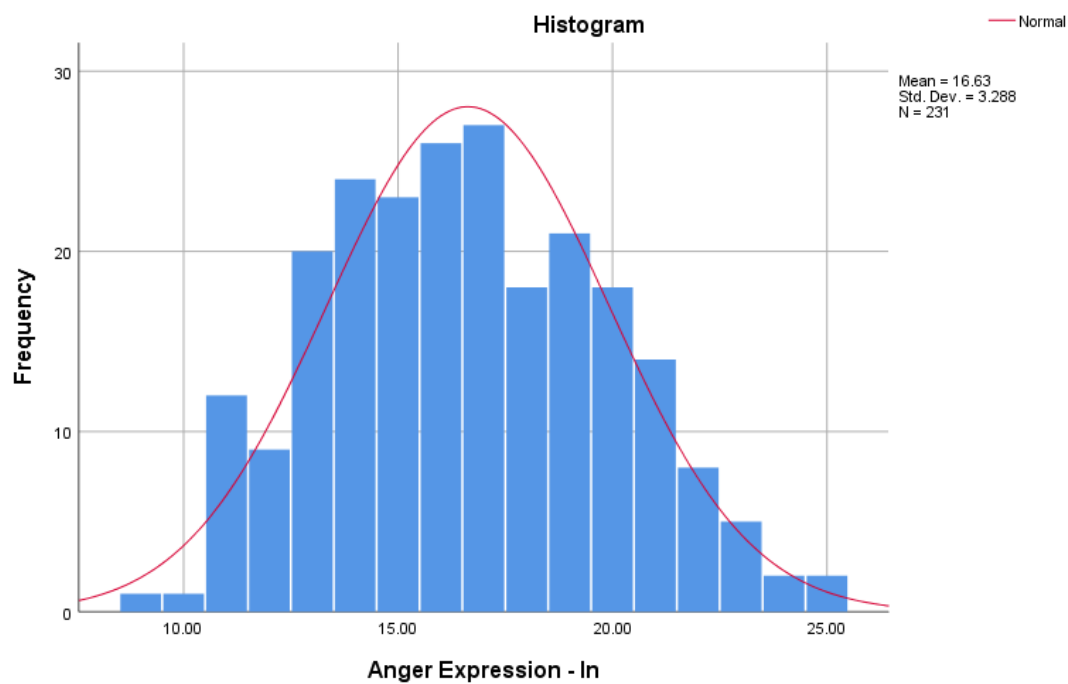


Fig 4.2.4

Histogram with Normal Curve on Histogram for Anger Control – Out.

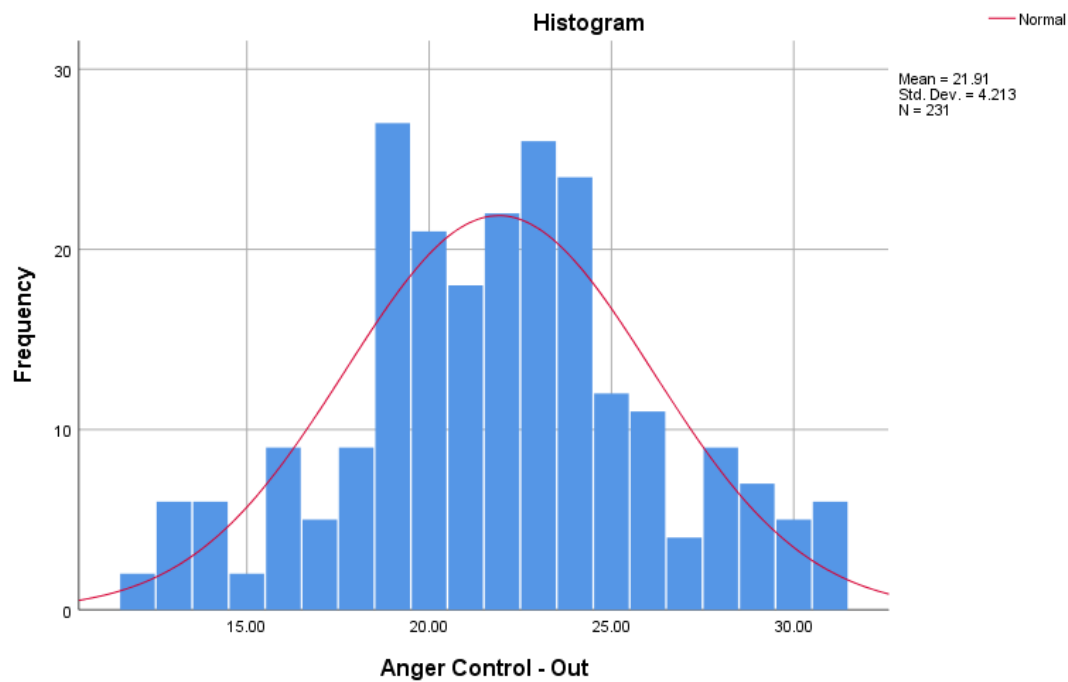


Fig 4.2.5

Histogram with Normal Curve on Histogram for Anger Control – In.

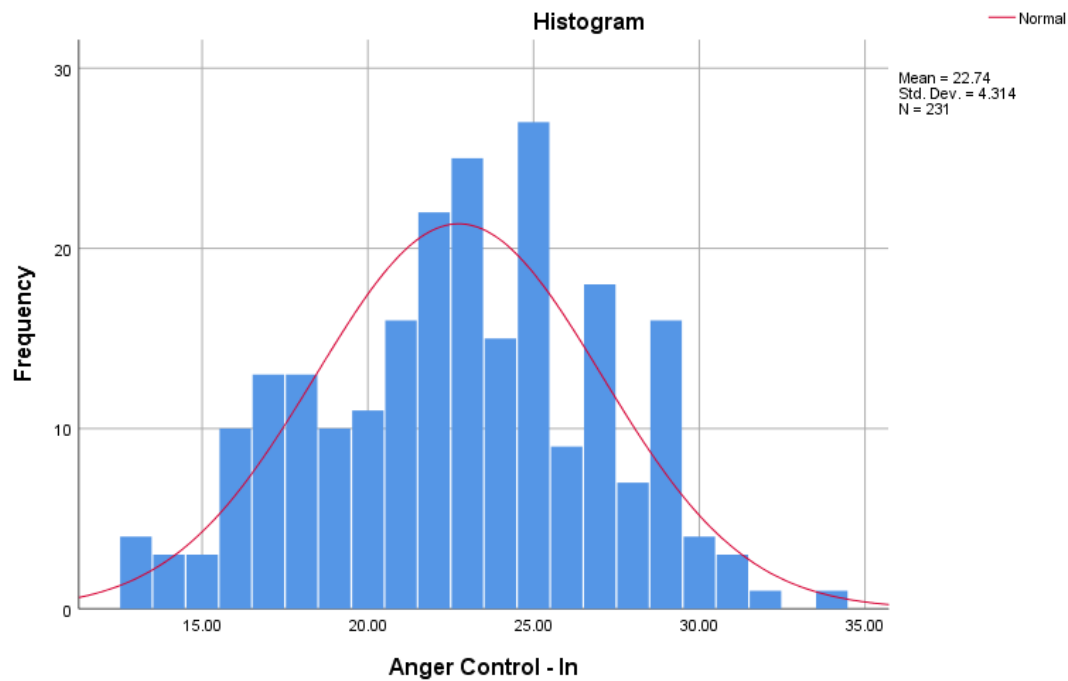
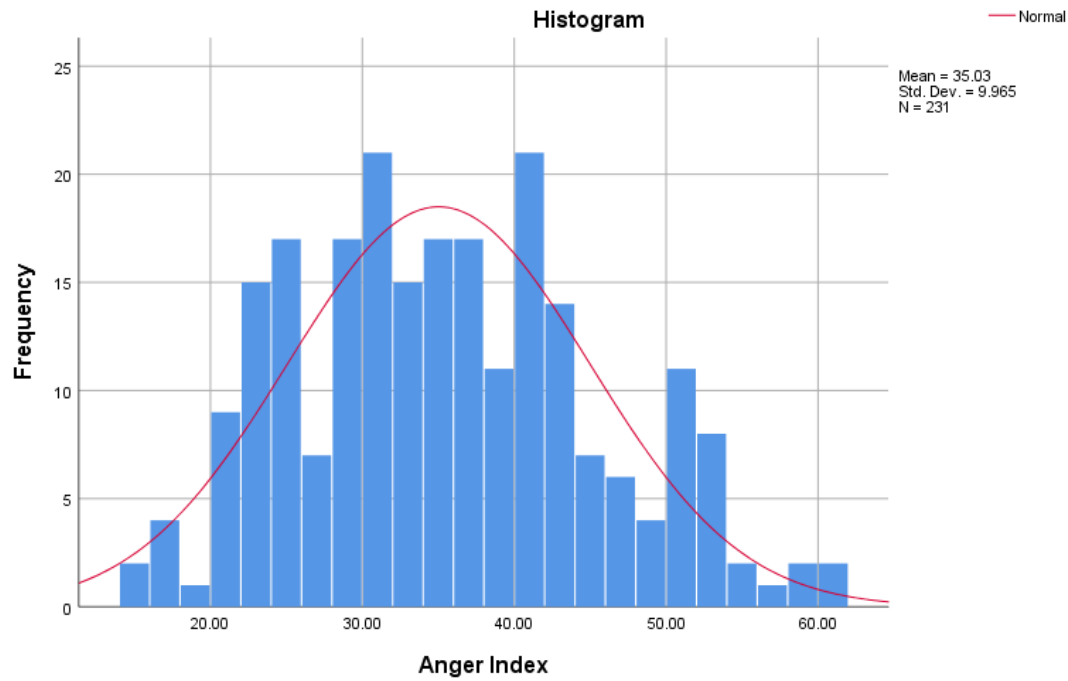


Fig 4.2.6

Histogram with Normal Curve on Histogram for Anger Index.



4.3 DATA ANALYSES

To test the formulated hypotheses, independent samples' *t*-tests were employed. Assumptions of independent samples' *t*-test were checked such as outliers (using boxplot method), normality (using skewness and kurtosis values), and equality of variance (using Levene's test for equality of variances). Initial sample size of 239 reduced to 231 after removing outliers. The skewness values for study variables ranged from minimum –0.132 to maximum 0.424, well within the normality range of –1.00 to +1.00 required for normality assumption. Similarly, kurtosis values for study variables ranged from minimum –0.568 to maximum –0.163, within the range of –2.00 to +2.00 required for normality. Thus, both skewness and kurtosis statistics indicated the data to be normally distributed across all study variables. Out of 5 study variables, one variable violated the assumption of equality of variances, i.e., anger control-out, both in the mothers and the fathers group. Thus, for these two hypotheses (*H7* and *H8*), equal variances not assumed *t*-values were interpreted. Table 4.3.1 provides descriptive statistics and *t*-tests for hypotheses framed to test the difference between fathers of children diagnosed with ADHD and fathers of children without any diagnosed psychological disorder. Table 4.3.2 provides descriptive statistics and *t*-tests for hypotheses framed to test the difference between mothers of children diagnosed with ADHD and mothers of children without any diagnosed psychological disorder.

Table 4.3.1

Results of differences between fathers of children diagnosed with ADHD and fathers of children without any diagnosed psychological disorder.

Variable	ADHD		No disorder		<i>t</i> (111)	<i>p</i>	Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
AX-I	17.24	3.36	17.78	3.30	0.86	.391	0.16
AX-O	15.05	3.67	17.55	3.51	3.70**	.000	0.70
AC-I	24.09	4.31	21.16	4.24	3.65**	.000	0.69
AC-O ^a	22.98	5.05	20.74	3.08	2.83**	.006	0.54
Depression	7.93	3.13	4.05	2.54	7.25**	.000	1.36

Note. ADHD = Fathers of children diagnosed with ADHD (*n* = 55).

No disorder = Fathers of children without any diagnosed psychological disorder (*n* = 58).

AX-I = Anger expression – in; AX-O = Anger expression – out; AC-I = Anger control – in; AC-O = Anger control – out.

a. Equal variances not assumed (*df* = 88.46).

Cohen's *d* = 0.2 small effect; 0.5 moderate effect; 0.8 large effect size (Cohen, 1998).

Table 4.3.2

Results of differences between mothers of children diagnosed with ADHD and mothers of children without any diagnosed psychological disorder.

Variable	ADHD		No disorder		<i>t</i> (116)	<i>p</i>	Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
AX-I	15.24	3.25	16.32	2.71	1.97	.051	0.36
AX-O	14.29	2.65	14.32	2.93	0.07	.948	0.01
AC-I	23.20	4.33	22.58	3.94	0.82	.413	0.15
AC-O ^a	23.14	3.36	20.83	4.57	3.12**	.002	0.58
Depression	8.27	2.61	3.51	2.40	10.32**	.000	1.90

Note. ADHD = Mothers of children diagnosed with ADHD (*n* = 59).

No disorder = Mothers of children without any diagnosed psychological disorder (*n* = 59).

AX-I = Anger expression – in; AX-O = Anger expression – out; AC-I = Anger control – in; AC-O = Anger control – out.

a. Equal variances not assumed (*df* = 106.51).

Cohen's *d* = 0.2 small effect; 0.5 moderate effect; 0.8 large effect size (Cohen, 1998).

4.4 RESULTS

There was no significant difference observed in anger expression in between fathers of children without any diagnosed psychological disorder (*M* = 17.78; *SD* = 3.30) and fathers of children diagnosed with ADHD (*M* = 17.24; *SD* = 3.36), *t* (111) = 0.86, *p* > .05. Thus, the first hypothesis stating that, “Anger expression in among fathers of children without any diagnosed psychological disorder is significantly higher than Anger expression in among fathers of children diagnosed with ADHD” was rejected.

There was no significant difference observed in anger expression in between mothers of children without any diagnosed psychological disorder ($M = 16.32$; $SD = 2.71$) and mothers of children diagnosed with ADHD ($M = 15.24$; $SD = 3.25$), $t(116) = 1.97$, $p > .05$. Thus, the second hypothesis stating that, “Anger expression in among mothers of kids without any diagnosed psychological disorder is significantly higher than anger expression in among mothers of diagnosed ADHD children” was rejected.

Fathers of children without any diagnosed psychological disorder exhibited higher levels of anger expression-out ($M = 17.55$; $SD = 3.51$) compared to fathers of children diagnosed with ADHD ($M = 15.05$; $SD = 3.67$), $t(111) = 3.70$, $p < .01$, Cohen’s $d = .70$. Thus, the third hypothesis stating that, “Anger expression-out among fathers of children without any diagnosed psychological disorder is significantly higher than anger expression out among fathers of children diagnosed with ADHD” was accepted.

There was no significant difference observed in anger expression-out between mothers of children without any diagnosed psychological disorder ($M = 14.32$; $SD = 2.93$) and mothers of children diagnosed with ADHD ($M = 14.29$; $SD = 2.65$), $t(116) = 0.07$, $p > .05$. The fourth hypothesis stating that, “Anger expression-out among mothers of children without any diagnosed psychological disorder is significantly higher than anger expression-out among mothers of children diagnosed with ADHD” was rejected.

Fathers of children diagnosed with ADHD exhibited higher levels of anger control-in ($M = 24.09$; $SD = 4.31$) compared to fathers of children without any diagnosed psychological disorder ($M = 21.16$; $SD = 4.24$), $t(111) = 3.65$, $p < .01$, Cohen’s $d = .69$. Thus, the fifth

hypothesis stating that, “Anger control-in among fathers of children diagnosed with ADHD is significantly higher than anger control-in among fathers of children without any diagnosed psychological disorder” was accepted.

There was no significant difference observed in anger control-in between mothers of children without any diagnosed psychological disorder ($M = 22.58$; $SD = 3.94$) and mothers of children diagnosed with ADHD ($M = 23.20$; $SD = 4.33$), $t(116) = 0.82$, $p > .05$. Thus, the sixth hypothesis stating that, “Anger control-in among mothers children diagnosed with ADHD is significantly higher than anger control-in among mothers of children without any diagnosed psychological disorder” was rejected.

Fathers of children diagnosed with ADHD exhibited higher levels of anger control-out ($M = 22.98$; $SD = 5.05$) compared to fathers of children without any diagnosed psychological disorder ($M = 20.74$; $SD = 3.08$), $t(88.46) = 2.83$, $p < .01$, Cohen’s $d = .54$. Thus, the seventh hypothesis stating that, “Anger control-out among fathers of children diagnosed with ADHD is significantly higher than anger control-out among fathers of children without any diagnosed psychological disorder” was accepted.

Mothers of children diagnosed with ADHD exhibited higher levels of anger control-out ($M = 23.14$; $SD = 3.36$) compared to mothers of children without any diagnosed psychological disorder ($M = 20.83$; $SD = 4.57$), $t(106.51) = 3.12$, $p < .01$, Cohen’s $d = .58$. Thus, the eighth hypothesis stating that, “Anger control-out among mothers of children diagnosed with ADHD is significantly higher than anger control-out among mothers of children without any diagnosed psychological disorder” was accepted.

Fathers of children diagnosed with ADHD exhibited higher levels of depression ($M = 7.93$; $SD = 3.13$) compared to fathers of children without any diagnosed psychological disorder ($M = 4.05$; $SD = 2.54$), $t(111) = 7.25$, $p < .01$, Cohen's $d = 1.36$. Thus, the ninth hypothesis stating that, "Depression among fathers of children diagnosed with ADHD is significantly higher than depression among fathers of children without any diagnosed psychological disorder" was accepted.

Mothers of children diagnosed with ADHD exhibited higher levels of depression ($M = 8.27$; $SD = 2.61$) compared to mothers of children without any diagnosed psychological disorder ($M = 3.51$; $SD = 2.40$), $t(111) = 10.32$, $p < .01$, Cohen's $d = 1.90$. Thus, the tenth hypothesis stating that, "Depression among mothers of children diagnosed with ADHD is significantly higher than depression among mothers of children without any diagnosed psychological disorder" was accepted.

4.5 EXPLORATORY INFERENCES

Table 4.5.1

Results of differences between fathers of children diagnosed with ADHD and fathers of children without any diagnosed psychological disorder.

Variable	ADHD		No disorder		<i>t</i> (103.21)	<i>p</i>	Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Anger Index ^a	32.75	11.10	41.28	8.85	4.50**	.000	0.85

Note. ADHD = Fathers of children diagnosed with ADHD (*n* = 55).

No disorder = Fathers of children without any diagnosed psychological disorder (*n* = 58).

a. Equal variances not assumed.

Cohen's *d* = 0.2 small effect; 0.5 moderate effect; 0.8 large effect size (Cohen, 1998).

Table 4.5.2

Results of differences between mothers of children diagnosed with ADHD and mothers of children without any diagnosed psychological disorder.

Variable	ADHD		No disorder		<i>t</i> (116)	<i>p</i>	Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Anger Index	31.29	8.82	34.75	8.13	2.21*	.029	0.41

Note. ADHD = Mothers of children diagnosed with ADHD (*n* = 59).

No disorder = Mothers of children without any diagnosed psychological disorder (*n* = 59).

Cohen's *d* = 0.2 small effect; 0.5 moderate effect; 0.8 large effect size (Cohen, 1998).

Fathers of children without any diagnosed psychological disorder exhibited higher levels of anger index (*M* = 41.28; *SD* = 8.85) compared to fathers of children diagnosed with ADHD (*M* = 32.75; *SD* = 11.10), *t* (103.21) = 4.50, *p* < .01, Cohen's *d* = .85.

Mothers of children without any diagnosed psychological disorder exhibited higher levels of anger index ($M = 34.75$; $SD = 8.13$) compared to mothers of children diagnosed with ADHD ($M = 31.29$; $SD = 8.82$), $t(116) = 2.21$, $p < .05$, Cohen's $d = .41$.

Table 4.5.3*Mean, Standard Deviation, and Tests of Between-Subjects Effects for Study Variables.*

Dependent Variable	Source (IV)	Level	N	M	SD	F (1, 227)	η^2
AX-I	Child	No Disorder	117	17.04	3.09	3.81	.016
		ADHD	114	16.20	3.44		
	Parent	Mothers	118	15.78	3.03	17.20**	.070
		Fathers	113	17.51	3.33		
AX-O	Child	No Disorder	117	15.92	3.60	8.99**	.038
		ADHD	114	14.66	3.19		
	Parent	Mothers	118	14.31	2.78	22.42**	.090
		Fathers	113	16.34	3.78		
AC-I	Child	No Disorder	117	21.87	4.14	10.34**	.044
		ADHD	114	23.63	4.33		
	Parent	Mothers	118	22.89	4.14	0.23	.001
		Fathers	113	22.58	4.51		
AC-O	Child	No Disorder	117	20.79	3.89	17.88**	.073
		ADHD	114	23.06	4.24		
	Parent	Mothers	118	21.98	4.16	0.51	.000
		Fathers	113	21.83	4.29		
Depression	Child	No Disorder	117	3.78	2.47	150.37**	.398
		ADHD	114	8.11	2.87		
	Parent	Mothers	118	5.89	3.46	0.08	.000
		Fathers	113	5.94	3.43		
Anger Index	Child	No Disorder	117	37.98	9.07	24.19**	.096
		ADHD	114	31.99	9.96		
	Parent	Mothers	118	33.02	8.62	10.74**	.045
		Fathers	113	37.12	10.84		

Note. N = 231. $\eta^2 = 0.01$ indicates small effect size, $\eta^2 = 0.06$ indicates medium effect size, and $\eta^2 = 0.14$ indicates large effect size (Cohen, 1988).

** $p < 0.01$, * $p < 0.05$.

On the variable anger expression-in, no significant difference was observed between parents of children diagnosed with ADHD ($M = 16.20$; $SD = 3.44$) and parents of children without any diagnosed psychological disorder ($M = 17.04$; $SD = 3.09$), $F(1, 227) = 3.81$, $p > .05$, $\eta^2 = .016$.

Fathers exhibited higher anger expression-in ($M = 17.51$; $SD = 3.33$) compared to mothers ($M = 15.78$; $SD = 3.03$), $F(1, 227) = 17.20$, $p < .01$, $\eta^2 = .070$.

Parents of children without any diagnosed psychological disorder exhibited higher levels of anger expression-out ($M = 15.92$; $SD = 3.60$) compared to parents of children diagnosed with ADHD ($M = 14.66$; $SD = 3.66$), $F(1, 227) = 8.99$, $p < .01$, $\eta^2 = .038$.

Fathers exhibited higher anger expression-out ($M = 16.34$; $SD = 3.78$) compared to mothers ($M = 14.31$; $SD = 2.78$), $F(1, 227) = 22.42$, $p < .01$, $\eta^2 = .090$.

Parents of children diagnosed with ADHD exhibited higher levels of anger control-in ($M = 23.63$; $SD = 4.33$) compared to parents of children without any diagnosed psychological disorder ($M = 21.87$; $SD = 4.14$), $F(1, 227) = 10.34$, $p < .01$, $\eta^2 = .044$.

On study variable anger control-in, no significant difference was observed between fathers ($M = 22.58$; $SD = 4.51$) and mothers ($M = 22.89$; $SD = 4.14$), $F(1, 227) = .23$, $p > .05$, $\eta^2 = .001$.

Parents of children diagnosed with ADHD exhibited higher levels of anger control-out ($M = 23.06$; $SD = 4.24$) compared to parents of children without any diagnosed psychological disorder ($M = 20.79$; $SD = 3.89$), $F(1, 227) = 17.88$, $p < .01$, $\eta^2 = .073$.

On study variable anger control-out, no significant difference was observed between fathers ($M = 21.83$; $SD = 4.29$) and mothers ($M = 21.98$; $SD = 4.16$), $F(1, 227) = .51$, $p > .05$, $\eta^2 = .000$.

Parents of children diagnosed with ADHD exhibited higher levels of depression ($M = 8.11$; $SD = 2.87$) compared to parents of children without any diagnosed psychological disorder ($M = 3.78$; $SD = 2.47$), $F(1, 227) = 150.37$, $p < .01$, $\eta^2 = .398$.

On study variable depression, no significant difference was observed between fathers ($M = 5.94$; $SD = 3.43$) and mothers ($M = 5.89$; $SD = 3.46$), $F(1, 227) = .08$, $p > .05$, $\eta^2 = .000$.

Parents of children without any diagnosed psychological disorder exhibited higher levels of anger index ($M = 37.98$; $SD = 9.07$) compared to parents of children diagnosed with ADHD ($M = 31.99$; $SD = 9.96$), $F(1, 227) = 24.19$, $p < .01$, $\eta^2 = .096$.

Fathers exhibited higher anger index ($M = 37.12$; $SD = 10.84$) compared to mothers ($M = 33.02$; $SD = 8.62$), $F(1, 227) = 10.74$, $p < .01$, $\eta^2 = .045$.

Table 4.5.4*Mean, Standard Deviation, and Tests of Interaction Effects for Study Variables.*

Dependent Variable	Child	Parent	N	M	SD	F (1, 227)	η^2
AX-I	No disorder	Mothers	59	16.32	2.71	0.43	.002
		Fathers	58	17.78	3.30		
	ADHD	Mothers	59	15.24	3.25		
		Fathers	55	17.24	3.36		
AX-O	No disorder	Mothers	59	14.32	2.93	8.52**	.036
		Fathers	58	17.55	3.51		
	ADHD	Mothers	59	14.29	2.65		
		Fathers	55	15.05	3.67		
AC-I	No disorder	Mothers	59	22.58	3.94	4.34*	.019
		Fathers	58	21.16	4.24		
	ADHD	Mothers	59	23.20	4.33		
		Fathers	55	24.09	4.31		
AC-O	No disorder	Mothers	59	20.83	4.57	0.00	.000
		Fathers	58	20.74	3.08		
	ADHD	Mothers	59	23.14	3.36		
		Fathers	55	22.98	5.05		
Depression	No disorder	Mothers	59	3.51	2.40	1.59	.007
		Fathers	58	4.05	2.54		
	ADHD	Mothers	59	8.27	2.61		
		Fathers	55	7.93	3.13		
Anger Index	No disorder	Mothers	59	34.75	8.13	4.33*	.019
		Fathers	58	41.28	8.85		
	ADHD	Mothers	59	31.29	8.82		
		Fathers	55	32.75	11.10		

Note. N = 231. $\eta^2 = 0.01$ indicates small effect size, $\eta^2 = 0.06$ indicates medium effect size, and $\eta^2 = 0.14$ indicates large effect size (Cohen, 1988).

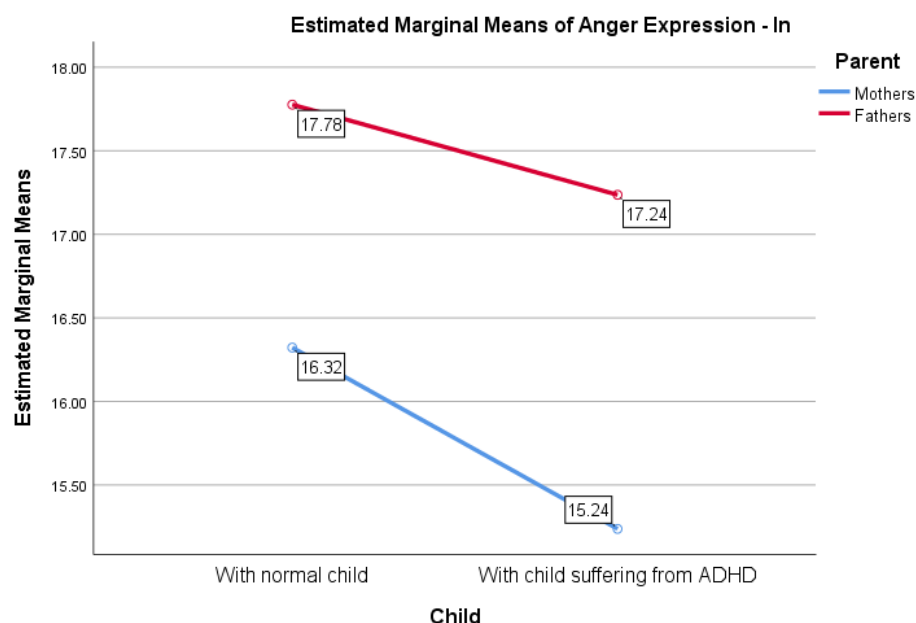
** $p < 0.01$, * $p < 0.05$.

Following line graphs provides the visualized description of interaction effect between parents of children without any psychological disorder and parents of children diagnosed with ADHD:

The interaction effect between the child category (parents of children diagnosed with ADHD and parents of children without any diagnosed psychological disorder) and parents' category (mothers and fathers) on variable anger expression-in was insignificant, $F(1, 227) = .43, p > .05, \eta^2 = .002$. Fathers of normal children exhibited the highest anger expression-in ($M = 17.78, SD = 3.30$) followed by fathers of children diagnosed with ADHD ($M = 17.24; SD = 3.36$), mothers of normal child ($M = 16.32; SD = 2.71$), and mothers of children diagnosed with ADHD ($M = 15.24; SD = 3.25$). However, the differences were not statistically significant.

Fig 4.5.1

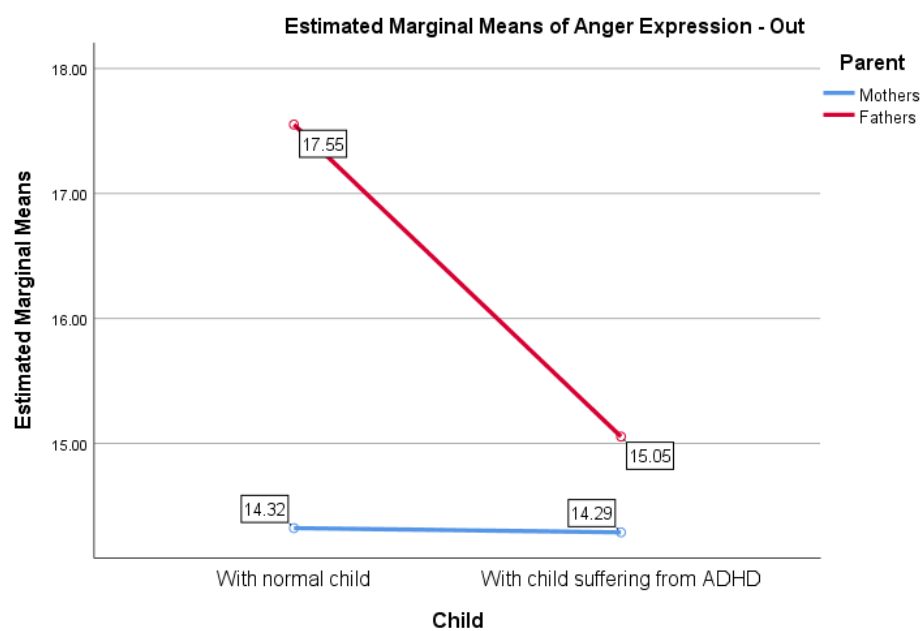
Interaction Effect for Anger Expression – In.



The interaction effect between the child category (parents of children diagnosed with ADHD and parents of children without any diagnosed psychological disorder) and parents' category (mothers and fathers) on variable anger expression-out was significant, $F(1, 227) = 8.52, p < .01, \eta^2 = .036$. Fathers of normal children exhibited the highest anger expression-out ($M = 17.55, SD = 3.51$) followed by fathers of children diagnosed with ADHD ($M = 15.05; SD = 3.67$), mothers of normal child ($M = 14.32; SD = 2.93$), and mothers of children diagnosed with ADHD ($M = 14.29; SD = 2.65$).

Fig 4.5.2

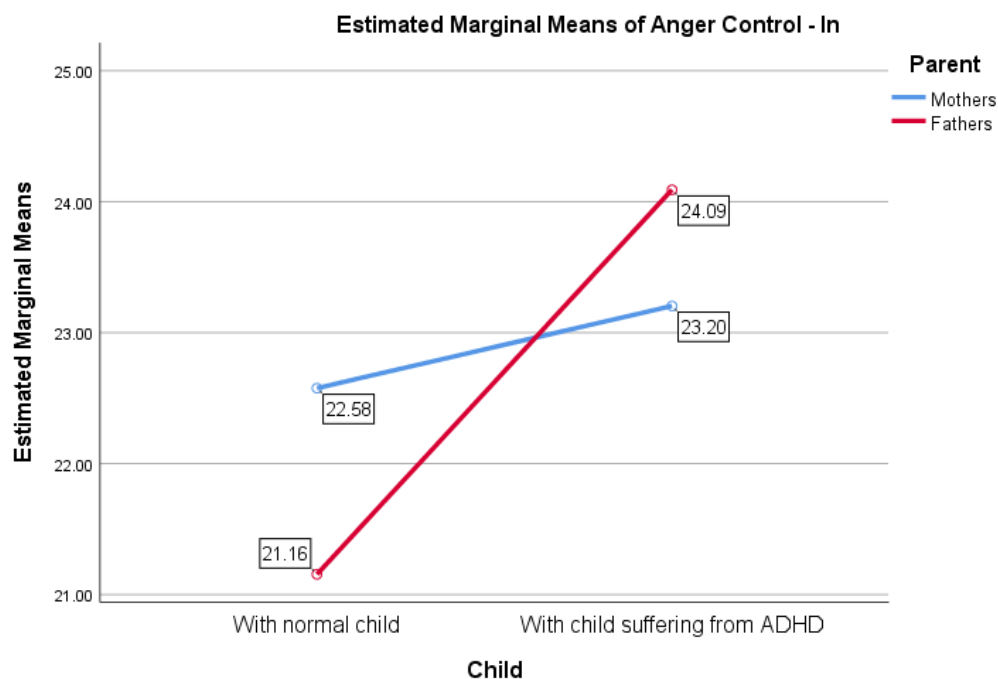
Interaction Effect for Anger Expression – Out.



The interaction effect between the child category (parents of children diagnosed with ADHD and parents of children without any diagnosed psychological disorder) and parents' category (mothers and fathers) on variable anger control-in was significant, $F(1, 227) = 4.34, p < .05, \eta^2 = .019$. Fathers of children diagnosed with ADHD exhibited the highest anger control-in ($M = 24.09, SD = 4.31$) followed by mothers of children diagnosed with ADHD ($M = 23.20, SD = 4.33$), mothers of normal child ($M = 22.58, SD = 3.94$), and fathers of normal children ($M = 21.16, SD = 4.24$).

Fig 4.5.3

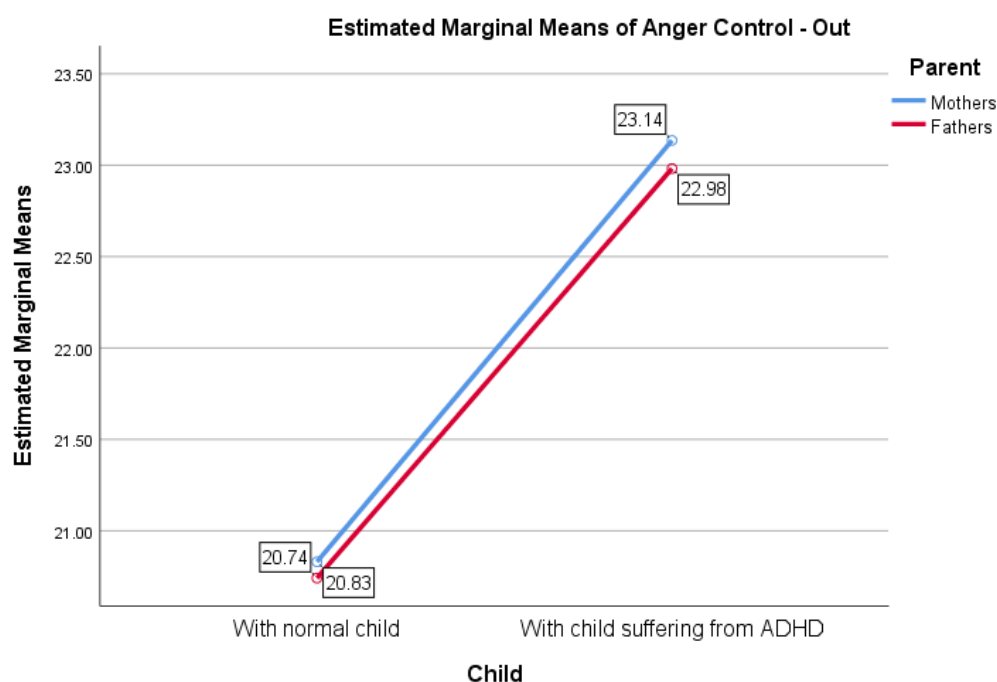
Interaction Effect for Anger Control – In.



The interaction effect between the child category (parents of children diagnosed with ADHD and parents of children without any diagnosed psychological disorder) and parents' category (mothers and fathers) on variable anger control-out was insignificant, $F(1, 227) = .00, p > .05, \eta^2 = .000$. Mothers of children diagnosed with ADHD exhibited the highest anger control-out ($M = 23.14, SD = 3.36$) followed by fathers of children diagnosed with ADHD ($M = 22.98; SD = 5.05$), mothers of normal children ($M = 20.83; SD = 4.57$), and fathers of normal children ($M = 20.74; SD = 3.08$). However, the differences were not statistically significant.

Fig 4.5.4

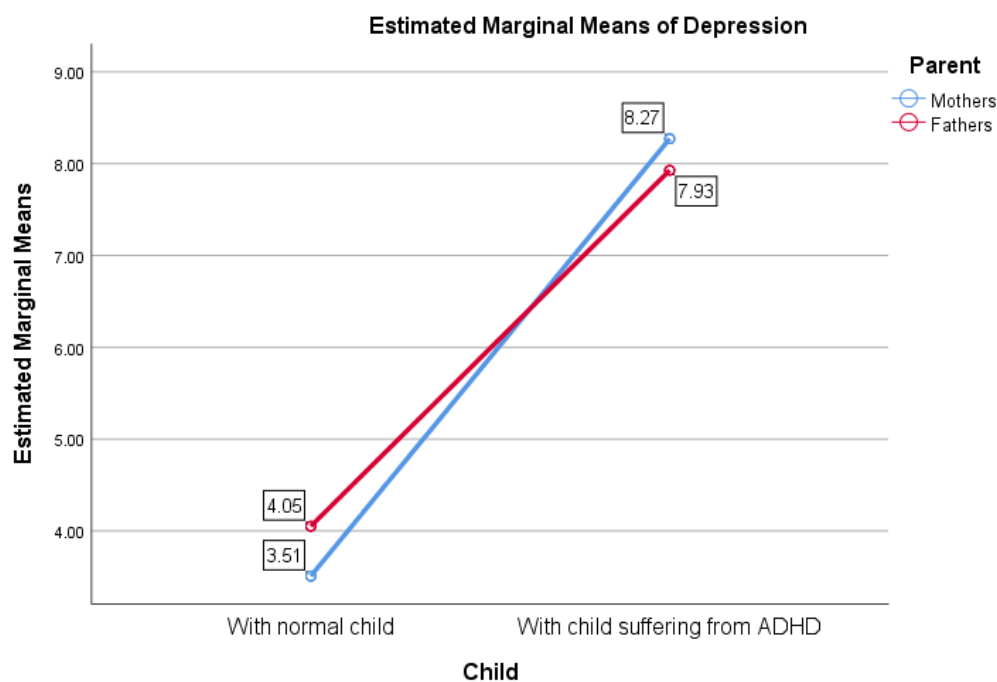
Interaction Effect for Anger Control – Out.



The interaction effect between the child category (parents of children diagnosed with ADHD and parents of children without any diagnosed psychological disorder) and parents' category (mothers and fathers) on variable depression was insignificant, $F(1, 227) = 1.59, p > .05, \eta^2 = .007$. Mothers of children diagnosed with ADHD exhibited the highest depression ($M = 8.27, SD = 2.61$) followed by fathers of children diagnosed with ADHD ($M = 7.93; SD = 3.13$), fathers of normal children ($M = 4.05; SD = 2.54$), and mothers of normal children ($M = 3.51; SD = 2.40$). However, the differences were not statistically significant.

Fig 4.5.5

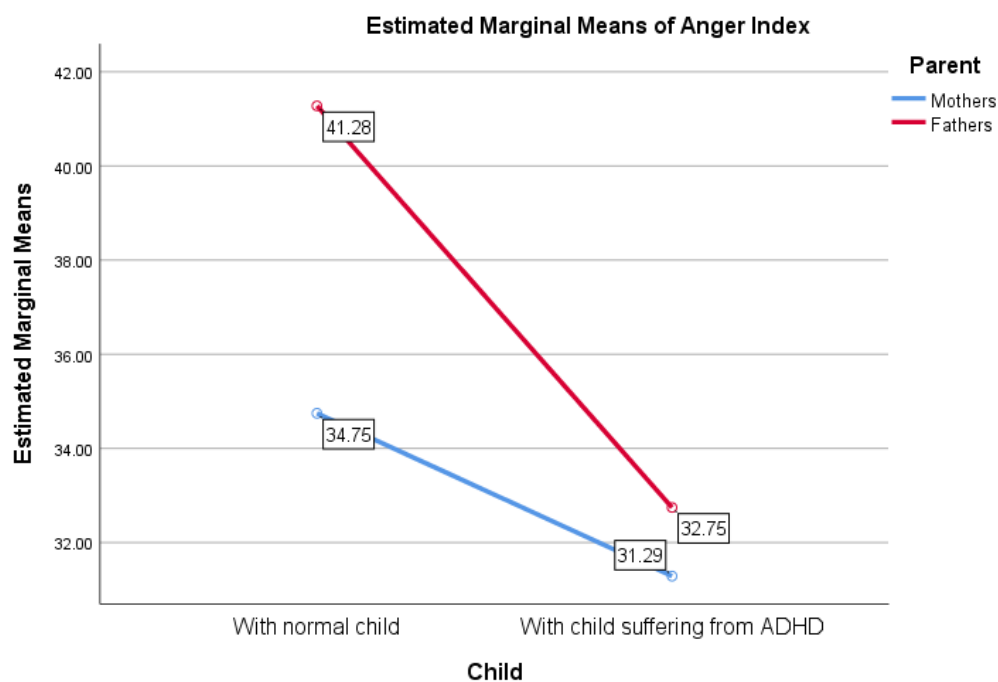
Interaction Effect for Depression.



The interaction effect between the child category (parents of children diagnosed with ADHD and parents of children without any diagnosed psychological disorder) and parents' category (mothers and fathers) on variable anger index was significant, $F(1, 227) = 4.33, p < .05, \eta^2 = .019$. Fathers of normal children exhibited the highest anger index ($M = 41.28; SD = 8.85$) followed by mothers of normal children ($M = 34.75; SD = 8.13$), fathers of children diagnosed with ADHD ($M = 32.75; SD = 11.10$), and Mothers of children diagnosed with ADHD ($M = 31.29, SD = 8.82$).

Fig 4.5.6

Interaction Effect for Anger Index.



Correlations

Correlation coefficients were computed between the study variables using Pearson's product moment correlation (see Table 4.5.5).

Table 4.5.5

Pearson's Product Moment Correlation Between Study Variables.

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1. AX-I	16.63	3.29	1					
2. AX-O	15.30	3.46	.246**	1				
3. AC-I	22.74	4.31	-.082	-.296**	1			
4. AC-O	21.91	4.21	.030	-.236**	.489**	1		
5. Depression	5.91	3.44	-.133*	-.112	.131*	.201**	1	
6. AI	35.03	9.96	.423**	.638**	-.750**	-.679**	-.220**	1

Note. *N* = 231. *M* = Mean; *SD* = Standard deviation; AI = Anger Index.

***p* < 0.01, **p* < 0.05.

4.6 SUMMARY

In this section statistical analysis of the collected data was performed. With the initial analysis like screening of the data, normality check up to the use of statistics like *t*-test, 2 X 2 ANOVA were applied to test the proposed hypotheses and to find additional findings. All the obtained values were interpreted and is made available for further discussion. As the analysis involved detailed univariate analysis, it will be carefully interpreted and discussed in the following section.

CHAPTER- 5

DISCUSSION

5.1 INTRODUCTION

5.2 ANGER EXPRESSION AND PARENTHOOD

5.3 ANGER CONTROL AND PARENTHOOD

5.4 DEPRESSION AND PARENTHOOD

5.5 ADDITIONAL ANALYSIS FOR ANGER INDEX

5.1 INTRODUCTION

The main objective of the present study was to investigate and compare anger expression, anger control and depression in parents of diagnosed ADHD children and parents of children with no diagnosed psychological disorder. In the previous chapter analysis of variables were calculated, completed, and demonstrated. However, in the current chapter results will be discussed.

5.2 ANGER EXPRESSION AND PARENTHOOD

The first hypothesis stating that, “Anger expression in among fathers of children without any diagnosed psychological disorder is significantly higher than Anger expression in among fathers of children diagnosed with ADHD” was rejected.

There was no significant difference observed in anger expression in between fathers of children without any diagnosed psychological disorder ($M = 17.78$; $SD = 3.30$) and fathers of children diagnosed with ADHD ($M = 17.24$; $SD = 3.36$), $t(111) = 0.86$, $p > .05$.

The second hypothesis stating that, “Anger expression in among mothers of kids without any diagnosed psychological disorder is significantly higher than anger expression in among mothers of diagnosed ADHD children” was rejected.

There was no significant difference observed in anger expression in between mothers of children without any diagnosed psychological disorder ($M = 16.32$; $SD = 2.71$) and mothers of children diagnosed with ADHD ($M = 15.24$; $SD = 3.25$), $t(116) = 1.97$, $p > .05$.

The third hypothesis stating that, “Anger expression-out among fathers of children without any diagnosed psychological disorder is significantly higher than anger expression out among fathers of children diagnosed with ADHD” was accepted.

Fathers of children without any diagnosed psychological disorder exhibited higher levels of anger expression-out ($M = 17.55$; $SD = 3.51$) compared to fathers of children diagnosed with ADHD ($M = 15.05$; $SD = 3.67$), $t(111) = 3.70$, $p < .01$, Cohen’s $d = .70$.

The fourth hypothesis stating that, “Anger expression-out among mothers of children without any diagnosed psychological disorder is significantly higher than anger expression-out among mothers of children diagnosed with ADHD” was rejected.

There was no significant difference observed in anger expression-out between mothers of children without any diagnosed psychological disorder ($M = 14.32$; $SD = 2.93$) and mothers of children diagnosed with ADHD ($M = 14.29$; $SD = 2.65$), $t(116) = 0.07$, $p > .05$.

5.3 ANGER CONTRIOL AND PARENTHOOD

The fifth hypothesis stating that, “Anger control-in among fathers of children diagnosed with ADHD is significantly higher than anger control-in among fathers of children without any diagnosed psychological disorder” was accepted.

Fathers of children diagnosed with ADHD exhibited higher levels of anger control-in ($M = 24.09$; $SD = 4.31$) compared to fathers of children without any diagnosed psychological disorder ($M = 21.16$; $SD = 4.24$), $t(111) = 3.65$, $p < .01$, Cohen’s $d = .69$.

The sixth hypothesis stating that, “Anger control-in among mothers of children diagnosed with ADHD is significantly higher than anger control-in among mothers of children without any diagnosed psychological disorder” was rejected.

There was no significant difference observed in anger control-in between mothers of children without any diagnosed psychological disorder ($M = 22.58$; $SD = 3.94$) and mothers of children diagnosed with ADHD ($M = 23.20$; $SD = 4.33$), $t(116) = 0.82$, $p > .05$.

It shows fathers of diagnosed ADHD children suppress their anger more than mothers to control their anger and on the other hand , anger suppression can result in further depression . (Sperberg,1995).

The seventh hypothesis stating that, “Anger control-out among fathers of children diagnosed with ADHD is significantly higher than anger control-out among fathers of children without any diagnosed psychological disorder” was accepted.

Fathers of children diagnosed with ADHD exhibited higher levels of anger control-out ($M = 22.98$; $SD = 5.05$) compared to fathers of children without any diagnosed psychological disorder ($M = 20.74$; $SD = 3.08$), $t(88.46) = 2.83$, $p < .01$, Cohen’s $d = .54$.

The eighth hypothesis stating that, “Anger control-out among mothers of children diagnosed with ADHD is significantly higher than anger control-out among mothers of children without any diagnosed psychological disorder” was accepted.

Mothers of children diagnosed with ADHD exhibited higher levels of anger control-out ($M = 23.14$; $SD = 3.36$) compared to mothers of children without any diagnosed psychological disorder ($M = 20.83$; $SD = 4.57$), $t(106.51) = 3.12$, $p < .01$, Cohen’s $d = .58$.

5.4 DEPRESSION AND PARENTHOOD

The ninth hypothesis stating that, “Depression among fathers of children diagnosed with ADHD is significantly higher than depression among fathers of children without any diagnosed psychological disorder” was accepted.

Fathers of children diagnosed with ADHD exhibited higher levels of depression ($M = 7.93$; $SD = 3.13$) compared to fathers of children without any diagnosed psychological disorder ($M = 4.05$; $SD = 2.54$), $t(111) = 7.25$, $p < .01$, Cohen’s $d = 1.36$.

The previous study in literature review by Mofokeng (2017) supports the result “Due to the stigmatizing views of family and community members, parents of children with ADHD face stress and anxiety while they try to manage the child's symptoms and stress and anxiety have a positive correlation with depression. (Mofokeng, 2017).

The tenth hypothesis stating that, “Depression among mothers of children diagnosed with ADHD is significantly higher than depression among mothers of children without any diagnosed psychological disorder” was accepted.

Mothers of children diagnosed with ADHD exhibited higher levels of depression ($M = 8.27$; $SD = 2.61$) compared to mothers of children without any diagnosed psychological disorder ($M = 3.51$; $SD = 2.40$), $t(111) = 10.32$, $p < .01$, Cohen’s $d = 1.90$.

Previous studies in literature review support the result where level of depression is related to the degree that anger is suppressed, expressed, or controlled and to the degree of perceived mutuality (Sperberg,1995).

5.5 Additional analysis

Anger Expression Index (AX-Index).

Anger expression Index, (AX-I) in the current study was additionally calculated and measured by a specific formula using STAXI-2 manual (Spielberger, 1988). Calculation of anger expression index (AX-Index) requires Anger Expression Out (AX-O), Anger Expression In (AX-I), Anger Control In (AC-I) and Anger Control Out. (AC-O). The formula for calculation of AX-Index is as following:

Anger expression Index, (AX- Index) = (AX-O + AX-I) – (AC-O + AC-I) + 48

The constant 48 is included to eliminate negative numbers.

The Anger Expression Index is an overall measure of total anger expression. (Spielberger, 1988).

Fathers of children without any diagnosed psychological disorder exhibited higher levels of anger index ($M = 41.28$; $SD = 8.85$) compared to fathers of children diagnosed with ADHD ($M = 32.75$; $SD = 11.10$), $t(103.21) = 4.50$, $p < .01$, Cohen's $d = .85$.

Mothers of children without any diagnosed psychological disorder exhibited higher levels of anger index ($M = 34.75$; $SD = 8.13$) compared to mothers of children diagnosed with ADHD ($M = 31.29$; $SD = 8.82$), $t(116) = 2.21$, $p < .05$, Cohen's $d = .41$.

The interview outcome supports the result where 50 percent of mothers and fathers of children without any psychological disorder rated their levels of anger as high and moderate and 50 percent rated their anger as low . Whereas 30 percent of parents of ADHD children rated their level of anger as high and moderate and 70 percent as low .

Correlational analysis

Correlation coefficients were computed between the study variables using Pearson's product moment correlation (see Table 4.5.5).

Anger expression-in was positively correlated with anger control-out, $r(229) = .246, p < 0.01$.

Anger expression-in was negatively correlated with depression, $r(229) = -.133, p < 0.05$.

Anger expression-in was positively correlated with anger index, $r(229) = .423, p < 0.01$.

Anger expression-out was negatively correlated with anger control-in, $r(229) = -.296, p < 0.01$.

Anger expression-out was negatively correlated with anger control-out, $r(229) = -.236, p < 0.01$.

Anger expression-out was positively correlated with anger index, $r(229) = .638, p < 0.01$.

Anger control-in was positively correlated with anger control-out, $r(229) = .489, p < 0.01$.

Anger control-in was positively correlated with depression, $r(229) = .131, p < 0.05$.

Anger control-in was negatively correlated with anger index, $r(229) = -.750, p < 0.01$.

Anger control-out was positively correlated with depression, $r(229) = .201, p < 0.01$.

Anger control-out was negatively correlated with anger index, $r(229) = -.679, p < 0.01$.

Depression was negatively correlated with anger index, $r(229) = -.220, p < 0.01$.

CHAPTER 6

SUMMARY

6.1 SUMMARY

6.2 CONCLUSION

6.3 IMPLICATIONS

6.4 SIGNIFICANCE OF THE FINDINGS

6.5 LIMITATIONS

6.6 SUGGESTIONS

6.1 Summary

The objectives of the present study were:

1. To examine and compare Anger Expression in fathers of diagnosed ADHD children, and fathers of kids without any diagnosed psychological disorder.
2. To examine and compare Anger Control in fathers of diagnosed ADHD children, and fathers of kids without any diagnosed psychological disorder.
3. To examine and compare Depression, in fathers of diagnosed ADHD children, and fathers of kids without any diagnosed psychological disorder.
4. To examine and compare Anger Expression in mothers of diagnosed ADHD children and mothers of kids without any diagnosed psychological disorder.
5. To examine and compare Anger Control in mothers of diagnosed ADHD children, and mothers of kids without any diagnosed psychological disorder.
6. To examine and compare Depression, in mothers of diagnosed ADHD children and mothers of kids without any diagnosed psychological disorder.

Based on review of literature, the following hypotheses were framed and tested for the present study.

Hypotheses

- 1-Anger expression in among fathers of kids without any diagnosed psychological disorder is significantly higher than Anger expression in among fathers of diagnosed ADHD children.
- 2- Anger expression in among mothers of kids without any diagnosed psychological disorder is significantly higher than Anger expression in among mothers of diagnosed ADHD children.
- 3-Anger expression out among fathers of kids without any diagnosed psychological disorder is significantly higher than Anger expression out among fathers of diagnosed ADHD children.
- 4 Anger expression out among mothers of kids without any diagnosed psychological disorder is significantly higher than Anger expression out among mothers of diagnosed ADHD children.
- 5-Anger Control in among fathers of diagnosed ADHD children is significantly higher than Anger Control in among fathers of kids without any diagnosed psychological disorder.
- 6- Anger Control in among mothers of diagnosed ADHD children is significantly higher than Anger Control in among mothers of kids without any diagnosed psychological disorder.
- 7-Anger Control out among fathers of diagnosed ADHD children is significantly higher than Anger Control out among fathers of kids without any diagnosed psychological disorder.
- 8- Anger Control out among mothers of diagnosed ADHD children is significantly higher than Anger Control out among mothers of kids without any diagnosed psychological disorder.
- 9-Depression among fathers of diagnosed ADHD children is significantly higher than Depression among fathers of kids without any diagnosed psychological disorder.
- 10- Depression among mothers of diagnosed ADHD children is significantly higher than Depression among mothers of kids without any diagnosed psychological disorder.

Sample

N=240	Having ADHD child/ children	Having child/children with no diagnosed psychological/health concerns.
Fathers	60	60
Mothers	60	60

Independent variables

Status of parents, whether they have ADHD children or not having any children with diagnosed psychological/health concerns.

Dependent variables

Anger Expression In, Anger Expression out, Anger Control In, Anger Control Out and Depression are dependent variables of the study.

Tools administrated and data analysis

- **Personal data sheet and consent form**

The personal data sheet includes, age, number of children, age of children, education, if ever remarried, if divorced,

, marital life duration, if they are suffering from physical disability and major physical/psychological concerns.

If their children are suffering from ADHD, physical disability, and major physical/psychological.

The instruments used to measure the variables were **1) State Trait Anger Expression Inventory (STAXI-2), by Spielberger (1988). 2). Beck Depression Inventory (BDI) by Beck (1961).** The alpha coefficient reliability was adequate for the above-mentioned tools. The study was done by using a questionnaire, and data was collected for the purpose of analysis and generalization in quantitative approach, which generated numerical data and information that was converted into numbers. The design for this study was 2 x 2 factorial designs.

For calculation and statistical analysis of variables, SPSS software was used, and the following steps were done respectively:

Calculation of the Means of the groups, calculation of the Standard Deviations (SD), Independent t-test and 2 x 2 factorial designs and co-relational analysis were performed.

6.2 Conclusions

From the discussion in the previous chapter, we can draw the conclusions for the present study as given below:

Hypothesis 1 stating “Anger expression in among fathers of children without any diagnosed psychological disorder is significantly higher than Anger expression in among fathers of children diagnosed with ADHD” **was rejected.**

Hypothesis 2 stating “Anger expression in among mothers of kids without any diagnosed psychological disorder is significantly higher than anger expression in among mothers of diagnosed ADHD children” **was rejected.**

Hypothesis 3 stating “Anger expression-out among fathers of children without any diagnosed psychological disorder is significantly higher than anger expression out among fathers of children diagnosed with ADHD” **was accepted.**

Hypothesis 4 stating that, “Anger expression-out among mothers of children without any diagnosed psychological disorder is significantly higher than anger expression-out among mothers of children diagnosed with ADHD” **was rejected.**

Hypothesis 5 stating “Anger control-in among fathers of children diagnosed with ADHD is significantly higher than anger control-in among fathers of children without any diagnosed psychological disorder” **was accepted.**

.

Hypothesis 6 stating “Anger control-in among mothers of children diagnosed with ADHD is significantly higher than anger control-in among mothers of children without any diagnosed psychological disorder” **was rejected.**

Hypothesis 7 stating that, “Anger control-out among fathers of children diagnosed with ADHD is significantly higher than anger control-out among fathers of children without any diagnosed psychological disorder” **was accepted.**

Hypothesis 8 stating, “Anger control-out among mothers of children diagnosed with ADHD is significantly higher than anger control-out among mothers of children without any diagnosed psychological disorder” **was accepted.**

Hypothesis 9 stating, “Depression among fathers of children diagnosed with ADHD is significantly higher than depression among fathers of children without any diagnosed psychological disorder” **was accepted.**

Hypothesis 10 stating, “Depression among mothers of children diagnosed with ADHD is significantly higher than depression among mothers of children without any diagnosed psychological disorder” **was accepted.**

Additional analysis on Anger index (AX-Index)

Fathers of children without any diagnosed psychological disorder exhibited higher levels of anger index (AX-Index) compared to fathers of children diagnosed with ADHD.

Mothers of children without any diagnosed psychological disorder exhibited higher levels of anger index (AX-Index) compared to mothers of children diagnosed with ADHD.

6.3 Significance of the present findings

Main significance of the present study is to expand our knowledge beyond the limits of our surrounding context.

One of the main significance of the current study is to know that having ADHD children is not always bad and instead it can have some positive influences on mental health, anger expression , and anger control of parents . It has been found from the current study that having ADHD children can result in positive aspects too when it comes to anger expression and anger control. However , depression will be higher when anger is suppressed. Also, this study can help parents of ADHD children to understand the different psychological outcomes due to having ADHD children.

6.4 Implications of the study

It can also be implemented and utilized in better understanding of parents of ADHD children.

in clinical settings as well as general knowledge for parents of ADHD kids.

On the other hand, findings can help educators, administrators and counselors better serve these groups through counselor training and direct services.

It is assumed that the result of the present study will improve the understanding of the importance of parenting ADHD children and self-care practices for parents.

It can help school counselors to help parents of ADHD kids in a better way using different strategies and suggestions.

Psychiatrists and psychologists who are professionally involved in the field of mental health must be aware about mental disorders associated with having ADHD children. They can utilize the results to treat the clients in their therapy sessions and with a perspective that every individual can be trained to change their psychological aspects to enjoy life more.

6.5 Limitations

There are some limitations that could be discussed in terms of sampling and methodological considerations.

- Participants with English proficiency participated in the tests.
- Samples have been collected from the city Pune and no other cities.
- Life quality of participants was not in accurate control, but participants were selected from private schools only.
- Religion wise, samples were not equally distributed, and it was not taken into consideration.

6.6 Suggestions for future studies

- In the present study, the status of parenthood and psychological status of children (ADHD and Non-ADHD) were the variables under research. Whereas, In the future, other factors like culture and working status can be taken into consideration to realize if any significant differences in the mentioned psychological variables exist in other different factors.
- Divorced women and widows also can be taken into consideration in future studies.
- The same study can be conducted to find out the differences in parents between two or more countries and even to study more psychological variables.
- Resilience for parents on the same status can further be investigated.
- Similar study may be conducted on a sample from different age groups, quality of life. Educational levels, backgrounds, and different cities.

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APPENDICES

- A. Personal data sheet**
- B. Beck Depression Inventory (BDI)**
- C. State Trait Anger Expression Inventory (STAXI-II)**

A- Personal Data Sheet

- **Name (optional):**
- **Age:**
- **Sex:**
- **Qualification /Education :**
- **City where you currently live in -----**
- **Marital status Single Married Engaged Divorced Remarried**
- **If female (Are you pregnant)? Yes No**
- **Are you voluntarily childless or a mother? Yes No**
- **Working status: Working Nonworking**
- **Number of children if you are a mother: -----**
- **Age of your youngest child -----years ---months ----**
- **Is your parenthood planned? (Are you voluntarily a parent?)**
- **Is your child diagnosed with ADHD at any level (Mild , Moderate , severe)?**
- **Yes No**
- **Is your child suffering from a major medical condition? Yes No**
- **Are you suffering from a major physical disability or medical condition? Yes No**

B- Beck Depression Inventory (BDI)

This questionnaire consists of 21 groups of statements. After reading each group of statements carefully, circle the number (0, 1, 2 or 3) next to the one statement in each group which **best** describes the way you have been feeling the **past week, including today**. If several statements within a group seem to apply equally well, circle each one. **Be sure to read all the statements in each group before making your choice.**

1 0 I do not feel sad. 1 I feel sad. 2 I am sad all the time and I can't snap out of it. 3 I am so sad or unhappy that I can't stand it. 2 0 I am not particularly discouraged about the future. 1 I feel discouraged about the future. 2 I feel I have nothing to look forward to. 3 I feel that the future is hopeless and that things cannot improve. 3 0 I do not feel like a failure. 1 I feel I have failed more than the average person. 2 As I look back on my life, all I can see is a lot of failures. 3 I feel I am a complete failure as a person. 4 0 I get as much satisfaction out of things as I used to. 1 I don't enjoy things the way I used to. 2 I don't get real satisfaction out of anything anymore. 3 I am dissatisfied or bored with everything. 5 0 I don't feel particularly guilty. 1 I feel guilty a good part of the time. 2 I feel quite guilty most of the time. 3 I feel guilty all of the time. 6 0 I don't feel I am being punished. 1 I feel I may be punished. 2 I expect to be punished. 3 I feel I am being punished. 7 0 I don't feel disappointed in myself. 1 I am disappointed in myself. 2 I am disgusted with myself. 3 I hate myself.	8 0 I don't feel I am any worse than anybody else. 1 I am critical of myself for my weaknesses or mistakes. 2 I blame myself all the time for my faults. 3 I blame myself for everything bad that happens. 9 0 I don't have any thoughts of killing myself. 1 I have thoughts of killing myself, but I would not carry them out. 2 I would like to kill myself. 3 I would kill myself if I had the chance. 10 0 I don't cry any more than usual. 1 I cry more now than I used to. 2 I cry all the time now. 3 I used to be able to cry, but now I can't cry even though I want to. 11 0 I am no more irritated now than I ever am. 1 I get annoyed or irritated more easily than I used to. 2 I feel irritated all the time now. 3 I don't get irritated at all by the things that used to irritate me. 12 0 I have not lost interest in other people. 1 I am less interested in other people than I used to be. 2 I have lost most of my interest in other people. 3 I have lost all of my interest in other people. 13 0 I make decisions about as well as I ever could. 1 I put off making decisions more than I used to. 2 I have greater difficulty in making decisions than before. 3 I can't make decisions at all anymore.
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14 0 I don't feel I look any worse than I used to. 1 I am worried that I am looking old or unattractive. 2 I feel that there are permanent changes in my appearance that make me look unattractive. 3 I believe that I look ugly. 15 0 I can work about as well as before. 1 It takes an extra effort to get started at doing something. 2 I have to push myself very hard to do anything. 3 I can't do any work at all. 16 0 I can sleep as well as usual. 1 I don't sleep as well as I used to. 2 I wake up 1-2 hours earlier than usual and find it hard to get back to sleep. 3 I wake up several hours earlier than I used to and cannot get back to sleep. 17 0 I don't get more tired than usual. 1 I get tired more easily than I used to. 2 I get tired from doing almost anything. 3 I am too tired to do anything. 18 0 My appetite is no worse than usual. 1 My appetite is not as good as it used to be. 2 My appetite is much worse now. 3 I have no appetite at all anymore.	19 0 I haven't lost much weight, if any, lately. 1 I have lost more than 5 pounds. 2 I have lost more than 10 pounds. 3 I have lost more than 15 pounds. I am purposely trying to lose weight by eating less. Yes _____ No _____ 20 0 I am no more worried about my health than usual. 1 I am worried about physical problems such as aches and pains; or upset stomach; or constipation. 2 I am very worried about physical problems and it's hard to think of much else. 3 I am so worried about my physical problems that I cannot think about anything else. 21 0 I have not noticed any recent change in my interest in sex. 1 I am less interested in sex than I used to be. 2 I am much less interested in sex now. 3 I have lost interest in sex completely.
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C- State Trait Anger Expression Inventory (STAXI-II)

A number of statements that people use to describe themselves are given below. Read each statement and then blacken the appropriate circle on the Rating Sheet to indicate how you feel *right now*. There are no right or wrong answers. Do not spend too much time on any one statement. Mark the answer that *best* describes your *present feelings*.

Fill in ① for <i>Not at all</i>	Fill in ② for <i>Somewhat</i>	Fill in ③ for <i>Moderately so</i>	Fill in ④ for <i>Very much so</i>
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How I Feel Right Now

1. I am furious
2. I feel irritated
3. I feel angry
4. I feel like yelling at somebody
5. I feel like breaking things
6. I am mad
7. I feel like banging on the table
8. I feel like hitting someone
9. I feel like swearing
10. I feel annoyed
11. I feel like kicking somebody
12. I feel like cursing out loud
13. I feel like screaming
14. I feel like pounding somebody
15. I feel like shouting out loud

Part 2 Directions

Read each of the following statements that people have used to describe themselves, and then blacken the appropriate circle to indicate how you *generally* feel or react. There are no right or wrong answers. Do not spend too much time on any one statement. Mark the answer that *best* describes how you *generally* feel or react.

Fill in ① for <i>Almost never</i>	Fill in ② for <i>Sometimes</i>	Fill in ③ for <i>Often</i>	Fill in ④ for <i>Almost always</i>
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How I Generally Feel

16. I am quick tempered
17. I have a fiery temper
18. I am a hotheaded person
19. I get angry when I'm slowed down by others' mistakes
20. I feel annoyed when I am not given recognition for doing good work
21. I fly off the handle
22. When I get mad, I say nasty things
23. It makes me furious when I am criticized in front of others
24. When I get frustrated, I feel like hitting someone
25. I feel infuriated when I do a good job and get a poor evaluation

Part 3 Directions

Everyone feels angry or furious from time to time, but people differ in the ways that they react when they are angry. A number of statements are listed below which people use to describe their reactions when they feel *angry* or *furious*. Read each statement and then blacken the appropriate circle to indicate how *often* you *generally* react or behave in the manner described when you are feeling angry or furious. There are no right or wrong answers. Do not spend too much time on any one statement.

Fill in ① for *Almost never*

Fill in ② for *Sometimes*

Fill in ③ for *Often*

Fill in ④ for *Almost always*

How I Generally React or Behave When Angry or Furious...

26. I control my temper
27. I express my anger
28. I take a deep breath and relax
29. I keep things in
30. I am patient with others
31. If someone annoys me, I'm apt to tell him or her how I feel
32. I try to calm myself as soon as possible
33. I pout or sulk
34. I control my urge to express my angry feelings
35. I lose my temper
36. I try to simmer down
37. I withdraw from people
38. I keep my cool
39. I make sarcastic remarks to others
40. I try to soothe my angry feelings
41. I boil inside, but I don't show it
42. I control my behavior
43. I do things like slam doors
44. I endeavor to become calm again
45. I tend to harbor grudges that I don't tell anyone about
46. I can stop myself from losing my temper
47. I argue with others
48. I reduce my anger as soon as possible
49. I am secretly quite critical of others
50. I try to be tolerant and understanding
51. I strike out at whatever infuriates me
52. I do something relaxing to calm down
53. I am angrier than I am willing to admit
54. I control my angry feelings
55. I say nasty things
56. I try to relax
57. I'm irritated a great deal more than people are aware of